

Diary of Albert F. Potter
(Former Associate Chief of Forest Service)
July, 1902 to November 22, 1902

July 1, 1902 - Left Salt Lake City, Utah at 7:00 am for Logan, arriving at 11:00 a.m. Met Mr. Tom Smart who owns sheep ranging in proposed forest reserve. He says the range is very much overstocked with sheep, cattle and horses. Many herds are driven in from Idaho and less favorable parts of Utah. Thinks it would be beneficial if grazing could be confined to stock which are owned in the county. Says the most serious damage done by livestock has been in packing the soil so that the water runs off in floods more than it did in former years.

July 2, 1902 - Went with saddle horses for trip to Providence Mountain, took road up Logan River to the Hercules Power House, then went around the point of the mountain and up Dry Canyon. The first part of the mountain is very rough and has no timber except a little scattering scrub cedar. Farther up the canyon on the north slope of the mountain there is a growth of Engelmann spruce which has been good forest at an elevation of 8,000 feet, but much cutting has been done and only the trees too small for telephone poles are now left.

The slopes of the mountain are all well covered with brush; saw a large amount of elderberry. Aspens come in at 6,700 ft. and at 7,500 ft. the first snowbanks were found; at 9,500 ft. There are many small snowbanks and at 10,000 ft. there is a large snowbank 15 ft. deep – the top of the mountain is about 10,500 ft. Mr. Smart has a fence across the canyon near its mouth and uses this section of country as a cattle pasture. At present he is running a small bunch of gentle cattle there.

July 3, 1902 - Went with Mr. Smart for a trip up Spring Creek (Logan area) and across the mountain. Passed a small sawmill at the mouth of the canyon before entering the mountain. Entering the canyon, found same contains a dense growth of brush, the trail cut-out being barely wide enough to permit a person passing with a saddle horse. It was raining and the wet brush just about wet me through. On the sides of the mountain the growth is about the same as in Dry Canyon. Scrub cedar on the south slope of the lower part and spruce on the north slope. Much cutting of timber has been done and no large trees remain.

Went up the canyon about two miles, dense brush all the way. As the rain had then turned into a snowstorm we concluded it was folly to try to go over the mountain today and turned back arriving at Logan at noon.

During the afternoon met a number of citizens who are favoring the establishing of the reserve. Said they wanted stock excluded from it so as to prevent them fouling the water; they think the health of the town is endangered by stock dying near the stream and by the pollution of the water by the manure and the urine. Denudation of the slope by timber cutting diminishing the water supply does not seem to alarm them. All evils being

charged to stock. There are many people, however, who honestly wish to preserve the forest and favorable water conditions.

Met Mr. Hatch and Mr. Low of Franklin, Idaho, who informed me that there were about 70, 000 sheep which used the country in the proposed reserve for summer range from June 1 to October 1. The lambing grounds are in the lower hills outside of the reserve.

July 4, 1902 - Attended meeting in tabernacle at 10 a.m. The programme [sic] was made up entirely of patriotic speeches and music. During the afternoon met Mr. Martineau who is interested in the establishment of a forest reserve here. Said the sheep fouled the water and tramped the range up so that the amount of silt in the streams was much greater after a heavy rain than it was formally (formerly).

Met Mr. Nebeker, the district attorney, and Mr. Preston, manager of the Co-op Drug and Grocery Store, both of whom expressed themselves in favor of the reserve.

July 5, 1902 - On account of stormy weather continuing decided to postpone starting out until Monday morning.

Bought provisions and got outfit all ready during the forenoon. After dinner met Mr. Ed Hansen, who surveyed some of the lands in the reserve and gave me some information regarding the lines.

At 8 o'clock in the evening met forest reserve committee Mapes, Martineau, Barber, Hansen, Edwards and Knolls. Answered question and explained plans for the management of the reserve to them. They expressed themselves as well satisfied with work done and thanked me for courtesy shown them.

July 6, 1902 - Went with Mr. Barber for ride up Green Canyon. The mountains are very rough at the mouth of the canyon and have every little timber growth. About one mile from the mouth of the canyon turns to the northeast and the high mountain ridge on the southeast side has a good forest of spruce. Along the bottom of the canyon there is a dense growth of maple brush, aspen, lanceleaf, cottonwood, mountain willow, wild roses, sumac and elderberry. Found snowbanks at the head of canyon 7600 to 9200 ft. Saw much sign of sheep grazing as this is one of the main trails entering mountain; some damage has been done. Much cutting has been done all along.

July 7, 1902 - Started from Logan at 9:30 a.m. for trip up Logan River. Passed power house of Hercules Power Company. Electric power is transmitted from here to Ogden and other points; about one mile up the canyon we passed the old power house formally (formerly) used by Logan Electric Light Company. The road runs along the canyon which is precipitous and rocky on either side. The bottom is brushy and in only a few places are there any little meadows. The north slopes all have a scattering growth of fir and spruce. Fires have burned over most of the areas which have been cut out. There are very few young trees; passed on settler's claim who has cleared a small tract of land not more than five acres and raises a few vegetables and potatoes. About seven miles from

town there was formally (formerly) located a sawmill which seems to have done a great deal of cutting.

Camped at the forks of the road where there has also been a sawmill located. All along the road wire fences have been built enclosing the river bottom and some are across the mouths of canyons to keep cattle back.

After dinner Mr. Barber and I rode up right fork and turning into Cowley Canyon followed it to the divide. There has been some cutting done in the little side canyons. At present there is very little spruce or fir timber and that only along the canyons. The mountain sides are mostly covered with aspen and sagebrush. Saw much evidence of excessive sheep grazing in this vicinity, the range being very seriously tramped. Met Mr. Curtis who is running about 800 head of cattle here; said he kept them in the mountains from May to October when they were taken into the valley and fed during the winter.

Mr. Pete Rose and Mr. Shadwick are also running bunches of cattle in the reserve. These gentlemen take the settlers' cattle and care for them during the summer for a certain price per head.

July 8, 1902 - From camp we took the county road Meadowville, following same about four miles. Timber cutting for ties and lumber has been done along this road. The hills are mostly bars of timber and covered with sagebrush and aspen thickets; went across ridge to north striking the slope of Maughan's Fork. Saw herd of sheep. All of this country has been very heavily grazed; most of the grass has been tramped and sheep subsist mostly on the weeds and brouse (browse). There is a high mountain ridge on the east side of the basin which seems to have a good spruce and fir forest. Maughan's Fork has a stream of water about 10 ft. wide, running nice and clear. Following the stream down, we again struck Logan River. There is a pretty good growth of young spruce on the north slope of the ridge at mouth of Maughan's. The ridge on the north side has a few cedars.

After dinner we went west up Blind Hollow. There is an old wagon road which goes to the top of the mountain. A sawmill was operated near the top many years ago, all of the large spruce and fir having been cut out.

This country has been very heavily stocked with sheep and much damage done in tramping the soil. On top of ridge north of Blind Hollow there has been a serious fire many years ago which entirely destroyed the conifer forest. There is no reproduction and the area is being covered with aspens. All of the ridges on this side of Logan River have aspen thickets covering most of their area. Saw four herds of sheep; they were scattered out feeding nicely, being herded loosely, but all of the country shows sign of heavy grazing. Returning to the river we again struck the road and shortly after arrived at Crowther Bros. sawmill, a little mill cutting custom lumber for the settlers of Cache Valley. There were about 75 logs on the yard but no sawed lumber. The mill has a capacity of about 5,000 feet per day. It has not yet been started up this season. They are building a road to reach the body of timber on the high mountain on the east side of the

basin. Camped for the night at the Red Bank and just about on the north line of the proposed reserve.

At a sheep ranch in section 11, T.2 S., R. 3 E., they were dipping sheep. There are herds all over this country, although they say there are not as many as last year.

July 9, 1902 - On starting out this morning, went to Tony Grove where the sheepmen have built a dipping vat. Consequently the immediate vicinity is badly tramped out by sheep. Took the old logging road up the Tony Grove Creek. The ridges are all covered with aspen thickets and hollow is filled with mountain willow brush. Arriving at the top of the ridge or where the bench levels out the country has had a good growth of spruce on the north slopes, but same has been cleanly cut for the sawmills. The creek shows sign of heavy sheep grazing, its banks being trampled down and barren of vegetation.

At the head of this stream there is a lake covering about 2 acres, the mountain on the west being fully 1,000 ft. above and having many snowbanks on its side.

Going north across the high mountain ridge we crossed the head of one little stream and then came to Magog Hollow. The ridge on the south of this hollow has the best saw timber I have seen. Going down into the draw we found a valley about ½ mile wide and having a good growth of spruce and fir timber. This is in Twp. 14 N., R. 3 E. and on lands owned by the State. At the head of the draw and under the mountain is another lake of about 2 acres. This valley has the best grass I have seen on the trip. Going down the valley, saw a band of sheep owned by Mr. Blair of Ogden. Also saw man hunting camp of Mr. Mariet's (Marriott's) sheep.

There is an old logging road down the draw and much cutting has been done on the ridge to the south. Following on down the road we passed through a dense brush thicket and finally got back to Logan River at Maughan's old sawmill, which is now abandoned and the machinery moved away.

At the forks of the creek above Maughan's mill we took the road up Beaver Creek to Montrose's mill. These people are cutting considerable timber in an area which was burned over three years ago and most of the trees killed. Some of the logs are good and sound but many are defective. The borers are working on them, some of the logs having holes bored by these insects 4 inches deep. This timber will not be fit for any use after three years more. Timber in all of this immediate vicinity has been cut out very clean in the places which were easily reached.

There is considerable peavine over this part of the range.

July 10, 1902 - Took road for Bear Lake. Passed Hansen's and a number of other lead mines. After traveling about two miles I left the road and went across the country south. Saw a number of basins covering large patches in which the timber had been totally destroyed by fire. Some of these areas had been cut over and the tops left and other places the timber was all young with apparently very little dead and down, but still the

forest was entirely destroyed. Passing this section, we entered a well forested country. The timber is mostly in patches with open parks scattered around among it, some of which have 2 or 3 sections of land without timber. Twp. 13 N., R.4 E., has about 2/3 of its area timbered. Came back to the road at Garden City Canyon and found wagon camped for noon.

After dinner, sent wagon around the road by Garden City and struck out across the country south. Visited the Lucky Boy, Daisy and Rich and Cache mines, all of which are lead and copper propositions. The first two are being worked developing. Crossing a high ridge we came into the northeast corner of Twp. 13 N., R. 4 E. on the east slope of the mountain.

There is a very little pine timber on this slope, most of it having been cut and burned off. The country is now covered with a dense growth of aspen with much underbrush.

Saw quite a number of cattle on this slope but very little sign of sheep. The valley south of Bear Lake is all fenced. Most of it is good meadow land from which volunteer crops of wild hay are cut. Very little grain is raised on account of the short season. Saw a number of little vegetable gardens, all of which looked thrifty.

Passed Meadowville and Round Valley and camped for the night on _____ Creek. There is a strip of aspen, willow and wild cherry along the creek, but outside of a little mountain mahogany there is not timber on the ridges.

July 11, 1902 - The road to Logan leads up Garden Creek. About 3 miles from Round Valley the people have built a storage reservoir which covers about 5 acres, with water at present about 4 feet deep. Crossing the divide we entered the valley of Saddle Creek. This is a beautiful rolling country well covered with grass. The soil is gravelly and stands tramping much better than the soil in Logan Basin. There is every evidence of the country being heavily stocked but the range is still in good condition. Mr. Hill owns about 5,000 acres of State lands in this Twp. 11 N., R. 4 E., which covers the cream of the grazing land in the township. Mr. I.C. Thorson also owns 18 forties on Saddle Creek out along the creek to control the joining range. Mr. Hill has a sheep dipping corral and says he has dipped 120,000 sheep so far this season. He also runs about 200 head of cattle and a buck herd in pastures.

There is very little pine or spruce timber on this township. The northwest corner has a dense growth of aspen. The open valley country extends over the southeastern corner or Twp. 12 N., R. 4 E. also. The western and northern part has a scattering forest. Crossing the valley we came to a rough country on this bluffs of Saddle Creek where there has been a little Rock Creek in Sec. 31, T. 11 N., R. 4 E. Good fishing in this creek. Caught string of speckled trout for supper.

July 12, 1902 - Crossing the ridge between Rock Creek and North Fork, found ridges covered with mountain mahogany. Much dead timber of this class. Make excellent firewood. Roads have been made into this section for purpose of getting this wood. In

few canyons there is pine and spruce on north slopes. Much cattle grazing in this section. Rough trail or snow road leads into North Fork. Went up to Curtis' herd house, crossed and took up side canyon, following same to top of divide. Aspen thickets cover all of these divides. Going on up one of these back bones, reached top of mountain ridge 9200 ft., "Old Baldy" the snow covered high peak. Must be about 10,500 ft. Valley on top covers area of about 6 or 7 sections. Good road having been built in from Millville Canyon. Very little of the conifer area of this proposed reserve has escaped the axe of the logger. The north slope of the ridge south of the Providence canyon has been cut clean and then burned over entirely destroying the forest. Much cattle grazing on the slope towards North Fork, and on top of the mountain are several herds of sheep.

There are a few lakes and small springs on top of the mountain, but most of the water of Providence Canyon comes out pretty well down the mountain. Canyon is very steep, dropping from 9000 to 5500 ft. in about two miles.

Mr. Crowthers has built a wagon road up a little canyon on the north side of the mountain from Logan Canyon for the purpose of cutting logs in a little cove which has not been reached before. This road cost \$3000 to build and will enable him to get out about 1,000,000 ft. of lumber. At the Hodges Fork mill a road has been built to the top of the mountain at a cost of \$1000.

Loggers are paid \$7 per M at the Hodges Fork mill and \$10 per M at the Logan Cr. Mill, the former being run in the summer and the latter in the winter.

Red spruce timber has been pretty cleanly cut out, fir being left because it makes inferior lumber.

I have noticed all over this reserve that the ground squirrels are a great pest. At Mr. Dewitt's ranch on ranch on Logan Creek a little field, which was formally (formerly) farmed had to be abandoned on account of their ravages. At Montrose sawmill I saw two men catching them with fish poles and a string noose, the squirrels being baited with grain spread out upon canvas. They caught 100 in about one hour. At Meadowville some of the farming lands have been abandoned and the settlers removed on account of the damage done by these pests. Poison is being used by a few.

July 13, 1902 - Sunday at Logan – nothing done.

July 14, 1902 - Went to Hyde Park and Smithfield. Talked with Mr. E. R. Miles who is operating a sawmill in Smithfield Canyon. Said they had a hard time getting logs nowadays. Only run the mill about one week out of the month, cutting for settlers. Smithfield Canyon has a fine stream of water. It has been stocked with fish and catching same prohibited for two years. The sawmill is located about six miles from town and on section 10, T. 13 N., R. 2 E. along the ridge and all along the canyon above the sawmill the timber has been pretty well cleaned out. The only saw timber left is on the high points which are hard to get at. Most of the logging is done in the winter time when the logs can be slid down the side hills on the snow. Saw about 75 head of cattle in this

canyon but did not see any sign of sheep. There is a fair reproduction on most of the areas which have been cut.

July 16, 1902 - Went afoot for a trip to the top of the mountain and to the head of the South Fork of Smithfield Canyon. The mountain is on even slope up to 8,000 ft. and from there to the top, 9,500 ft., is very steep and rough. There is a scattering growth of spruce and pine along the side of the mountain. On the northwest slope of the high ridge there is a good growth of timber. Going around into the head of South Fork Canyon we found a valley containing about 200 acres which has a good growth of fir timber. One patch of 3/10 of an acre had 34 trees over 8 inches D.B.H. and about 80 ft. high. The upper part of the valley is being rapidly cut for Hess sawmill. Trees being cut down to 10 inches D.B.H., which is under size allowed by Int. Dep., 12 inches D.B.H. being limit. I think the limit should be raised to 14 inches, as the forest is being cut too close. Down the canyon there is a very large snowbank; it must be one mile long and about 12 feet deep, reaching clear across the bottom of canyon and melting into a tunnel along the waterway. Saw a few small bunches of cattle but no sign of sheep except on the top of the high ridge.

July 16, 1902 - Went with Mr. Crowther for trip up Spring Creek Canyon. His winter sawmill is set at the mouth of this creek on Logan River. From the mill 5600 ft. to the timber on top of the mountain 8700 ft. a wagon road has been built at an expense of about \$3,000. A bench at an elevation of 7,800 affords a landing or break in the grade. There is a little spring here and a camp for the loggers has been built consisting of a log house and log sheds for the horses. Mr. Crowther thinks of setting his mill here as the long pull up the mountain with the heavy logging wagons wears the teams out very fast. By setting the mill on the bench it would be within 1000 ft. of the timber and would make the logging comparatively easy. The road is a good one, being well built, but I do not think the belt of timber which it taps justifies the expense, as the forest only covers an area of about two sections and does not contain over 1,000,000 ft. of saw timber.

It is mostly red spruce with a very little white spruce and once in a while a pumpkin pine. There is also a large percent of fir which is of no value for saw timber.

The forest is very dense, having a stand of about 250 trees to the acre over 6 inches D.B.H. The average height is 80 ft. and on a sample area measured the average D.B.H. Very few trees yield over two cuts of 14 ft. Many trees cut only giving one 16 ft. cut. The young growth coming on seems to be mostly fir. Very little damage has been done in this area by fire. Mr. C. has fought one fire which threatened to destroy this forest and succeeded in extinguishing same before very much damage was done.

Met Mr. Montrose, sawmill man from Beaver Creek, who gave me some novel information. Said it took a 10-inch pine tree 12 years to grow, consequently there is no need of any alarm regarding a scarcity of timber. Said the timber did not increase water supply, as the snowbanks were all outside of timber in canyons where it had a chance to drift. Said after a snowstorm the first place that the ground was bare was next to the trunk of the trees. Said sheep were the cause of water shortage; they tramp the ground up

into a dust which is full of air and when the rain falls it does not soak into the dust but just runs off on the air bubbles in the dust, consequently the theory of packing the ground is all wrong as the water never gets through the air in the dust. Unfortunately Mr. Hatch, a Franklin sheep man, came up just at this moment and I did not get any more information from Mr. Montrose.

July 17, 1902 - Went to Franklin, Idaho with Mr. Hatch. He runs about 8,000 to 10,000 sheep. Lambs near Soda Springs commencing in April and at Franklin in feed yards commencing in February. Ranges sheep on the foothills until about May 15 then goes over the mountain into Logan basin. Seldom drives farther south than Tony Grove. Says the earliest feed is in the open or brushy country and later in the timber. Has always been careful about his camp fires and warned his men against allowing any forest fires to get started on the range they are using.

Grown sheep shear about 7 pounds once a year. Uses lime and sulphur dip, sometimes dips with nicotine but has not noticed any increase in amount of wool or improvement in quality of fleeces on account of using tobacco.

Lambs generally fatten by from July 15 to Sept. 1, which is the shipping season. Ship to Chicago with St. Joe and Omaha privilege. Lambs weigh from 62 to 72 pounds and sell for 4 ½ cents to 6 ½ cents. Old ewes are run dry and fattened on the range. Sheep are fed hay for three months every winter. Costs about 30 cents per head, running on range costs about \$100 per month for each herd. Herders are paid \$30 to \$40, camp hustlers \$20 and foreman \$50. Provisions cost about \$8.00 per man per month, shearing 6 cents, dipping 2 ¢. Dip shortly after shearing when fleece is short.

July 18, 1902 - Met county treasurer and got statistics of the county assessment for 1893-1902. Also assessor's return of transient sheep. There were 35,000 resident sheep and 75,000 transient sheep assessed during 1901. As 150,000 sheep were grazed in Logan River basin last year. From general appearance of the range I think the number allowed within the proposed forest reserve should not exceed 50,000. And it might possibly prove to be necessary to cut the limit down lower. This can only be determined by carefully watching the range for a few seasons. It being true, of course, that in some seasons feed is more abundant than others.

As there is a variety of feed which is eaten by sheep which is not touched by cattle and also as sheep do not require water so often, they can better utilize the higher parts of the mountain, it is my opinion that a limited number of sheep should be allowed in this reserve under the existing regulations. The sheepmen will organize a local association and cooperate with the government in caring for the reserve in case it is established.

Met Mr. Swendsen of the agricultural college who is taking an active part in favor of the reserve. Is opposed to grazing, thinks it should be prohibited for two years. Gave measurements of Logan River and Summit Creek showing that since deforestation and damage to range, floods have come down earlier in the spring and streams have almost gone dry later in the season when water was most needed.

July 26, 1902 - 20 miles. Leaving Murray with Mr. Lee, the liveryman, in a two-horse buggy we went across the valley and up Big Cottonwood Canyon.

Just after entering the canyon we came to one of the power houses of the Utah Light and Power Co. The mountains on either side are very high, precipitous and rocky. On the south side of the canyon there is a scattering growth of timber. About one mile farther up the canyon we came to the "Stairs Station" of the Utah Light and Power Co. Above here the canyon makes a sharp bend to the south and is very steep. After passing this rocky road we arrived at Maxfield camp. A number of families from the valley are now camping here. They have trimmed out the underbrush and have a very pretty little oak and maple grove. Following on up the canyon a number of camps and houses of settlers are passed. About 12 miles from Murray we came to Gov. Thomas' mine and Argenta P.O. After passing here the mountains became smoother and are well covered with brush. Saw sign of sheep grazing. Timber is getting thicker and comes down closer to the creek.

Two miles above Argenta there is a large valley known as Mill D Flat. There has been a good body of timber here on the south side of the canyon but it has been pretty closely trimmed out by the sawmills. At the upper end of this valley is located the sawmill of Mrs. Green. She saws a few lots for settlers once in a while, but does not run steady. Has a few cattle and is making her home here. Returning down the canyon I met the stage and transferring to it went around to Wasatch Hotel in Little Cottonwood Canyon.

July 27, 1902 - 15 miles. Left Wasatch on tram car for Alta. Many years ago when the Emma Mine was working on an extensive scale this little railroad handled from 20 to 30 tons of ore per day. It is now used for hauling supplies and passengers for the camps or mines near Alta.

There are a few scattering firs extending down to this mouth of the canyon but the mountain is quite rough and precipitous until Tannerville is reached. Then the mountain slopes off into a mesa on the south side of the canyon and the north slopes have a good body of timber. The mountain on the south slopes. There are two different places along the road where glaciers have slid down into the canyon. Tannerville is an old sawmill camp and most of the timbered area south of it has been cut over. All of the good sawlogs being cleaned out. Good wagon roads have been built to the top of the mountain which facilitates traveling over the area. Central city is a mining camp and consists of just a few houses.

Arriving at Alta a novel view meets one's eye. Here is an old mining camp that has been worked until both the ore and timber were pretty well exhausted.

The stumps show it to have been well forested originally but every tree (and seedling) has been cut. It certainly is a picture of a forest destruction and I do not wonder that the town was once destroyed by a snowslide coming down the denuded mountain side. As I

remarked to Mr. Fitch, it would be hard to find a seedling big enough to make a club to kill a snake.

Climbing to the top of the divide towards American Fork the contrast in the scene is very pleasing. This is apparently a fairly well timbered country and a number of very pretty lakes are seen in the different basins. It looks like a good grazing country.

There are a number of mines on the mountains at its head. The Detroit mine is located on the top of the divide.

July 28, 1902 - 35 miles. Crossing over the divide east of Alta a beautiful view is seen. Standing on the top at an elevation of 10,000 feet, the Twin Lakes lie directly under you at an elevation of 9,500 feet.

After looking at the barren mountains the sight of a forest again certainly looks good. Stretching all the way across to the divide on the east side of Big Cottonwood is a scattering growth of timber with little thickets occasionally interspersed. Going on down the trail and passing Twin Lakes you come out on to a granite point and in sight of Silber Lake and Brighton. The sides of the mountains are all green, the south slopes being covered with aspen.

Silver Lake is one of the prettiest spots I have seen in a long time and I do not wonder that it is well patronized by the people of the valley who seek a pleasant camping place during the hot months. Grand view and Mountain Park are also summer resorts located farther down the canyon.

At Silver Springs a sawmill has been operated which cut everything off of the point south. There is a fair reproduction of young trees coming on.

Sawmills have cut out most of the large timber in the entire forest of the canyon. The merchantable timber left does not exceed 2,000 ft. per acre in forest area.

July 31, 1902 - 20 miles. Went from Heber to American Fork Canyon, took road to Midway then went north about one mile and took road up a little canyon. Hillsides covered with oak, maple, sage, deer brush. At 6,000 ft. aspen comes in. Also a few firs. Going on up the canyon the divide of Deer Creek is reached at 8,000 ft. Good wagon road; only a few scattering pines and fir. The ridge on west side of Deer Creek has some conifer forest but the valley and east ridge has nothing but aspen and brush. Many cattle grazing on this part of the range. Seems to be overstocked and badly tramped out in some places. Crossing the divide to American Fork country is all covered with aspen thicket; scattering pine forest on northwest slope. Went down to Lost Dutchman mine. There has been good forest on north slopes here but it has been closely cut out and burned in some places. Went up Mary Ellen Gulch. Very little forest on Miller Peak. Aspen thickets. Ridge on west side well forested; much cutting done here also. About 6 herds of sheep grazing on slopes – plenty of room. So far slopes on north side have not been overgrazed this season.

August 1, 1902 - 25 miles. Camped at Lost Dutchman mine, about 20 miles northeast of American Fork city. Mr. Madison of Cleveland, Ohio is the manager.

He is doing a limited amount of development work and meeting with some success in finding ore. There are quite a number of mines in this vicinity which are being worked upon. The formation apparently being very similar to the Park City district stimulates the belief that a large body of ore may be found somewhere on the American Fork.

Went up the road on south side of Mud Lake. Has been an old sawmill location here and all of the timber cut out. Aspen thickets and good reproduction of conifers in many places, but all on the north slope of the mountain. Crossing over the divide the south slope is covered with sagebrush and aspen thickets. Very little pine and fir except on the north slopes of the little side canyons. This section has been heavily grazed by sheep and some damage done by tramping. Following down the divide, came back to American Fork River again. Aspen thickets all the way with once in a while a little patch of conifers.

Deer Creek, which comes in to the main stream about six miles from the mouth of the canyon. It heads up against Snow Mt. and the Deer Creek divide. Scattering timber in spots along this canyon. Aspen thickets on most of the slopes; some oak. The main canyon for the last six miles to its mouth is rough high mountains on either side. Scattering pines and fir on the south side. Along the bed of the entire canyon there is a good growth of oak, maple, boxelder, birch, willow, haw, chokecherry and underbrush. The mountain slopes off onto a foothill mesa on the west side and at the foot of this mesa there is a fertile valley extending across to Utah Lake. Many orchards dotted over the farming land. Stopped at Pleasant Grove over night.

August 2, 1902 - 15 miles. Took road for Provo Canyon, passed mouth of Grove Creek and Battle Creek. These are both short streams heading up on Snow Mt. (Timpanogos Peak) and furnish part of the water supply for irrigation. There is a small patch of timber on the north slopes of Battle Creek. Aside from this, Snow Mountain is quite barren. Entering the canyon, the first place of note is a summer resort on south side. They have tents in a shady grove circling the edge of an artificial lake. The next place is the power house, the high mountain comes in against the creek at this point and the canyon is steep and narrow to the "forks". At the "falls" there is a little stream of water flowing from the mountain on the south side which falls over a precipice about 200 ft. high just before reaching the creek. The "upper falls" about one mile above here is at the summer of Mr. Dorman.

August 3, 1902 30 miles. Leaving Upper Falls the canyon widens out a little. It is fenced and used as a cattle pasture for milch stock. At the "forks" Mr. J.W. Slick has a picnic ground and summer resort. He has trimmed up the natural grove of maple, boxelder and poplar, built a dancing platform in one flat and a dining hall and sleeping tents in another. Area has a pasture with tents up the south fork. It is a very pleasant

place and is well patronized. The only bad feature I noticed is that there are some mosquito breeding ponds.

Going up south fork, the canyon soon widens out to a flat about 6 or 8 chains wide and the fields of the settlers commence. The land is very rich black mountain loam and produces prolific crops. Wheat, potatoes, cabbage, corn, timothy, hay, oats, and garden truck were all looking well. I saw no Lucerne. Farms are all pretty well fenced with poles and wire. Houses are common cabins and only used in summertime. The first main fork on the west is known as Bunnell Fork or Mill Creek. Many years ago a sawmill was run about two miles from the mouth of this canyon. A wagon road was built on up the canyon about four miles beyond to the pine timber. The bottom of the canyon and south side is covered with aspen thicket. Also maple, poplar, chokecherry and birch, serviceberry, rose. The ridges are quite high and smooth, and covered with oak and maple brush. There are a great many cattle in this canyon browsing on the brush. Trails lead in every direction and some of the hillsides are pretty badly cut up and tramped. The stock are all in good condition and there seems to be an abundance of feed for them all there this season. There is some pole cutting still being done in this canyon.

The middle fork is a much smaller basin and has very little water. There are two settlers up this fork who have no title to their land. They claim to have been here four or five years. The country is brushy with aspen on south side. The main south fork is stocked with cattle and from the sign and tramping along the creek must have been used for a great many years. State land selections cover the water for about five miles beyond the settlements on this creek made by cattlemen to control the range. The hills on the east side of the fork are quite barren of weeds and grass. There is some sagebrush and here and there an oak brush thicket.

There is some pine and fir on the head of the main fork and a few lots are still being hauled out. The pine and fir area in this section of country is very limited, being confined to the high north slopes. The water supply of this canyon is good. There are springs coming out of the rock at the bottom of the hill along all of the branches.

A good wagon road leads to the head of the main canyon and across the divide to Hobble Creek.

August 4, 1902 - 28 miles. Leaving Slick's Resort the road leading along up the canyon forks again the North Fork of Provo River. The canyon is quite narrow and rocky for about two miles. It has a beautiful stream of water and is one of the most picturesque canyons I have seen. The undergrowth is fresh and green. Many wild flowers adding to its beauty. About one mile from its mouth there is a trail going across west to Scott Canyon and another mile farther up the canyon widens out into a beautiful valley. The slopes are all covered with aspen and oakbrush thickets. The lands along the water courses and the choicest of the slopes have been taken up by Provo parties for the purpose of controlling the basin for a cattle ranch. There are many cattle grazing here at the present time. Crossing the brushy divide on the east side of the basin much sign of sheep grazing is seen. There are several sheep corrals built in the little flats or saddles

along the ridge. This seems to be used as a lambing ground during the early spring. In the mouth of Deer Creek and on the line of the proposed reserve Mr. J.W. Hoover has a fenced cienega from which he cuts sufficient hay to feed quite a bunch of cattle during the winter. The range up Deer Creek along the line of the reserve is used mostly for cattle pasture.

There is very little timber in North Fork Canyon. One of the first sawmills in the country was located there in the 70's by Mr. J. O. Stradling.

The country in the reserve in Twp. 5 S., R. 4 E. is high rolling mountain ridges sparsely covered with sagebrush, some patches of oakbrush, very little grass or timber. The divide between North Fork of Provo and South Fork of American Fork Canyon is low and smooth. Cattle pass back and forth at will. They also cross from either canyon over to Deer Creek. Ridges are all covered with oakbrush.

August 6, 1902 - 20 miles. Went over to Midway and up Snake Creek. The ridges on both sides are covered with aspen and brush thickets. There is no pine timber outside of the proposed reserve line. But it commences very near this point and extends along the north slope to a point opposite the Steamboat mine which is almost at the head of the canyon.

A fire started about a mile below the Steamboat and just opposite of the big Four mine on August 1 and burned over an area of about 100 acres extending up the ridge to its top. All of the young seedlings were destroyed and much of the large timber seriously damaged. The south slope is covered with aspen and brush. This is in the mineral belt and a number of mines are being actively developed. The ore found in prospects assay rich in gold, silver and copper. All of the miners are expecting to strike the belt of ore which is supposed to extend across the mountain range from Park City. Almost the entire section is covered with mining claims. There are a few cattle along the creek and a band of sheep on top of the ridges on each side.

Stand on burned area was about 150 to acre, trees 6 inches to 20 inches D.B.H., the best patch in this section.

August 7, 1902 - 25 miles. Left Heber for a trip south to Strawberry and Hobble Creek – took road leading up Daniels Canyon. The farming lands extend along the creek for about 2 miles and then beyond there are grazing lands on the ridges for about 2 miles farther until the line of the proposed reserve is reached. These grazing lands on the outside of the reserved lands have been brought from the State by the stockman. As soon as the unsurveyed lands are entered, a difference can be noticed in the feed and the farther up the canyon you go the more heavily grazed the country is, the head of the canyon being just about tramped out. As soon as the line of the Uintah Indian Reservation is crossed a marked change is again noticed. There is good grass and plenty of woods and browse. The country shows the difference restriction of grazing makes in range conditions. This part of the Indian Res. is leased by Heber Stockmen, they paying a lease of \$12,000 per annum. Mr. Chas. Carter has an additional range leased for which he pays

\$7000 per annum. These people are not overstocking the part of their leases hold which I saw, but are managing it as though they intend to continue in the stock business permanently. Trespassing herds are charged \$25 for every time they are caught across the line.

The country on the Indian Reserve in Strawberry Valley is mostly open and well covered with grass.

In Daniels Canyon sawmills have operated in eight different places and much of the merchantable timber has been cut out. There is still one little mine operating there cutting for the settlers. The mountains are rolling and all good grazing country if properly taken care of. The north slopes and tops have all been covered with pine forest and there is good reproduction in many places. Many fires have run over some parts of it and there is much dead and down stuff. The timber belt on the Indian Reserve is quite narrow. Some cutting has also been done there.

Good mountain grazing lands are being leased by stockmen at \$100 per section for a season commencing on August 15 and ending in about 3 months. The dry condition of the range has appreciated values of good grazing lands.

Mr. Alexander is the man who is running the sawmill. The company has divided their range into the sheep and cattle ranges, using the valley lands mostly for cattle and the brushy ridges for sheep.

August 8, 1902 - 25 miles. Commenced the day by being kicked by a mule. Fortunately I have become thoroughly toughened and no serious damage was done.

Went over to the dipping corral on Strawberry. Met Mr. Clyde who was dipping a band of sheep under direction of Mr. _____ and Mr. Townsend, inspectors of the Bureau of Animal Industry.

Sheep were not looking extra well, dry weather is causing feed to become scarce. After dinner went along up the west side of the valley to Mr. Adamson's camp. He has a sub-lease on 7 or 8 square miles of range in the Indian Reservation and is running about 3,000 sheep. Says it is getting hard for a small man to handle sheep on the range any more. The State lands being sold and leased is cutting the amount of open range down materially and the many road damage fines and trespass fines cut down the profits. Went up the old government road to the old sawmill setting and then turned north along the ridge and has pine timber among the aspen over the entire area. There is an open valley on the ridge containing about 160 acres. The road turns to the southwest down Circle Creek and goes down a very steep grade to the Round Valley Basin. This is a very pretty valley. All of the bottom land is under cultivation. It is rich soil and produces very heavy crops, the altitude being rather high (5700); the season is consequently short and no fruit of any consequence is raised here. The settlers have a few cattle which are ranged mostly on the south and west sides of the valley.

The forest reserve line should be changed so as to run along the top of the divide on the west. There are a number of selections of State lands in the area adjoining the reserve. If the Wasatch Reserve is not created Twp. ____ S., Range ____ E., and T. ____ S., Range ____ E. should be added to the Uinta Forest Reserve as they are mostly good timber lands.

August 9, 1902 - Met Don Herbert of Wallsburg who has 2,000 sheep. Is in favor of a reserve and keeping sheep off until the 1st of June, then limiting the number allowed on.

35 miles. Went south from Wallsburg up the west prong of Round Valley Creek, passing the "Flat Top" Mountain. "Little" Valley is entered. This is a small mountain basin covered with oak and sagebrush and is being grazed by sheep. Going along up the divide to the southeast, aspen and then some spruce and fir timber is found. It is scrubby and there are very few good sawlogs. Crossing the divide the side of the mountain is a brushy thicket which has all been grazed over by sheep until very little feed is left.

At the foot of the south side slope is "Government" flat. A sheep dipping corral is located here which has been in use for twelve or fifteen years and the surrounding country is very badly tramped by sheep. There is no feed of any kind at the present time. On the ridges to the south and east there is a scattering growth of spruce and fir. A few sawlogs have been recently cut in this vicinity by settlers on Hobble Creek. Turning to the west the country is a series of ridges covered with oak and brush thickets. There is a pass through the high cross ridge leading to the Hobble Creek basin.

Sheep have grazed all of the country east of the pass until there is almost nothing left for them at present. Through the pass the range is held by the cattlemen and there is considerable summer food to be found yet.

August 10, 1902 - 18 miles. Went with Mr. Dougle for a trip over the "rincon" on the northwest corner of the Basin. Found the country covered with oakbrush to an altitude of 7500 and then aspen thickets to the high mountain. Went up to 9500 and were still in the aspen thickets. The country is stocked with cattle which are all looking well and apparently getting plenty to eat. The soil is pretty badly tramped in some places, but on the whole this section of the range is in fairly good condition. There is no timber except a few small patches on the high ridges. Went on down the canyon and camped with Mr. Mower who also runs a cattle ranch.

All of the settlers in this township have part of their ranches under cultivation. The principal crop is alfalfa, which is fed to their cattle in the wintertime. Most of those people own from 10 to 150 cattle and seem to be living comfortably. Sheep grazing should not be allowed in this basin as the settlers have enough cattle to utilize what food there is. The sheepmen own no ranches in this vicinity and have no claim to the range which I know of.

The settlers have a small (water power) sawmill located at Mr. Fullmer's. They have cut a limited amount of lumber for their own use and are intending to saw more this coming fall.

August 11, 1902 - 10 miles. Leaving Mr. Mower's ranch I went up Pole Heaven Canyon to the top of the divide. This country is all covered with brush and is stocked with cattle. There is an aspen thicket on the mountain side to the south and many poles have been cut here. The spruce and fir area is very small and does not amount to much. Crossed the divide and came down Spring Creek Canyon. It is very steep and rough. The sides of the ridges are brushy and are used for cattle pasture. The mountain breaks off abruptly and rich farming lands come to its foot.

The head of Spring Creek is a dry canyon, but near the foot of the mountain a large spring breaks out which supplies a good size irrigating ditch. A good stream also comes from Rock Creek.

August 12, 1902 - 14 miles R.R. travel. Went to Provo. Met Mr. C.A. Glazier, county treasurer, who kindly gave me a list of cattle and sheep assessments of Utah Co.

August 13, 1902 - 84 miles R.R. travel. Went to Salt Lake City. Saw Mr. Sower, special agent of Land Office. Had talk regarding timber cutting on withdrawn lands. He informed me that a special order had been issued to stop all cutting on these lands.

August 14, 1902 - 25 miles. Started out with Mr. A. Spafford, Mr. Dimmick, Mr. Harmon and Mr. _____ for a trip up the Right Hand Fork of Hobble Creek. The first side canyon is coming in from the south known as Grindstone Canyon. It is a short "V" shape heading against the Maple Canyon divide and its slopes are all well covered with brush. No timber of any consequence. Used as cattle pasture by town people. Just beyond the canyon at the forks is Mr. Kelly's summer resort. The valley bottom lands are seeded to alfalfa and produce good crops of hay. Entering the right hand fork Mr. _____ ranch, the first one passed, is also partly cultivated. The canyon above this range is an even slope. Both sides are brush covered, sage on the south slope, maple and aspen on the north slope. There are not cultivated lands any farther east but a number of cattle ranch cabins. None are occupied at present. A sawmill has been operated at the upper end of Mr. Johnson's place but it has been moved on up the canyon about four miles and into T. 7 S., R. 5 E. on unsurveyed land. There are about 50 logs on the yard but the mill is not running, they have been stopped by Col. Sowers. The net claim above Johnson's is that of Bowman of Pleasant Valley. The place is not being kept up and no one is living there. Just below Johnson's ranch the Day Canyon comes in from the south. There is a little pine and fir timber and some sawlogs have been cut out of there. Just below Smith's place the Lawrence Canyon comes in from the north and Kirkland from the south. These are both short brushy canyons. Cedar Canyon is the next one coming in from the south, also a short brushy canyon. All of this country is used by the Springville cattlemen. Mr. Harmon has a cabin on the head of Cedar Creek. About two miles above Smith's the canyon forks and the main canyon from here on is known as Wadsworth Canyon and the main south branch as Packard Canyon. From this point on there is much evidence of sheep grazing. We went on up to pump house on old sawmill stand. Nothing there now. Country damaged by sheep grazing. Saw a herd of sheep grazing in the brush just east of the pump house. They were feeding principally upon leaves although

there was a little green grass. The soil has been badly tramped, however, and is quite hard.

Went across the divide west and camped at the cabin of Mr. Spafford. Saw a few cattle in the brush on the north slope of the mountain. Feed is scarce, all of this range having been overstocked.

Just above Smith's ranch there is quite a large canyon coming in from the north known as Dry Canyon; as its name indicates it has no water. The head of this canyon is back about even with the narrows in the left hand fork.

August 15, 1902 - (Chicken Day) 30 miles. Went from pump house out along the divide south of Wadsworth Canyon. Saw two herds of sheep grazing on the brushy slopes. Turning down the south side of the ridge into the canyon the road leads on up to the old shingle mill. The pine timber just commences at this point and there is some scattering stuff left from there on east to the top of the divide. Turning south and cutting across the divides we struck the old Indian trail and followed it south to Chase Canyon and then on across to Hall's Canyon where there has been an old sawmill. The ridge south of Hall's canyon has been well forested but it has been cut out by loggers and eat (ate) lunch and then continued on south. The next divide is a wide rolling moss-topped one. As we went off of this ridge into the basin of Sixth Water, saw a few yellow pines. There has been a grove of large trees here but only one has been spared by the loggers. This tree is 5 ft. D.B.H. and 150 ft. high. Following on down the canyon to the first forks, found another old sawmill and just above it a sheep dip which is being used by herds in the vicinity. There is a little scattering timber on the ridge southeast of the corral; also on up in the head of the canyons. The divide on the west is a low brushy ridge with no timber. All of this country has been very much overgrazed with sheep.

August 16, 1902 - (Deer Day) 35 miles. Went west from the pump house through the timber to the old sawmill set on head of Packard Canyon. A few logs have been cut here for the sawmill on Hobbie Creek. There is an area of a couple of sections which has a scattering stand of pine and fir and there are a few sawlog trees left yet.

Crossed the divide to the head of Wamhodie (?) basin and went on down the valley. Springville parties have about 100 acres fenced and have plowed perhaps 100 acres to plant in grain. The entire basin is an oakbrush country and has been very heavily grazed.

There is an abandoned ranch below this pasture which belongs to Mr. Gallup. Met Mr. Allen of Mapleton; said people would like to buy grazing land on the mountains.

Below this ranch the country looks pretty hard; the cattle are living entirely upon oak leaves. Went around to the head of Little Diamond Creek and went up that stream. There are a large number of cattle and very little feed, browsing mostly on the brush. From the top of the divide a good view of the entire country is had. There is a very small proportion of the country seen which has any pine and fir timber. It is all brushy and used principally for grazing.

August 17, 1902 - 40 miles. Leaving the pump house I went down the road to Diamond Creek and across to Sixth Water, then crossing the creek took the old Indian trail south. Met two sheepmen who are working for Mr. Jensen. Said they were moving their sheep to Idaho (4 herds) on account of this range being overstocked and not being able to graze on the Indian Reservation as formally (formerly). Crossing the ridges found very little grass or feed, the country being badly tramped out. Some open places mostly oakbrush. Few aspen thickets on the high ridges. No timber except on the head of the streams along the Strawberry Ridge. Below the trail on the south side of the ridges there are a few patches of cedars. They cling as closely to the south slopes as the pine and fir does to the north slope. Struck first water at an old dipping corral. Going up on old road to the south reached the top of the divide about two miles west of Bald Knoll. All of this country has a clay soil and is not very fertile. Looking south from the high ridge the headwaters of Sheep Creek form a large basin covered with scattering oak and oakbrush. The mountain on the west of the basin is smooth and wide. There is a pasture belonging to Mr. Streepers built of aspen poles. The south slope of this mountain has a thick growth of cedar and oak. Saw first pinon on this slope. Country is stocked with cattle subsisting principally on oakbrush. Sheep drive over the range every spring and fall and have helped to do up the feed. The soil is clayey and does not look like it ever did produce much grass, claims of stockmen to the contrary notwithstanding. The high ridge on the southeast of Sheep Creek has two small patches of timber on the head of branches. It slopes down to foothills covered with sagebrush on its lower end. No farming until the valley of Soldier Creek is reached. Went down through Red Narrows and camped at Mr. Streepers'.

August 18, 1902 - 30 miles. The country north of Mr. Streepers, which is at the mouth of Red Narrows, is a broken red sandstone and conglomerate country for about one mile back and is covered with a dense growth of cedar and pinon. The mountain back of this is smooth with scattering patches of brush until the breaks of Diamond Creek are reached and then it breaks off in red bluffs again. The country between Placer Fork and Sheep Creek is covered with sagebrush. East of Sheep Creek for about six miles it is a series of white hills covered with pinon and cedar. Met Mr. Jack Lewis, an oldtimer. He has made application to buy some of the lands on Dairy Creek basin and is opposed to forest reserve; thinks it would be better for the people to buy the lands. Went from Lewis' ranch over the country south. It is most all smooth hills covered with oak and maple, brush. Saw first manzanita brush. There is about one section of timber in the southern end of the Rincon; also some oil mines. There is a low divide on the southwest. Went across to Lake Creek. There is more timber here. All of the north slopes have little bodies of pine and fir. A sawmill has been operated here and has cut much of the boxelder and cottonwood along the creek as well as the pine from the mountain. The creek is washing badly and looks about like the lower Blue River of Arizona. The mountain west of Lake Creek is high end brushy and the mountain east is broken and covered with pinon and cedars. Saw cattle over all of the range examined today but no sheep. Saw mahogany on the east slope of the Dairy Fork Mountain.

August 19, 1902 - 15 miles. Went south from Thistle Junction along railroad. The north slopes of the mountain on the east side is covered with sagebrush and a few patches of

oakbrush. Very few cattle were seen. West of Nebo station the slope is covered with a dense growth of pinon and cedar; the largest solid area I have seen – probably covers about six sections. Arriving at Indianola stopped with Mr. Seely. He is in favor of the forest reserve. Says there must be regulation of the grazing and timber cutting or the water supply will fail until settlers will have to abandon their homes. Says sheepmen have brought State lands along the line of the reserve and claim control of all adjoining range.

August 20, 1902 - 20 miles. Leaving Indianola went up Kilikinic Canyon, following the old Indian trail. There is a small stream of water, enough for stock water. The country is grazed off clean and the cattle are living on oakbrush. The hollow is an even, level slope having a deep soil, Crossing the divide to one of the branches of Lake Creek the slope breaks off rapidly. There, signs show this to be a driveway for sheep crossing the mountain. Lake Creek is filled with driftwood. Here, the same as below. Saw quite a number of cattle. Crossing along the trail and just before going over the divide, I came to the camp of Dr. C. Barrett. Two men are at work sinking a shaft for oil. Just over the divides on Dairy Fork side the White Star has an oil derrick.

August 21, 1902 - 30 miles. Mill Fork is one of the most noted timber basins in this part of the State. It has furnished a large proportion of ties for the R.G.W. Ry. And lumber for all purposes. Eight sawmills have operated on the different branches of the creek. All of the slopes have been cut over clean and the saw timber which is now standing has matured since the first cutting. The principal tree is the white fir. A few red pines are also found. No other varieties. The reproduction is good except in the places which have been burned over since the clean cutting. The water supply of the canyon is poor. The stream formally (formerly) ran all the year and furnished a ditch but of lat years it goes dry about August 1st. There is running water in the heads of all the branches. Sheep have grazed over this country until everything within their reach is about cleaned up. The soil is badly tramped and in bad shape to hold the water which falls.

The top of the divide south of Mill Creek is known as Poison Ridge. It is a high mountain mess above timber and at present is covered with sagebrush, larkspur, lupine and a few other varieties of small brush. Sheep have grazed over it extensively in spite of the poisonous plants, although now that the lupine beans are ripening they are keeping clear of it. There are herds hanging around the slopes on all sides, however. On the head of the Middle Fork there is a nice young forest which covers an area of about 1000 acres. There are a few trees large enough for sawlogs already. Some cutting is being done in the east fork. The logs average about 125 ft. or 250 ft. to the tree. Mostly white fir, only a few red pine.

The slopes on the northern part of the basin are covered with oakbrush.

The only sawmill now running is in the east fork and is owned by Geo. Haskell. He is cutting for the settlers in the valley who come out and do their own logging. There are about 60 logs scaling about 10,000 ft. now upon the yard.

August 22, 1902 - 12 miles. Crossing the divide between Mill Fork and Clear Creek. A forest is growing up on an area which has been cut over, there being about 100 trees per acre 6 inches D.B.H. and over, average being about 9 inches and height about 50 ft. There are a few trees being cut for sawlogs which were too large for ties at the time R.R. was cutting 20 years ago and which were too small for sawlogs at that time but now they measure from 14 to 20 inches D.B.H. and cut two logs. The southeast side of the ridge has nothing but oak, chokecherry and sagebrush.

The Southworth sawmill is located about the head of Clear Creek. There is a body of green timber on the southeast and a burned area on the southwest of several hundred acres upon which the loggers are now cutting.

August 23, 1902 - 20 miles, Met Mr. M.V. Price of Goshen, who is running two herds of sheep on the head of White River. Says he would buy land in that vicinity or on the head of Diamond Creek if he had the opportunity. Also gave me the names of some other sheepmen who wanted to buy lands. Says all of this range country would be bought up in 30 days if the stockmen had a chance to get it. On account of the withdrawal of lands and fear that it will be made a forest reserve, many sheepmen have shipped out part of their herds and some are quitting the business entirely. (This is one good thing accomplished, as the range certainly needs relief in some way.) Mr. Price says if the stockmen owned the grazing lands they would take care of them better than men who are granted permits to graze on a forest reserve. (The overstocking of the Uintah Forest Reserve this year is a sore blow to the management of grazing by the government.) There are 30 herds now grazing in the basin of White River where there should not be over 6 or 8.

Went up Tie Fork in the afternoon. After passing Williams ranch the basin branches out and there are scattering bunches of timber on all of the forks. The ridges are covered with brush and are good grazing lands. There are several bands of sheep here at the present time. The head of the main stream is in a series of grassy cienegas and willow brush. The country looks to be in better condition than any I have seen for several days. Sawmills have been set in several different places and have cut out considerable timber. Thousands of ties for the R.R. have been cut here, hence its name. No part of the area has been entirely destroyed by fire and there is a good new forest coming on. Engelmann spruce abounds here. Red spruce is principal tree, however. There is very little of the white fir. Slopes are covered with oakbrush. There is yellow top brush in bottom eaten by sheep.

August 24, 1902 - 40 miles. Went up Indian Creek. Met Mr. Ballard who has lived here for 17 years. He is located on SW1/4 of Sec. 18, unsurveyed. Has place well fenced and has built a sawed log house. His son is now building a new sawed log house on the north of the field, raises alfalfa hay for purpose of feeding his cattle during the winter. Would like to buy range adjoining his ranch; thinks private ownership of these grazing lands would be better than having it in forest reserve.

Slopes of Indian Creek are covered with oakbrush and aspen; very little pine. The ridges are broad and smooth, good grazing lands. This basin is not as well timbered as Tie Fork

or White River. Crossing a low divide went into White River basin; slopes are well covered with brush and have many patches of timber. Sawmills have been operated here and have cut pretty clean. Some merchantable timber still standing, mostly red spruce. Rock formation is limestone and shale. Many locations for oil land. No timber outside of reserve; some aspen, mostly sagebrush. Ozokenite is located on the line. It is a parafine [sic] wax mine owned by the Soldier Summit Mining Co. Its product is refined at the mine and is shipped to New York and Europe. East Fork of White River branches out more, has patches of timber scattered all over. A large burn has recently destroyed timber above old sawmill set.

30 herds of sheep have grazed in White River basin this summer. Saw four herds. All look well and seem to be holding flesh. Good feed on some parts of range yet. Other parts pretty cleanly skinned. Good, natural reservoir site ½ mile above sheep corral or near the line of surveyed land. Camped over night at camp of Toe Titcum (?) who is working for Mr. Fransen. Says they have leased range sufficient for their sheep; thinks it would be better for stockmen to own their ranges. Strange how sheepmen are changing views in regard to leasing range. Have sued Jensen of American Fork for trespass. "Keep off the grass"!

Culmer Asphalt Mine on divide northeast of William's house.

Lister Asphalt Mine on divide east of White River sheep corral.

August 25, 1902 - 15 miles. Came down White River and crossed divide at Soldier Summit. Land west of divide on Soldier Creek is a long sloping mountain on the south covered with aspen and sage. Good grazing land; has been bought by Price Bros. for sheep range. Good feed in many places. One season's good management already making a showing. Very little pine timber. Country north of railroad is rough, poor grazing lands, has growth of scrub cedar, some sagebrush, shaley [sic] rock and probably location for oil lands. Water comes mostly from the south side. Saw band of sheep belonging to Price Bros. in good condition. Some farming lands along valley. Alfalfa principal crop.

August 27, 1902 - 15 miles. Went up Winter Quarters Hollow. The P.V. Coal Co. have extensive coal mines in this section. The Rio Grand Western Ry. is largely supplied from these mines. There are about 300 houses and a population of 2500 people. The slopes of the canyon are well covered with aspen. A few spruce and fir are mixed with the aspen and there are a number of good sized trees (18 inches D.B.H., 80 ft.) along the bed of the stream. Above the first forks there have been good stands of spruce and fir but most of them have been cut out clean. There is much old dead and down timber scattered all over the slopes. In the head of the canyon there is still a small area of green timber. Saw a pile of 80 telephone poles, 12 in. D.B.H. 24 ft. The butts had been burned for about 5 ft. up, bark was peeled. The wagon road leading to this timber has recently been repaired showing intention of some one to continue cutting.

There has been an old sawmill set on the south fork of the canyon.

The county line seems to divide the range for stock. On the Emery Co. side there is good feed, grass and weeds all through the timber, while across the line in Sanpete Co. the sheep have the ridged tramped into a dust bed. The elderberry bush and all other brouse [sic] is being stripped clean, the grass and weeds are entirely gone. Saw three herds of sheep. They are in good condition yet although they appear to be shrinking some in flesh.

I shall be interested to watch their condition and movements if the drouth continues.

August 28, 1902 - 25 miles. Went from Scofield to the north fork of Fish Creek. The north slope of this branch is covered with a heavy growth of aspen and the south slope is open sagebrush ridge.

Saw herd of sheep belonging to James Larsen. They were in good condition. The range in this vicinity is controlled by the Metcalf Coal. Co. from whom Mr. Larsen has secured a lease.

About 2-1/2 miles from the mouth of the canyon I came to the mine of the Metcalf Coal Co. Went into the tunnel with the miners; it extends about 1000 feet into the hill. The coal vein lies flat (horizontal) and is about 4 ft. thick. It is a good quality soft coal; the market is with the settlers who come to the mine with their wagons. The price is \$1.50 per tone at the chute.

Above the mine the canyon is narrow and very brushy. It is necessary to pick out a trail in order to get through.

The head of the canyon has been heavily grazed by sheep and the vegetation on the ridges pretty well destroyed.

Crossed over to Silver Creek which heads against the divide east of Thistle Creek. There is quite a large basin and considerable open country along the stream. No farming. Sheep have cleaned up the grass and weeds in the valley and are now feeding on the elderberry bushes on the ridges.

Crossing Silver Creek basin struck road going toward Fairview, following same along the divide through aspen thickets to head of a little draw which runs down to Gooseberry. There is scattering spruce and fir timber in the head of San Pete Canyon. All the balance of the country is covered with aspen and sage.

Went down Gooseberry and camped at Mammoth Reservoir. There is an open valley about 2 miles wide and 4 miles long, rolling lands covered with sagebrush.

August 29, 1902 - 20 miles. Went to see the work which has been done on the Mammoth Reservoir at Gooseberry.

It is a fine natural location, the outlet of the stream being at one side or in a bend of the creek so that in case a flood the force of the water would come against the hill instead of the dam.

A tunnel 500 ft. long has been cut through the hill 20 ft. above the level of the creek. This will be the outlet for supplying the flume. A temporary dam is being built to raise the water up to this level. As soon as this is done work will be commenced on the large dam just below the temporary. Ditches have been cut in the side of the hill ^ shape and the dirt will be tamped into these as the dam is built, thus anchoring it to the sides. The dam will be 100 ft. high and the reservoir will have a capacity of 50,000 acre feet. The estimated cost is \$500,000. The water will be taken to the valley by tunneling 2 miles through the mountain and fluming about 4 miles. All of the work which has been done seems to be good, although there is much complaint regarding its cost.

Leaving Gooseberry I went across the divide to Pine Crown Peak and down to the Mouth of Oak Creek. The Mesa is covered with sagebrush and the point with oakbrush. A few pines along the top of the ridge, scrubby white pine.

September 8, 1902 - 15 miles. Leaving Fairview at 2 p.m., went across the hills toward Fountain Green. The country passed over is rolling foothills covered with sagebrush and patches of oakbrush and on the west side a few patches of cedar. There are a number of ranches in the Big Valley but only a very limited amount of farming is done on any of them. Saw no living water any place. The dry arroyos show signs of floods and are washed to a depth of 20 ft. in places. Saw a few cattle near the town. No other stock on the range at present.

September 9, 1902 - 25 miles. Met Mr. Peter Olsen of Fountain Green who is now running one herd of sheep upon the headwaters of Huntington Creek. He has some State lands bought in T. 13 S., R. 3 E. which he uses for lambing ground during the spring, these lands being within the proposed Gunnison Forest Reserve. Mr. Olsen kindly volunteered to go with me to show me the country. We went a couple of miles north from town and then turned across northwest toward Water Hollow. The main valley above Fountain Green is now entirely covered with sagebrush and no grass. The same story is told as in other localities. In early days it was all a grass meadow and the settlers came out with their mowing machines and cut great stacks of hay. Since the destruction of the grass by stock the country has all grown up with sagebrush. By fencing and burning off the brush a good stand of grass is secured again.

This gravelly sagebrush land when put under irrigation produces excellent crops of alfalfa.

Crossing the first little divide we came into Water Hollow. This was formally (formerly) a choice range for cattle. It is an oakbrush country and the open valleys were covered with a luxuriant growth of grasses. A nice little stream of water ran along the bottom furnishing a good size irrigation ditch for a grain farm of 300 acres located in the lower end of the valley. Behold the change now through the overstocking and tramping of

passing herds, the grass has been entirely destroyed. The past drouthy seasons have not furnished enough rain or snow to produce a new growth of any consequence and the country at present looks very barren. The stream of water flowing through the bottom is about large enough to water a band of turkeys and would not irrigate 30 acres much less 300. There is one ranch on the hollow in the lands withdrawn for the Gunnison Reserve. Mr. Rob _____ lives there. He has a small pasture fenced and has a garden of about one-half acre.

Going on up Water Hollow about one mile there is a draw coming in from the north forming a fork on the creek. At this point a Mr. Erickson once had a cattle ranch but the buildings and corral have all been torn down and moved away. Following up the east fork the country soon becomes quite brushy and a few little aspen thickets are found. At the head of the draw is a high gravelly mountain called Bald Peak. Just east of this in the head of a draw running off toward Thistle Creek there is a very pretty little lake covering about 5 acres.

There are a few spruce and fir trees and quite an area of aspen in the near vicinity. The land in this draw has been bought by some parties living in Mount Pleasant who are ranging both cattle and sheep. West of Bald Peak there is a very pretty basin on the head of Hop Creek; it is known as the Park.

There is only one little patch of spruce but almost the entire valley is covered with aspen thickets and oakbrush. Mr. Olsen and Mr. Aagard each have land in this valley and use it in the spring for lambing their sheep. Across the ridge north are the little streams forming the headwaters of Nebo Creek. This section is all well covered with aspen and there are quite a number of little patches of spruce and fir probably 300 to 400 acres in all. Farther on down Nebo Creek the country changes to sagebrush covered hills.

The south slope of the ridge between Hop Creek and Water Hollow is well covered with oakbrush. Water Hollow is tramped out worse than the other parts of this country on account of its being used as a trail by all herds of sheep coming through the Nephi Pass bound for the Wasatch range. They go down the divide between Thistle and San Pete valleys and most of them go onto the mountain up Dry Creek, returning the same way in the fall.

September 10, 1902 - 20 miles. Met Mr. J____, Mr. Leslie and Mr. Bishop Christensen all of Fountain Green. They are anxious to have the forest reserve established and want all of that part which is in T. 13 and 14 S., R. 2 E. for the exclusive use of cattle owned by the people of this settlement.

Starting out I went west to the spring which furnishes the water supply for this settlement; it bursts out of the side of the mountain in three springs, all on an area of not more than one fourth of an acre. Formally (formerly) the water ran out and sank in a marshy spot in the valley. The people have cut a ditch around the side of the hill through gravelly soil and turning the water this way utilize it to irrigate their fields. The ditch also furnishes water power for a flour mill and an electric power plant.

Just south of the spring there is a trail going up the side of the mountain. Following this the top of the divide is reached at the head of the south fork of Log Canyon. Saw camp of Mr. Andersen's sheep herders on the east side of the divide. On a bench on the east side of the mountain just under the divide, there were several small bunches of cattle and horse. Found Mr. Anderson's herd at a corral on top of the divide. They are a good grade of sheep, showing strains of Cotswold crossed with Shropshire, and Merino. The lambs and wethers were in good condition but quite a number of the ewes were thin. The country is pretty badly tramped out. Very few young trees are seen in the forest which covers the head of the canyon.

At one time there was a sawmill located at the south of Log Canyon and most of the timbered area has been cut over.

South of the high point on the divide there are a number of horses ranging. They look pretty gaunt and are living on leaves and sagebrush.

Going north along the divide I turned down the North Fork of Four Mile Creek. Saw quite a number (100) of cattle and plenty of signs along the water. They were all in good condition although they seem to be living entirely on brouse [sic]. The soil is badly tramped everywhere.

Down near the forks I saw a herd of sheep belonging to Mr. Worthington of Nephi. The men in charge told me this was the first day he had been in this basin and that no sheep had been her for 5 years previous. The grazing of cattle and horses has gone on constantly, however, and the range is just as bare as that which has been used by sheep. On the east side of the canyon below the first forks is an old coal mine. About one mile farther down is an old sawmill set and about one half mile farther another. This sawmill was operated for six years by Nephi people and cut about 2,000,000 ft. of lumber. All of the merchantable timber in this basin being pretty well cleaned up. The entire basin is covered with aspen, spruce and fir. Very little oak or maple brush.

On the Left Hand Fork of Four Mile Creek which forms another basin west, there is an area of about 160 acres of spruce which has not been cut out, probably there is 400,000 or 500,000 feet of sawlog lumber in this basin.

Cattlemen have bought the State lands on Four Mile Creek up to the township line and have the canyon fenced at this point to prevent stock from drifting in and out of the mountains. The spruce timber is all on the lands withdrawn. The township west is almost entirely oak and mahogany brush lands. Broadhead Bros. farm is located at the mouth of canyon on Sec. 4 and 5.

September 11, 1902 - 8 miles. Went to Levan and met a number of citizens before noon. On account of my horse being lame from an accidental cut with barbed wire, concluded to lay over until morning and then make an all day trip back on the mountain again. People at Levan do not seem to be very much interested in the forest reserve.

September 12, 1902 - 35 miles. Leaving Levan I went up Chicken Creek. Just outside of the fields and at the mouth of the canyon there is an old sawmill which cut lumber for the valley a number of years. It has been abandoned for a long time and is badly dilapidated.

The canyon is narrow for about a mile and then widens out into quite a large basin, the divide toward Pigeon Creek being very low. The valley is covered with oak brush and is very closely browsed by cattle. A few small patches of spruce are seen on the top of the high ridge to the south.

Going on up Chicken Creek about three miles from the old sawmill the valley or basin narrows down and the bluffs become quite high and precipitous. The canyon is very steep and floods have entirely destroyed the old wagon road. It is now only a very rough trail. At the top of the hill in the narrows there is another rough canyon coming in from the south, the sides of which are pretty well covered with timber. An old sawmill has been located at the forks many years ago. About one-half farther up Chicken Creek is another old abandoned sawmill site. From this point on the valley of the creek is quite level and the mountain flattens out into a rolling mesa. The spruce is seen no more and patches of cedar are scattered over the entire top of the mountain.

Turing over the divide into Little Salt Creek the country is covered with oak and maple brush. There are patches of timber in the heads of different draws and many ties have been cut out of this section. Saw head of sheep belonging to Mr. McCune of Nephi. Country is very brushy and sheep do not go over more than half a mile in feeding during the day.

Going on down the canyon found it about the same all the way. Oak and maple brush and once in a while a little patch of spruce.

About a mile below the main forks of the creek the valley narrows down into a very rough canyon and the trail leads out to the north over the top of the ridge.

The country then changes to a cedar country with very little brush. This section is mineral land and a large number of mining claims are staked off.

Considerable prospect work has been done but no working mines have yet been developed.

The country on to the mouth of the creek is bad lands, clay sandstone, alkali, timber growth being cedar and a little scattering sagebrush.

September 13, 1902 - 30 miles. During the forenoon went from Levan to the mouth of Chris Canyon. Met Mr. Cole who owns ranch here and is running a band of sheep up on the head of the canyon.

After dinner went with Mr. Cole for a trip over the range. Following up the canyon just after the township line is crossed which forms the boundary of the proposed forest reserve the canyon boxes up and is very rough for about a mile. The sides are covered with cedars. Above the box the canyon widens out and the long sloping hill sides are covered with oak and maple brush. Mr. Artbeck has an entry here but I saw no improvements of any kind. He also has made some selections of land which he has applied to buy from the State. There are other private entries and State land selections near the head of the canyon but I saw no improvements or farming on any of them.

This is also true of locations on Little Salt Creek. The entries all seem to have been made to hold the range for grazing purposes.

There are little patches of timber on the head of Chris Canyon and the tie cutters have worked in them as in other parts.

Saw Mr. Cole's band of sheep; they were in fairly good condition but seem to be losing flesh. The range is pretty well cleaned off. Saw several small bunches of cattle; sign shows the range to be used quite extensively for cattle grazing.

Returning down the canyon stopped over night at Cole's ranch.

September 14, 1902 - 30 miles. On account of the very rough character of country along the western part of the mountain, I concluded to take Mr. James of Fayette along with me as a guide.

Going up Mellor Canyon the slopes are very rocky and have only a scattering growth of cedar. No browse or grass, conglomerate formation and devoid of soil.

All of Twp. 18 S., Range 1 E., which has been withdrawn is about the same kind of country. In Twp 17 S. on the head of Mellor, Axbundle and Maple Canyons the country changes to a mesa well covered with oakbrush. There is also buckbrush, deerbrush, bullberry, Cercocarpus, chokecherry and maple.

It is a good grazing country and has been well taken up in application to buy these lands from the State by cattlemen residing in the adjoining settlements. Saw quite a number of cattle, all looking well. Range is in fairly good condition.

The timber is located on the north slopes in the breaks of the canyons. There are patches of yellow pine in Kitchen and Timber Canyon, the largest trees being about 40 in. D.B.H. and 80 ft. high.

The timber on the slopes is red spruce, white fir and white spruce. It has been cut over for ties. Stand about 80 to acre, 60 ft. high., average 10 in. D.B.H. Reproduction very scant. Spruce and fir apparently thrifty.

September 16, 1902 - 35 miles. Met Mr. J.C. Mellor of Fayette, one of the leading sheepmen, says he has applied to buy from the State some of the lands located on the South Fork of Kitchen Canyon. Uses same for lambing ground during month of May, then drives sheep over to the East Mountain for summer returning here about Oct. 1. Says all of the grazing lands on this mountain which have not yet been applied for would be taken if the people had a change to buy same. The purchases are about equally divided between cattle and sheepmen and the quarrel of range rights has thus been pretty well adjusted in this section.

The rough country which would not be bought by the people is very rocky and produces nothing but cedar and pinon and in a few places a little sagebrush. A very hard kind of country to make much improvement in and undesirable for forest reserve purposes.

Going out across the country east from Fayette found a mesa valley well covered with sagebrush and cedar but very little of anything else. Saw no stock of any kind. Crossing over to Antelope Valley went down a rock bad lands canyon characteristic of all the breaks sloping into this valley. The ridges on the head of the valley are well covered with cedar and pinon. Looking south as far as you can see is a level sloping valley with a rolling ridge on either side and all covered with sagebrush and nothing else. The few ranches which have been located in the upper part of the valley have been taken up for stock ranches, but from the appearance at present all of the stock have had to go to some other part of the range for water.

The lower part of the mountains on the east side are very rough as far as Wales. From there north the mountains are smooth mesas covered with oakbrush and are good grazing lands.

September 17, 1902 - 20 miles. Went across to Moroni and took the S.P.V.R.R. train for Nephi. Going north from there to the lands withdrawn in Twp. 11 and 12 S., R.1E. Quaking Aspen Canyon and Red Canyon form a basin on the southwest side of Mt. Nebo. The lower part is covered with oakbrush. On the head of upper part there is a scattering or bunchy growth of fir and a few small bunches of aspen. The next basin north is Willow Creek. This is directly under the main peak and contains an area of probably 1,500 acres. It is about the same as the other basin – oak and fir, some aspen.

The balance of the range north is quite rough with fir along the comb. The peak of Mt. Nebo is rocky and barren.

September 18, 1902 - 6 miles. Went from Nephi to Moroni on S.P.V.Ry. and then across to Mount Pleasant with my horse.

Talked with a number of citizens at different points during the day, but learned nothing new of importance.

Having completed my examination of the proposed Gunnison Forest Reserve, after careful consideration, it is my opinion that the area within Twp. 11 and 12 S., Range 1

East and Twp. 13 and 14 S., R. 2 East, as per revised boundary lines, should be added to the Payson Forest Reserve and all of the balance of the lands withdrawn for the Gunnison Reserve should be opened for settlement again.

The lands in the area which I consider unfavorable for forest reserves are divided into two principal classes. Rough rocky ridges and canyons and good grazing lands. The area covered with pine timber or which would produce naturally a merchantable crop of timber is less than 5 percent of the entire area. The area around the edge of the mountains on the east and west sides in Twps. 15, 16 and 17 South is very rough and rocky. It is covered with a scattering growth of cedar and pinon of value for fence posts and firewood but has very little soil and is of no value as grazing lands and the greater part of it has already been applied for to the State Land Commissioners by stockmen wishing to buy same. I do not doubt that all of the remaining grazing lands will be bought if opened for sale again.

In Twp. 15 S. which has only recently been surveyed there will be fully 20 homestead entries as soon as the survey is accepted and the land offered.

The lands which have already been applied for are well distributed between the different stockmen and the general sentiment of the people in the vicinity of these lands is that they be allowed to complete their title. It is believed that the range will be taken care of by the owners fully as well as the Government could care for it under forest reserve management.

The area in Twps. 11, 12 and 13 South, Range 3 East are all good grazing lands having very little timber and have been largely applied for by stockmen.

Twps. 14 S., Range 3 E., 18S. Range 1 and 2 East and 19 S., Range 2 E. are all low rolling hills, very limited water supply and covered with sagebrush and a very scattering growth of cedar and pinon. They are not timber lands and do not comprise any important part of a water storage basin.

September 19, 1902 - 18 miles. Resumed work on the Wasatch Reserve by going out on the mountain from Mount Pleasant. Went up Cedar Creek to the top of the divide. There is a good road which has recently been built or improved which goes to a sawmill on Black Canyon about four miles east of the divide. Most of the lands on the slopes of this canyon are owned by private parties and grazing is very closely restricted, the consequence being an improved condition of the vegetation and soil. The surface is not trampled like the open range and the weeds and grass have had a chance to grow. Saw a herd of sheep belonging to Mr. Sealy. They were in splendid condition and were being properly handled on this range. The upper part of the canyon has been heavily timbered but the sawmills have cut everything worth cutting and moved on. On top of the divide I met six wagons loaded with lumber and a little farther along on a saddle in the mountain saw about 30, 000 feet of lumber which had been hauled up from the mill and piled. The canyons on the east slope all have a good growth of spruce and fir timber. Going along

the main divide north to the head of Pleasant Creek the soil is badly trampled by sheep and is bare of vegetation.

Saw a band of sheep on the head of Potter Canyon which were quite thin in flesh and seemed to be living on fresh air and mountain scenery. Turning down Pleasant Creek I saw several small bunches of cattle which were in fair condition although there was very little feed and the country everywhere showed signs of heavy sheep grazing.

September 22, 1902 - 18 miles. Leaving Fairview went up Cottonwood Canyon road to Little Gooseberry. This is an open valley about 2 miles long and one mile wide with rolling land covered with sagebrush. Aspen and fir thickets on the border all around. One house (a 2-story log) has been built on the east side of the valley. A small reservoir has been built here and the water is taken out to the San Pete Valley. Crossing the divide on the east side I went down Flat Canyon.

This has been a timbered country and sawmills have been located at several different points on the canyon.

At one place on the south side there is a burn covering about 160 acres on which the timber has been totally destroyed. Reproduction is not very good in any of the timber although there are enough young trees from 15 to 40 years old growing to make a new forest if properly cared for. At the junction of Flat Canyon with Huntington Creek there is a good sheep dipping plant which has been presently built. All of this country has been heavily grazed by sheep. I saw four bands of sheep; they were in good condition yet but looked as though they were shrinking some. The men in charge said they were going off of the mountain soon now and drift out towards the desert.

Going down Huntington Creek about two miles I came to the camp of the Utah Coal Company and stopped for the night. Met Mr. Cribs and Mr. Fielding; also the workmen in the mine. They have a 23-inch vein of good coal and are expecting to open up a better vein soon. The market for the product of this mine and also another which is located on the same vein is with the farmer of the San Pete Valley who came to the mines with their wagons. Sometimes there are as high as 50 teams per day loaded.

Mr. Cribs says that the entire country has underlying veins of coal, some heavy "faults" occur to the west which cause it to be down very deep in that section.

September 23, 1902 - 32 miles. Going on down Huntington Creek found the ridges on either side high and smooth and good grazing lands – much open sagebrush country. Good patches of fir and Engelmann Spruce timber on the north slopes. Aspen thickets in many places on the south slopes. No maple or oak, willow along the creek bed. Some birch, serviceberry, chokecherry and other bushes. Aspen extends down about to the mouth of Tie Fork. Oak and pinon commences there (also mahogany). Cottonwood commences about the forks of the Huntington Creek.

Below Tie Fork the country becomes very tough on the northeast side of the canyon. High sandstone ledges with very little vegetation and scrubby timber. On the southwest side it is also rough along the main canyon but smooth as soon as the side canyons are entered. Mill Fork and Rilda Canyon being good grazing lands and also having some good patches of timber. All of the country below the main forks and on both sides to the township line east, west and south is filed upon as coal lands; also in T. 16 S., R. 7 E. all of the land on the southwest including Mill Fork and Rilda Canyon is taken up as coal lands. On the northeast side Bear Canyon is taken up as coal lands and mines are working there.

Met Mr. D.C. Robbins who is an oldtimer here and who is largely interested in the coal land entries. Says the people here have been working on these prospects for the past seventeen years and have run about 100 tunnels to locate the veins at different points. There are 7 principal veins in the district. Experts estimate the land to have 50,000 tons of coal to the acre.

I do not think there is any doubt that these lands are more valuable for the coal they contain than for the timber or grazing lands, although this district is situated nearest to Pleasant Valley station, the end of a branch of the R.G.W. Ry. The country between that station and these lands is so high and rough that it would be very expensive to build a road that way for the transportation of this coal, the most practical route being the way it is now hauled by wagon, out across the valley to the main line of the R.G.W. Ry. a distance of about 30 miles.

Mr. W. Kimberly, representing an eastern syndicate, is getting out 20 tons of coal which is being crushed and will be shipped to Sharon, Pa. where it will be made into coke and tested as to its qualities for treating iron ores. Should the tests prove satisfactory it is believed a deal will be made for 40,000 acres of coal lands in Huntington Canyon.

September 24, 1902 - 44 miles. Went with Mr. J. W. Lott for a trip over the country on the northeast side of Huntington Creek. Traveled wagon road to Trail Canyon and then took trail to the top of the mountain. It is very steep and rough, rising 1,200 feet in about one-third of a mile. There are steep ledges on either side and there is no other trail to the top of the mountain until you get around to Cedar Creek. As soon as the top of the ledges is reached the country is smooth and rolling; covered with sagebrush, aspen thickets on high ridges and patches of spruce and fir timber on the north slopes. Many springs of water with sufficient supply for livestock. Mr. Lott has two corrals for horses. Stock are ranged here from June 1 to about Oct. 15 when they are taken down to the valley for the winter. Three sections of land on this mesa have been selected by the State. Going down Tie Fork found trail made by stock on a very steep point; led (or slid) our horses down. There has been an old sawmill at the forks many years ago. Ties were cut for R.G.W. Ry.

There is a large burn covering about 200 acres which had been first cut over and is now totally destroyed, there being no reproduction. On the east side of the canyon there is an

area of about 500 acres of good timber which has about 150 trees per acre over 6 in. D.B.H., the largest being about 24 in. D.B.H. principally red spruce, second fir balsam.

All of this country is covered with coal claims. Saw a place on this canyon at an elevation of 8,050 ft. where an 8-ft. vein of coal had been opened up and 60 feet higher up was a vein of 17 ft. thick, good, hard coal. Mr. Robbins located claims here 18 years ago. Went on down main canyon to Trail Canyon again. Mr. Robbins has built a stone cabin here which is used for camp when working the coal claims. On the east side of canyon at an elevation of 7600 ft. a tunnel has been run in 60 ft. and shows up a solid vein of coal 17 ft. thick, formation same as in Tie Fork and evidently a continuation of same vein.

About 60 ft. under this vein is a natural cave in which another vein of coal 8 ft. thick shows for 100 ft. along the ledge; also the same looking kind of a vein as in Tie Fork. At the mine in Bear Canyon the same formation is found in an 8-ft. vein first, and about 60 ft. above this a 17-foot vein. On Rilda Canyon across on the southwest side of Huntington Creek, the water running in the creek exposes a vein of coal 16 ft. thick; is same kind of formation and same elevation as in Trail Canyon. On Deer Creek at Johnson and Wakefield's mine there is a 14 ft. vein of coal at an elevation of 8,100 ft.; is same formation.

On Cedar Creek at Mr. Howard's mine there is a 17 ft. vein of coal at an elevation of 8,100 ft. in same formation. On Cottonwood Canyon at Mr. Otterson's mine and at _____ mine the same kind of coal vein is found. This seems to indicate that the entire mountain in this vicinity has this vein of coal running through it. Other veins crop out in many places. A number of the canyons show 7 distinct veins from one to four feet thick. The coal is of good quality, contains much rosin, is good cokeing coal. At present the mines are only worked during fall months to supply the demand from settlers of the valley who go to the mines with their teams and buy the coal at the chutes.

September 25, 1902 - 36 miles. Went with Mr. Wakefield to visit the Deer Creek coal mine about 8 miles from Huntington on the southwest side of the canyon. The mouth of the tunnel is almost 100 feet above the bed of the creek and at an elevation of about 8,100 ft. This mine has been worked for the past 18 years. The vein runs from 10 to 14 feet in thickness with a solid sandstone floor and roof. The coal is hard and contains a large amount of rosin, burns very freely and makes cheerful fire in open grate. The lower vein which exists in all of the other places where the prospects have been opened up has not been sought for here and does not happen to show up in the ledges. Up the canyon about a quarter of a mile there are four small veins of coal above the vein which is being mined and farther up the canyon three other veins crop out and have been opened up. Some of the lands on the head of this canyon which have been located by the State are in conflict with the coal locations. On top of the ledges the mountain is smooth and covered with sagebrush. There are patches of aspen and spruce and fir along the ridges. It is good grazing land and is used largely by the settlers for pasturing their cattle and horses. Also by the sheepmen for their bands. At present is very badly trampled out by the sheep and there is little feed left for cattle and horses. Also in Rilda, Mill Fork and Crandall

Canyon there are good grazing lands which have been seriously injured by overgrazing. There is one band of sheep in Rilda Canyon, two in Mill Fork and one in Crandall Canyon. There are good bodies of timber on Crandall and Mill Fork Canyons. The canyons east of Meeting House and Deer only have patches of timber on their heads.

Returning to Huntington then went with Mr. Lott to the Granger coal mine on Cedar Canyon. This is the largest opening I have seen. The vein is 17 feet thick and the tunnel has been cut so that the wagons are driven into the mine to load. It is a solid vein of good hard coal with smooth sandstone top and floor. The elevation at mouth of tunnel is 8,100 feet. This same vein has been found at about 40 different places in the adjoining claims. Formation is same as in Huntington Canyon.

September 26, 1902 - 10 miles. Went to Castle Dale; met Mr. Wall, county treasurer of Emery Co. Says he is in favor of a forest reserve if grazing will be allowed under proper regulations; does not think total exclusion will be necessary to secure an improvement of the present conditions. Mr. Winters, a sheep man, has been opposed to the forest reserve, but if grazing is to be allowed under proper regulations thinks it would be a good thing for the country. Says sheep go on the mountains too early; should be kept off until feed has a chance to grow.

Range should be allowed settlers for their cattle and horses and sheep kept off of same. Sheepmen can cut down the number of their flocks and improve the quality and will be better off than now.

Proper regulation will be a benefit to sheep industry. Met Mr. Browning, an oil man; is interested in a homestead in Upper Joe's Valley; thinks that section should be excepted from the reserve. Met Mr. _____, editor of "The Progress". Thinks the forest reserve is a popular move with the majority of the people and would like to publish anything which will give information on the subject.

September 27, 1902 - 25 miles. Leaving Castle Dale went to Orangeville and then on up Cottonwood Canyon. The mouth of the canyon is formed by very steep mountain ledges on each side. Scattering cedars in the valley, spruce and fir on top of the mountain.

About 6 miles from Orangeville there is a coal mine which furnishes the town with their supply of that commodity. At Trail Canyon about 3 miles above the coal mine, the ridges are smooth and are good grazing lands. Met Mr. Franklin, a sheepman who was going to his herd.

Camped at the head of Cottonwood for noon. The flat is covered with sagebrush, sides of ridges with aspen and the top of mountain with spruce and fir. A road branches off on east side which goes to sawmill on head of Mill Fork which was recently burned, destroying the mill and a large area of timber in the vicinity.

Crossing the divide west, the road goes down a short canyon and comes out into Upper Joe's Valley. Mr. V. Kofford has a large pasture fenced which he is using to hold his

cattle and horses. There is no farming. The ranches are all taken for the purpose of running livestock. The meadows in the valley are well watered and have a good covering of grass. Met Mr. Hansen who is running cattle on the mountain and camped over night with him.

September 28, 1902 - 35 miles. Went north along Joe's Valley. Saw corral and partly build log house which have recently been built. There is an old log cabin at Aiken's ranch and another about 2 miles up the creek; both are abandoned and tumbling down. Ridges covered with aspen on both sides. Sagebrush on all open places. Crossed divide to Soad (?) Valley, then to Sheep Flat and on north to Miller Flat where Mr. J. Seely has built a dipping corral. This valley has been a perfect cienega. There are springs coming out of the bottom of the mountain on all sides. Saw two herds of sheep, both looking well. The dipping corral has closed for the season on account of the cold, stormy weather.

Directly east of Miller Flat at the forks of Left Hand Huntington there is a coal mine which is now being worked. The valley between the two high mountains is streaked with aspen thickets and sagebrush in the open places. Went to the Cleveland Reservoir on one of the north branches of Huntington Creek. This is a splendid natural reservoir site; the dam is about 300 ft. long and 40 ft. high, is build of dirt and rock. A new stave pipe is now being put in for an outlet. This reservoir has been in use for 10 years and has proved a success. It will be raised 10 ft. and the capacity thus greatly increased. The drainage basin is quite large and high so that a good supply of snow and water is assured.

Going west I passed another reservoir site where the people of _____ are building a dam. Does not look like a very good place to me; not much storing capacity in the basin. All of the north slopes on this part of the mountain are well covered with timber. Saw a number of places where sawmills have set and much lumber been cut. Good forest of small trees 4 to 10 inches now coming on. Very young trees or seedlings are scarce.

Commenced snowing at 2:30 p.m. and when I reached the summit I could not see anything for the storm. Heard sheep bleating in every direction. Flocks are now drifting off of the mountain. The west slope is short and steep and covered with oak and maple brush.

September 29, 1902 - Learning that Mr. Gannett would be in Salt Lake City tomorrow, went there to have a talk with him in regard to the proposed forest reserve.

September 30, 1902 - Met Mr. Gannett and am pleased to learn that our views regarding this country do not differ very greatly.

October 1, 1902 - Met Mr. Newell and Mr. Fitch; attended a meeting at the assembly hall. Mr. Newell explained the irrigation bill which was passed by the last Congress.

October 2, 1902 - Returned to Mt. Pleasant and went over to Spring City so as to be ready to start to the mountain early in the morning.

October 3, 1902 - 30 miles. Went from Spring City up Canal Creek. The head of the creek is filled with boulders. Several years ago the settlers built a dam on the right hand fork; when it was washed out by a flood it sent rocks weighing several tons rolling down the canyon. Also washing the soil away and leaving the head of the creek a mass of boulders.

The ridges near the mouth of the canyon are covered with maple and oakbrush, some cottonwood willow and birch along the creek. Above the forks the north slopes have patches of spruce and fir. Sawmills have been set in three different places and all of the merchantable timber cut out. There are two places where small areas have been entirely destroyed by fire. The head of the canyon is against a very steep mountain known as the horseshoe. Along under the granite ledges between the two forks of the main creek there are a number of small lakes, all at an altitude of 10,000 ft. Crossing the divide to the head of Reeder Canyon the mountain flattens out and forms a large horseshoe valley. There is no ground cover, all vegetation having been destroyed by overgrazing. The north slopes and bottom of the canyon is well covered with timber. A road leads out of this basin on the southwest, climbing the divide to the summit of Horseshoe Mountain it joins a road which runs from the old sawmills near Joe's Valley to Ephraim.

On top of the main mountain it forms a very large mesa extending south about 12 miles and east and west about 6 miles. Seely Canyon cuts into the mesa from Joe's Valley and the head of Ferron Canyon comes in on the south side. There are little scattering patches of timber but not enough to form a forest anywhere except on the north slopes running into the main canyons.

Dropping off of the mountain into the head of Ephraim Canyon the first ridges are quite barren, having only here and there a small clump of aspen. About one mile down the ridge the spruce and fir timber commences. An old sawmill has set here and trimmed up about everything worth cutting. The main stream of Ephraim Canyon runs back southeast heading near the head of Seely Canyon. The high ridges on the south side has some patches of timber but the slope is covered mostly with aspen, maple and oak. Down the canyon near its mouth there is a large round top mountain on the south outside of reserve which is all fenced off in pastures.

Mr. George Taylor has a small farm south of the road which I think is also outside of the proposed forest reserve; stopped at Ephraim.

October 4, 1902 - 8 miles. Went to Manti. Met a few of the citizens and talked over forest reserve matters. Stockmen are anxious to secure the lands which they have applied to buy from the State. After dinner called on county treasurer, Mr. P.A. Eliason. Secured an abstract of the assessment roll showing owners of sheep in Sanpete County.

October 5, 1902 - 12 miles. Started out to cross the mountain again. Went up Manti Canyon. Floods have certainly done great damage here and there is need of every care to

restore the vegetation on what soil is left. Stock have been entirely excluded from this canyon during the past season.

A little improvement is already noticeable and I think the exclusion should be continued at least two years more before any grazing is allowed. After that time probably a limited number of stock could be pastured here without danger.

About 4 miles from town there is a sawmill which I understand is the property of Mr. Wm. Bench. It is not running at present. The slopes on the lower part of the canyon are covered with oak and maple. The spruce and fir is on the top of the high mountain and in the head of the canyon. There is a small area of timber on the Main Canyon which unfortunately was burned during the past summer.

On top of the mountain on the headwaters of Manti Canyon the country is open and quite level in slope. Grass is starting again in spots and the country shows an improvement over the other parts of the mountain top in the vicinity. On the divide as you cross to Ferron Canyon there is a basin with an area of about 80 acres which contains a beautiful natural lake. Dropping down over the divide into Ferron Canyon there is a wagon road which leads to B. Kerron's sawmill. There is an area of about 160 acres of timber on the south side of the canyon.

An old sawmill operated here before Mr. Kerron located, cutting out about 300,000 feet of lumber. Mr. Kerron has cut about 300,000 feet during the past two years. At present he is cutting some lumber for the town of Manti, using the dead timber. There are many good cuts of logs which were left by the first sawmill which apparently took only the cream. These are being used up now by Mr. Kerron. Also, there is about 75,000 ft. of dead standing timber which could be used to advantage now that will rot and be of little value in a few years more. The stand of the forest is about 125 trees per acre 6 to 36 inches. Average sawlogs 16 in. D.B.H. Av. Cuts 2, 16-foot. Merchantable timber (above 12 in. and dead standing) about 2500 ft. per acre. Average height about 60 ft. These patches of timber would all average 10,000 ft. lumber before they were first entered. This is about the average of all Ferron Creek timber patches. Spent the afternoon looking over the forest and camped with Mr. Kerron.

October 6, 1902 - 25 miles. Went around the point of the mountain northeast of Mr. Kerron's sawmill to Bear Creek. Very scattering growth of spruce and fir. Strip of aspen thicket near the creek. Small patch of timber in the mouth of Little Bear. Across on the north side of Bear Creek and on the south slope of Wagon Road Ridge there is only a narrow strip of scattering timber. Slopes running down to Ferron Canyon are all open. The long divide between the two forks of Ferron is known as McEwan's Flat. It is open and level, good grazing land. Aspen thicket up against the mountain; a good sheep corral in the edge of the aspen. Under the north point of Wagon Road Ridge there is a good spring and an old sheep corral. Going on around the point there is a scattering patch of timber on the head of Tracy Creek which runs into Joe's Valley near Reynold's Ranch. The pass from Joe's Valley to Ferron Canyon is known as the Dragon.

The mesas on the different slopes on all sides are good grazing lands but are very badly damaged by sheep grazing. The lower ridges in this vicinity are used for lambing and the sheep are driven in some years as early as April 15. It would be much better if they could all be kept off until later in the season and until after lambing. There are lambing grounds off of the main mountain on the west side but on the east side of the country is so dry that water would have to be developed by building reservoirs. This is rather an uncertain kind of water supply and not safe to depend upon for lambing. To provide a different place for sheep to lamb on the east side off of the mountain seems to be a hard problem.

Going down the Dragon the country is all white-looking clay and covered with pinon and cedar. There is an alkali spring on the slope about half way down.

Several coal claims are staked out along the canyon. On the north side of the creek there is a coal mine now working in a short canyon known as Birch Creek. The coal contains a large percent of rosin and slacks (?) rapidly. It is said that the coal in the other veins which have been opened up is harder and of a much better quality.

In the mouth of the canyon there are three settlers within the proposed forest reserve. The first, or farthest west, being Mr. Biddlecum, then comes Mr. Elder and on the line, Mr. Hertz. All of these parties have little farms and raise crops of alfalfa, corn, potatoes and squashes.

Think forest reserve will be a great benefit if limited grazing is allowed and the settler can get the mature timber. Went to the mountain with a party of cattlemen who are going out to round up cattle. Country on the south side of Ferron Canyon is gravelly and has some bunchgrass left yet; is quite open, no timber except along near the top of mountain. Good grazing lands, used by sheep in the spring for lambing. On Dairy Creek there is a sheep dipping corral which belongs to one of the town men who runs it for toll (?).

Cattlemen would like to have this part of the country from Rigley creek east for cattle range and have the sheep excluded; would be willing to give the sheepmen the balance of the basin. There is a good body of spruce and fir timber all along the north slope of the Ferron Mtn. At present there are three sawmills located here, one on Stevens Creek and two on Indian Creek.

October 8, 1902 - 30 miles. Went across Ferron Mountain to the Muddy; the north branch is known as Horse Creek. There is a good patch of timber on its head but over almost the entire north side of the basin there is only a very scattering growth of timber. Not enough to call it a timbered country, being very open and barren ridges. The main creek is in two forks. On the head of the south fork there is a large, high mountain which is well covered with timber. The south side of the basin is mostly open grazing lands. On the north side of the creek below the forks there is a growth of pinon, cedar and mahogany. At this point also is located the main trail crossing. Below here the creek boxes up and cannot be crossed. There is a sawmill located at the edge of the timber on south fork and a wagon road leads from there both ways, one to Muddy and the other to

Mayfield. There is a cut-off trail which leaves the road at the head of the south box canyon and cut across down the wildcat canyon to Emery.

Six herds of sheep were lambled in Muddy basin last spring and had plenty of room. They commenced May 15, loose herding the sheep until through lambing then rounding up to mark and dock.

Cattlemen of Emery and Muddy would like to have the range on the divide between the Muddy and Quitcupah. The ridges are open and rolling, covered with sagebrush and bunchgrass. Cattle commence working up on the mountain about Mar. 15, grazing along the rough breaks first until the snow goes off.

From south Box Canyon out to the point of the ridge east there is a large body of yellow pine, the first pine forest I have seen on the mountain. It stands about 50 trees per acre. Most trees over 8 in. D.B.H., av. 20 in., av. heights about 80 ft. Very poor reproduction, seedlings are very scarce, soil sandy and thin, ground cover scattering bunchgrass – a typical open forest. Going down Wildcat trail the country is very rough. Pinon, cedar and mahogany are all scattered around among the rocks. At the mouth of the canyon the country slopes off gradually. Deep clay soil badly cut up with washes and covered with scattering cedar and pinon. Wood roads lead to Emery.

October 9, 1902 – Layed [sic] over at Emery. Met Mr. Edwards, town clerk, and a few citizens who were interested in knowing what the plan for the management of the proposed forest reserve would be.

Muddy and Emery is a joint township located 60 miles from the railroad. The principal products of the farms is wheat and oats. Although this has been a very dry year the crops have been remarkably good.

All of the farmers have a few stock which they keep during the winter by feeding the rough stuff for which they have no sale. Without cattle and horse to utilize this feed farming would not be profitable. The stock are all ranged in the mountains during the time the land is being farmed.

October 10, 1902 - 25 miles. Leaving Emery to a trail for Quitcupah Creek, passed over a rough sandstone country covered with a scattering growth of cedar, very little grass or brush, badly cut up with box canyons and washes. At Quitcupah Creek the valley widens out and there is a strip of farming land along the north side about 5 chains wide. At the head of this valley is located one of the ranches of the Ireland Land and Cattle Company. Two crops of hay are cut and the third crop pastured. The hay is stacked in a square and feed racks build all around. Last season 400 yearlings were wintered at this ranch.

Above here the canyon is very rough again and badly cut by the wash. Water Hollow coming in from the south heads against a horseshoe mountain which has a little spruce and fir on its top. Good grazing lands as soon as you get away from the rough breaks of

the main canyon. Following up the canyon about 5 miles there is a camp of some coal miners who are working on the development of some coal claims which belong to Quayle and Kimball. They have opened up a 14-ft. vein of good, hard coal. They have a number of claims extending north to the main Quitchupah Canyon. All appear to be upon the same vein. Crossing the divide at the head of south fork of Quitchupah the road leads to Acord's Lake. This is in the lower end of the basin which has no outlet. It is smooth country. The high part of the ridges is covered with oakbrush and the lower part and the flats are covered with sagebrush.

The greater part of the surveyed land in this basin has been selected by the State and approved. Crossing on south to Spring Canyon the higher part of the ridge at the head has some aspen and a little spruce and fir. The balance of the basin being the same as Acord's oak and sagebrush. The lands along the water of this canyon have also been selected by the State and approved. About 3 miles from the head of the canyon boxes and has a growth of cedar on the north side. Below the box it widens out again and the south side is covered with oak and sagebrush. There is a small spring coming out under the foot of the hill at the mouth of the box and about one-half mile farther down a very large spring breaks out which furnishes enough water for an ordinary irrigating ditch. Yago Creek comes in from the south and Little Salina from the north joining just below the springs and forming the Salina River.

The country west of Yago Creek is fenced for a pasture by the Ireland Land and Cattle Company who own a large tract of land on Neotche Creek. It is reported that they have about 40,000 acres of Government land fenced upon the mountain. The meadow lands on Neotche Creek are seeded to timothy and a crop of 1200 tons of hay was cut this year.

The company is now running about 2,500 head of cattle and horses in the pasture. The land is all smooth and rolling, has scattering growth of cedar in the lower parts and aspen on the mountain slopes, sagebrush on the lower ridges and oak, buckbrush and a variety of other bushes on the higher ridges. There is a good stand of grass and considering the dry season and number of stock pastured the country looks exceedingly well. The stock which I saw were all in good condition.

October 11, 1902 - 16 miles. Went across the Yago Creek and following south branched off up Meadow Creek. All of the water comes from the Yago. There are many little meadows along Meadow which were cienegas during the early days but are now very dry and barren. No water worth mentioning in this stream. The ridges are about the same, being covered with cedar and pinon, aspen, oak and buckbrush and sagebrush. All good grazing lands but at present overgrazed and trampled by sheep. Near the head of Meadow Creek there is a sheep shearing corral. This range is used by Robbins Bros. who own lands on Spring and Salina Creek.

Crossing the divide east to the head of Ivie Creek the country is just the same until below the junction of Red Creek when it boxes up with ledges on either side and the north slopes have a scattering growth of aspen and pinon.

Cutting across to Gilson Valley found a large area under cultivation. This is the property of the Ireland Land and Cattle Co. and is known as the Oak Springs Ranch. They cut 1,500 tons of alfalfa hay in two cuttings this summer and had a good third crop for pasture. This ranch is used for feeding cattle during the winter which are summered in pasture on the mountains. The company also owns the Quitcupah ranch and has a fence extending from one ranch to the other, joining the points of the ledges and thus forming another large pasture.

They generally run part of the cattle out on the desert during the early part of the winter, bringing them in to feed when the heavy storms come on.

October 12, 1902 - 16 miles. Returned up Ivie Creek to Red Creek and then took road south up Red Creek for Hogan's ranch. About one mile from Ivie Creek there is a fork in Red Creek and a small ranch located there, following on up the left hand prong about one-half mile there is a sheep dipping corral. The road turns across the divide southeast to Clear Creek and then follows up Clear Creek for several miles finally turning south across the divide to Last Chances Creek near the foot of Mt. Alice.

The Clear Creek slopes are all malpais rock. They have been well grassed and the roots are still seen pretty well set but the grass is all eaten off very close by the sheep which are ranged in the vicinity. There is no timber growth worth mentioning in this part of the country. The Last Chance breaks are all malpais mesas with cedar thickets along the canyons. The entire slope is very closely grassed by sheep.

The heads of all of these creeks are large open valleys under Mt. Hilgard and are excellent grazing grounds if they were only half way taken care of. Passing out of the Last Chance basin to the south the Hogan ranch is found, being located in a large sink basin. There is a meadow containing 300 or 400 acres under fence and crops of hay are cut on some parts of it. Water is furnished by a spring in the upper part of the basin. This ranch is now owned by Farrell & Company who also own a number of other ranches on this side of the mountain. They now have 7,000 sheep and intend to also stock some parts of their range with cattle.

October 13, 1902 - 25 miles. Went from Hogan's ranch to Mt. Hilgard. The country is rolling. Malpais ridges with no timber except along the high mountain divide. On the head of Last Chance Creek there is a level valley with an area of 400 to 500 acres. There has been a ranch taken up here and a little farming done. Water for irrigation being obtained from a lake on top of the mountain. This water is also carried across the ridge to the Hogan ranch. Two other little reservoirs have also been built on the mountain to increase the water for irrigation. The hills are all gravelly (broken lava) and are well covered with grass, principally bluegrass in the flats and curly mesquite on the ridges. Sheep have been grazed it all off very closely this year but the range will come out all right with a few favorable seasons and restriction of the number of livestock.

Crossing the mountain the top is a level sagebrush flat and on the west side there is a very large open valley on U. N. Creek. This is also excellent grazing land.

Going south along the mountain there is a large aspen thicket in a bed of lava. A rough trail lands through this and out into a large sink or basin. This is open and is pretty well covered with grass and sagebrush. Crossing the mountain again to the east, came out on the head of Horse Creek (there is no water in it at present). After passing through a number of small aspen thickets an along rough lava ridges, finally came out upon a large grassy plain which extends clear to Rabbit Valley. Saw a few horses and cattle. Crossed the mountain again to the north by the way of the Ivers spring which is on top of the divide and then struck the road leading north to the Hogan ranch.

October 14, 1902 - 20 miles. Went with Mr. Jake for a trip to Solomon Creek and Thousand Lake Mountain. Crossed the divide south and east from the Hogan ranch following the road to the Solomon ranch. The slope is smooth and steep, dropping down 1,200 feet in about one and one-half miles. This ranch is part of the property of Ferral and Rice. They have built a dam across the outlet of a large lake south of the ranch and by this means secure enough water to irrigate about 40 acres of alfalfa. Two crops are cut, the first about June 15. This is a very warm, well protected spot and ought to be a good place for fruit. A few pear trees were planted by the first settler on the ranch and they bore excellent fruit. The country surrounding this ranch is rolling, gravelly hills; has been an exceedingly good grazing country previous to its overstocking with sheep.

There is no spruce or pine near the ranch but the hills have a scattering growth of cedar and around the many lakes in the vicinity there is some birch, aspen, and willow.

South of this ranch about one mile there is a lake of an area of about 5 acres which is very deep. It has been tried with a 200-foot line which failed to reach the bottom. It is generally believed that it has some very deep underground connection as the level of the water never changes no matter how much or how little runs into it.

The entire east slope of this mountain is open rolling country with very little timber. Low down along the edge of the desert there is a strip of cedar thicket.

A slope is very uneven and there are hundreds of little pockets which catch water during the rainy season or after melting of the snow. Some of these basins are fed by springs and have permanent water. In Twp. 26 South about the only spruce and pine timber is a few little patches on the east side of the ridge east of Horse Creek Valley.

Twps. 24, 25, 26, 27 and 28 South, Range 5 East are all mostly east of the high mountain and on the edge of the desert. They have no timber growth except scattering cedar and pinon.

October 15, 1902 - 20 miles. Leaving the Hogan ranch went south along the main road as a as the old Forsythe ranch. The country passed over is smooth, gravelly valley, open and covered with sagebrush and grass. It seems to be used mostly for cattle and horses. There is no timber on the ridges on either side for several miles. A good little stream of water runs down from the ridge on the east side and joins the main creek about the mouth

of the Sink Hollow. At the old Forsythe ranch which is now abandoned and gone to rack, there is a good natural reservoir site, a gap 200 ft. wide could be damned and a reservoir of probably 10,000 acre feet capacity thus secured. The U. M. Creek joins the main creek at this point. The south slopes have a fairly good growth of cedar and pinon.

Turning east at this point I went along a road leading to the summit of the ridge. A good little stream of water also runs down this draw. Going south along the ridge there is a sharp pointed peak well timbered on the north slope. The top of the ridge at the foot of this peak is wide and open. Just south of here there is a creek running northwest which heads up against the Thousand Lake Mountain. An old sheep ranch is located in this valley. There is a good wagon road from Rabbit Valley and branches have been built up, many of the different branches for the purpose of getting out sawlogs and poles. There is still much good timber in this basin. Crossing the divide at the head of this valley, which is known as Salt Creek, there is a road to Poke Creek which runs east through one of the lake basins and then a trail from there on around the mountain to the old Dairy ranch on Deep Creek. The mountain is all well timbered and very little cutting has been done on this slope. Going on south along the side of Thousand Lake Mountain the slope is well covered with aspen and spruce thickets for about one mile from the bluff and then a very steep open slope for the next two miles below this, or on each in Range 5, there is a large mesa wall covered with cedar and pinon. Also in one part an area of a couple of square miles of yellow pine. Arriving at Giles spring on the southeast point of the mountain, camped for the night with some boys from Torrey who were out on a horse roundup. No shortage of forest air in this camp; it is 10,200 ft. altitude and in the edge of the aspen.

October 16, 1902 - 15 miles. Leaving camp I went on around the mountain on the south side. There is a wide bench or mesa all at an elevation of 10,200 ft. which is very open, the timber being only in a few spots near the bluff of the mountain top. There is sagebrush and grass on all of this slope and many cattle and horses from the valley are ranged here.

It is reached by a trail up the Golden Stairs (a sandstone ledge hollow) and also by an old wagon road up Sand Creek. There is also a rough trail west through a low place in the divide known as the saddle. It is necessary to take one of these trails to reach Rabbit Valley. The ledges are impossible at any other places. There is a good stream of water running from a spring at the foot of the rim on the south side of the mountain which flows on down to the valley through Sand Creek. Under the high mesa and on the second bench ridge there is a scattering growth of good yellow pine timber. Many trees over 18 in. D.B.H. Dropping off of the second bench the washes are sandy with a few pines and scattering cedars. Also birch and cottonwood along the bank of the stream.

The sides of these narrow valleys are high sandstone ledges. They are practically large box canyons which have to be followed to their mouth to reach the valley. The water from Sand Creek or Brown's Creek, as marked on the maps, is used for irrigation by the settlers of Torrey.

October 17, 1902 - 20 miles. Engaged Mr. Gus Williams to furnish three horses and a pack outfit for a trip over the Boulder Mountain. Fitted out with provisions for five days and leaving Teasdale went west across the point of the mountain mesa. The country is well covered with cedar and pinon. Crossed Government Creek which heads just under the bluff of the high bench of the mountain. Birch, willow and serviceberry along the banks of the creek. Went on west to Bailey Creek. The country west of this creek is open plains with no timber. Taking a trail running south along the bench on the east side of the creek, followed same for about four miles to Torgersen's sawmill. The slope in this vicinity has a scattering growth of yellow pine which species has been cut almost exclusively in logging for this sawmill. Only a small area has been cut over thus far. In the valley of Bailey Creek west of the sawmill there is a pasture fenced, and a field in which some farming has been done in years past. It appears to be abandoned at present.

Going on south along a road which runs along the foot of the bench, in about one mile we came to a dipping corral owned by Mr. Thos. Smith who runs same for a toll of \$15 per M. Talked with Mr. Gile of Manti, the owner of the flock which was being dipped, regarding proposed forest reserve. He said [sic] that something needs to be done to regulate the use of the range in better shape, but fears that it will be very hard to make an equitable adjustment of the range divisions and permits in the proposed forest reserve. Says the sheepmen will never be able to agree upon who is entitled to the privileges.

His sheep look well and are in good flesh considering the dry season. Did not appear to have very much scab; are being dipped to clean up for the winter.

Leaving the dipping corral and going on south about two miles farther we came to an open park basin known as Dark Valley. Mr. Geo. Coleman of Teasdale has fenced a farm here and up until the recent dry years has raised a good crop of hay which was used in feeding cattle which he ranged in the valley. This country has all been taken by the sheep which have just about cleaned up all of the grass. At the lower or southeast corner of Dark Valley there is a very rough trail leading to the top of the second bench. Arriving there, found the country well covered with a good spruce forest. Going south about one mile entered the end of a park known as Jacob's Valley. The settlers of Escalante have built a reservoir here covering about 40 acres. The water is turned into Winslow Creek and thus reaches the town.

Finding a little grass in the edge of the timber we camped for the night.

October 18, 1902 - 30 miles. Went southwest from camp to the rim on the south side of the main mountain. Good spruce forest on all the north slopes. The mesa in this vicinity is covered with a thick growth of bunchgrass; also sagebrush. Scarcity of water has prevented sheep from grazing over this part of the range.

On the South slope of the mountain and on Winslow Creek there is a splendid lot of yellow pines. Many good trees 24 in. D.B.H. and over. A very scattering growth in most of the area not averaging over 25 or 30 trees per acre but in proportion fully half are over 12 in. D.B.H. and good saw timber. No cutting has been done here. Fires have evidently

run through quite frequently. Many of the trees are scared. Reproduction is very poor; only a very few seedlings can be found. Above place on Winslow Creek there is a forest of about 200 acres of yellow pine which will run 100 trees per acre and average over 10 inches D.B.H. The average height of these trees is 75 feet.

On the head of Birch Creek and also on the head of Mamie Creek there are also large areas of scattering yellow pine. Farther south and to the line of the proposed Acquarius [sic] Forest Reserve the country is covered with a heavy growth of cedar and pinon. Also oakbrush and a number of other varieties of brush. All good cattle range, much of it is also used by sheep.

Crossing Winslow Creek went to a place known as the Auger Hole. There is a large basin with a fine little meadow of about 40 acres in the center. An old log house and corral is all that remains of a former dairy ranch. Saw a flock of sheep belonging to Mr. Roundy. They were in good condition. The herder said they were on the road to the dipping corral.

Went southwest from here towards Cyclone Lake which is located at the foot of the high ridge dividing Birch and Coyote Creeks. This is a very large mesa and is all covered with a good spruce forest. There is a series of parks scattered all through it, all of which are well grassed and furnish good pasture for stock. Saw several bunches of horses and a few cattle. Swinging around north continued to travel through a good spruce forest. Many of the thickets will run 200 trees per acre over 6 in. D.B.H. The largest trees are about 30 in. D.B.H. and reach a height of from 110 to 125 ft. this is certainly a "pole heaven".

Arriving at a large park west of Rock Springs struck the sheep camp of King A. Brown of Coyote. These gentlemen run four bands and their usual summer range is on this mountain. They winter on the desert southwest towards the Henry Mountains. These flocks have just been dipped and are now preparing to start for the winter range.

Mr. White told me that the customary rental for sheep on shares at present time was about 10 lambs and 2 lbs. of wool, renter making old stock good and paying all expenses. Sheep enter this mountain range about June 15 and usually leave about Sept. 15. They are staying later this year on account of scarcity of feed and water on the winter range.

Leaving this camp came southeast towards Jacob's Valley passing through a very large old burn and also a burn which occurred in June 1902 and which destroyed about 500 acres of timber.

October 19, 1902 - 20 miles. Went from Jacob's Lake up the road towards Boulder until we reached the first bench then turning north went past the Row Lakes and to the top of the mountain. There is a good body of spruce timber on all of the ridges on this slope. Reaching the top found the country quite rough and full of little sinks. It is all volcanic formations. This timber on top at this point is very scrubby and scattering. Found a rough hollow running southeast and followed this towards the south rim. Just before

reaching the bluff we came to a very large lake known as Spectacle Lake. It is very irregular in shape, being long and crooked. I think it is covered an area of about 20 acres. Going on to the south a short distance we come to the edge of the bluff and looking off south had a splendid view of the country in the vicinity of Escalante and Boulder. There are patches of yellow pine up near the high mountain and aspen and oakbrush over the lower slopes.

There is a little valley right up close under the bluff on the head of Bear Creek. It has been fenced and is known as Hawe's Dairy.

Turning northeast from this point we went across the top of the mountain to its extreme northeastern point; passed a number of beautiful lakes, some of them having an area of as much as 40 acres. The eastern part of the top of the mountain is well timbered with spruce; there are open parks or basins all over this section. Along the ridge which forms the southern part of the mountain there is a heavy body of spruce timber; also a good forest on the northern part of the mountain, the most barren part being the western central. Of the entire mountain top fully one half is timbered.

There has been a good growth of mountain bunchgrass on all of the area which has any soil. On the many little meadows there has been a sod of fine bunchgrass. One year a settler from the valley cut a good crop of hay on one of these meadows, hauled one load down and on account of the roughness of the road never returned for the balance. There are a number of cattle and sheep corrals scattered over the mountain.

The entire range has been very heavily stocked and on account of the dry season now looks very bare. There are still several sheep herds on top grubbing away at the grass roots, but the cattle have all been moved to the lower ranges for the winter.

This mountain as well as the top of Thousand Lake Mountain has very little sagebrush or browse of any kind on its top.

Found a large meadow at the head of Pleasant Creek and camped for the night near a cattle corral which has been recently built. There is a heavy body of spruce timber to the south. Considerable snow is still lying in the timber thickets although it is entirely melted on all of the open places. The temperature must get pretty low on this mountain as it is now freezing ice one-half inch thick every night.

October 20, 1902 - 30 miles. Leaving camp went north for several miles and then turning east traveled in that direction to the edge of the mountain top coming out at the top of the chokecherry trail. All of the country passed over was well timbered with spruce. There are several small open parks and a amount of good little lakes. Grass has been eaten off every close and the country quit badly trampled by sheep.

Just under the high mountain on the head of Pleasant Creek there s a very large Rincon. The bluffs on each side form a barrier and a pole fence across the valley from one point to the other makes a splendid natural pasture which contains 4,000 to 5,000 acres. Just

south of the chokecherry point and at the foot of the mountain there is a little valley which has been fenced and used for a cattle pasture. It is known as the Wildcat Dairy. At present it is only used as a camp by cattlemen occasionally.

South of this place across a narrow divide there is another small valley fenced which is now abandoned. This was the Park Dairy. On the north fork of Tantalus Creek there was also another pasture fenced which was used by the Brindle Dairy. This was quite a large outfit; they milked about 100 cows and made a large amount of butter and cheese.

These places are now given up for dairying on account of the scarcity of feed.

All of the ridges on this slope or under the bluff of the high mountain is pretty well covered with a yellow pine forest. Following a trail around to Careas Creek, passed two places where sawmills have set and cut out the choicest of the timber. The loggers were very careless about cleaning up the trees cut, many good logs being left to rot. Near the edge of the pines Mr. John Smith has a sawmill which is not running at present. There is a large body of good yellow pine timber in the near vicinity, only a small amount of which has been cut.

Mr. Henty Cullum has a sawmill located on Fish Creek in a fine body of yellow pine. All of the lumber cut by these sawmills has been used by the settlers in the improvement of their places.

There is a large lake on the head of Fish Creek. A ditch has been cut to turn the water across the divide to Careas Creek. There is a settlement known as Grover located in the northeast corner of Twp. 30 S., Range 5 East. There are also a number of settlers on Fish Creek. If the north half of this township was cut out all complications with these settlers would be avoided.

October 21, 1902 - 15 miles. Leaving Teasdale on the road to Loa, passed along Rabbit Valley between the proposed Wasatch and Aquarius Forest Reserve. There are a few farms in the mouth of Government Creek and quite a large area of farming land extending up ----- Creek. The Thurber bottoms could be made to form a very large storage reservoir by building a comparatively small dam probably 300 yards across the opening; if closed would make a reservoir with an area of 10 square miles.

The country northeast of Thurber on the Wasatch range is very rough and broken. The settlers have piped the water from a couple of springs in these canyons for house use.

The foothills on the west side of Thousand Lake Mountain extend out into Twp. 28 S., Range 3 East, north of Thurber.

These hills are quite rough and barren; have growth of scrub cedar and sagebrush; following on around these foothills the road leads to a little town called Lyman and then across the valley to Loa. Northeast of Lyman about 3 miles there is a large open valley over the foot of the mountain known as Horse Valley in which three settlers of the valley

have summer farmed on which they raise good crops of grain. The second bench on the west side of the mountain has a good forest of spruce and lower down on the slope considerable yellow pine. There are several lakes on this bench which usually have a good supply of water. On the southeast corner of the mountain there is a canyon called Pole Canyon in which a good many sawlogs have been cut for the little sawmill above Fremont on Dirty Devil Creek.

October 22, 1902 - 18 miles. Leaving Loa, went to Fremont and called upon Mr. Balle, supervisor of the Fish Lake Forest Reserve, who volunteered to go with me though the country joining the Fish Lake Forest Reserve. We went up Dirty Devil Creek. The canyon is quite rough and narrow – birch, alder and willow along the creek, cedar on the ridges. Just before reaching the line of the proposed Wasatch Forest Reserve we passed a small sawmill run by water power which cuts 2,000 to 3,000 ft. of lumber per day. They are getting sawlogs from the Thousand Lake Mountain.

The country for the first three or four miles after crossing the line is rough hills, volcanic formation, covered with a scattering growth of cedar.

About five miles from the line the road turns up the side of the ridge on the east and crosses to the U.N. Creek. From this point on north the ridges are covered with spruce and aspen. The road goes down to a large valley on U.N. Creek known as the Danish Meadows. It is all fenced and is used for cattle pasture by Mr. McClellan and Mr. Stephens, the former having 160 acres and the latter 120 acres.

Finding good grass in Mr. Stephens' pasture we camped there for the night. Saw about 75 head of cattle all in good condition.

October 23, 1902 - 40 miles. Leaving the Danish Meadows, went north along the valley of U.N. Creek. Mr. Stephens has fenced across the valley from the lava beds on each side enclosing a school section which he has leased from the State.

Above this pasture there is another area fenced on the west side of the valley which has been bought from the State (approved selection). Going on up the head of the valley. The ridges on the west side have some spruce timber and along the upper part of U. N. Creek there are several thickets of aspen. In the upper valley there is an old cabin and corral the remnant of a former cattle ranch.

Crossing the divide the country north is about 1000 ft. lower and the north slope of the mountain has a fine body of spruce timber covering an area of about 1000 acres.

There is a sawmill on the Yago River just at the edge of this timber which is cutting some good sawlogs. Quite a large area which was cut over years ago has been burned and the remaining young trees totally destroyed.

Going across to the Neotche Creek crossed a steep divide which was covered with a heavy growth of aspen. The valley north is rolling country and good grazing lands.

The Ireland Cattle Co. has a pasture of four sections fenced around one of their ranches. The head of the Neotche is mostly covered with aspen, some chokecherry and serviceberry, very little oak. Crossing the divide west to the head of Gooseberry Creek the country changes and is covered mostly with oakbrush, the flats being covered with sagebrush. The head of this basin is also mostly covered with aspen thickets and oakbrush. There are several old abandoned cattle ranches. This country has been surveyed at request of stockmen who wish to buy some from the State.

An agreement was made between the cattlemen and sheepmen dividing the range for the season, the sheepmen to take the southern part and the cattlemen the country north to Salina Canyon. All of the country between Yago River and the line of the reserved land has been very closely grazed and there is very little feed left. The country to the north towards Salina Canyon is covered with cedars and oakbrush. Mr. Crane says there were 150,000 sheep grazed on Salina watershed during summer of 1901.

October 24, 1902 – Layed [sic] over at Salina. Met Mr. Kister of the Ireland Cattle Co. ranch, Mr. Crane a cattleman, and a number of other citizens. Almost all seem to be in favor of the establishment of the Wasatch Forest Reserve.

During the afternoon a rainstorm came up so I concluded to lay over until morning and make a fresh start then.

October 25, 1902 - 25 miles. Leaving Salina went east across the hills towards Willow Creek.

The country near the town in Twp. 21 South, Range 1 East is mostly rough hills and bad lands. Gypsum and salt, poor grazing land. I think the line of the forest reserve should be near the line between Twp. 1 and 2 East, which runs through a valley pass, thus cutting out the country in Range 1 E.

The country east of this is smooth, high mesas, the lower part being covered with cedars and on the higher ridges and the country farther east a good growth of oak and maple brush; also a number of other varieties of brush.

Following up Willow Creek there are a few yellow pines and large spruce in the bottom of the canyon.

The ridge south of Willow Creek has some very high peaks which have small patches of spruce timber. On the east the oak and maple runs to the breaks of Musania Peak, only a small amount of aspen. A small belt of spruce and fir is on the high mesa under the peak. The country between Willow Creek and Twelve Mile Creek is a very high mesa, mostly covered with oakbrush. There is very little spruce or pine timber.

October 26, 1902 - 40 miles. Leaving Mayfield went up the Twelve Mile Creek. Farming land extends along the creek for about two miles east of town. The country on

each side is a large mountain mesa which slopes or pitches very rapidly towards the west. The ridges running north and south. On the east side the ridges break off very abruptly forming bluffs and ledges in places. Above the fields the creek runs through a break in the mesa which forms a rough canyon for about one mile. The country then opens out into a large basin, the creek forks both north and south. The ridges on the north are covered with cedar and oak and the ridges on the south with spruce, aspen and oak and maple brush. The tops of the high ridges on both sides have a small area of spruce. Farther on up the creek above the second forks the entire basin is covered with aspen. The high divides to the north and south form steep bluffs several hundred feet high. To the east it is open in places and there are roads crossing to the Ferron and Muddy Basins. In the head of the canyons to the south and east there is a good body of spruce timber. The entire Twelve Mile Basin is well covered with brush and aspen. Does not seem to have been grazed as heavily as the larger part of the country. There is good depth of soil and erosion has not as yet been of very much consequence. A sawmill which ran by water power formerly sat near the main forks of the creek. Logging was done principally on the heads of the creeks just under the high mountain bluff.

October 27, 1902 - 20 miles. Went from Salina to Richfield.

October 28, 1902 - Went from Richfield to Salt Lake City.

November 3, 1902 - 205 miles. Went from Salt Lake City to Richfield. Will commence examination of Sevier Forest Reserve from that point.

Met Jesse M. Smith on train. Talked over the matter of grazing regulations for the management of sheep in the proposed forest reserve.

Met Mr. Peter Thompson of Ephraim. Expressed view in opposition to allowing range to be controlled by purchase of State lands. Says six herds lambled on head of _____ Canyon before country was bought up. Now it only furnishes range for a few cattle. Thinks sheep utilize the range to a better advantage than any other class of livestock.

Says tramping the soil has increased the water supply by causing the water to run down the canyons in place of soaking into the ground. Mentioned the argument I have heard other sheepmen make that it took a large part of the water to support the vegetation. Also the theory of the warmth from the trees causing the snow to melt around the body of the trees quicker than it does in the sun, the snow banks in the open lasting the longest.

Says the country between Soldier Fork and Salina Canyons produces a revenue of \$1,000,000 annually through the medium of sheep. Says Manti watershed would furnish range for 20,000 sheep for the summer.

Ephraim has constructed a new reservoir which their water runs through, its object being to settle the water and catch the boulders.

November 4, 1902 - 12 miles. During this forenoon called upon the county treasurer and made abstract of the assessment of livestock in Sevier County. Went to Joseph City during the afternoon; met a number of citizens who are interested in the proposed Sevier Forest Reserve.

November 5, 1902 - 30 miles. Went from Joseph City to Kimberly in the Gold Mountain mining district. The road leads up Clear Creek to the mouth of Mill Creek, then follows up that stream to the mines. There are small areas of farming lands along Clear Creek. Most of these settlers have small bunches of cattle and a few horses.

Mr. Robinson has a ranch at the south of Mill Creek and also keeps a hotel. On Mill Creek just about the line of the proposed forest reserve there is a small area of farming land owned by Mr. Williamson. The country inside of the reserve is rolling hill lands and ridges partly covered with cedars and oakbrush. Also some sage and a variety of other small brushes, fairly good grazing lands and has been used mostly for cattle.

Along the stream bed there is cottonwood and birch.

About 3 miles south of the line on Mill Creek and just above the forks there was once a sawmill which cut all of the timber which was growing along the canyon. The same mill was afterwards moved farther up the stream and cut out another area. Just before the line dividing Piute and Sevier Counties is reached the creek and road pass through a narrow canyon called "Red Narrows". Above this point the Kimberly mine has build a small dam to hold back the water and settle the tailings from the mill. The water of this stream is very strongly impregnated with chemicals used in working the ore (cynide [sic] of potassium) and a number of stock have been fatally poisoned by drinking it. The town of Kimberly is located on the east side of the canyon very near its head. The mines are almost on the top of the Gold Mountain. The ore is run down a steep incline tramway from the tunnel to the mill. The timber in the close vicinity has been cut off clean for the development and working of the mine. There is a splendid reproduction of young trees coming on, however, as the country has been protected from fire and overgrazing. On the head of the two forks of the canyon there is still a good body of spruce and fir. There is a road running across to Fish Creek where the company has two electric light and power plants. This stream has a large and good drainage basin; there are three forks heading up under the snow-covered with timber. The lower part of the Fish Creek basin is quite open, on the east side the growth of timber being very scattering. On the west side the slope is well covered with aspen, oak and a variety of brushes. It is all good grazing lands. The ridge or divide between Fish Creek and Mill Creek is all rich mineral lands. A group of mining claims known as the Sevier have recently been sold for \$100,000. There is a five-stamp mill on the property and it was run for one season on ore which was mined from a dike sticking out of the top of the ridge.

There is a sawmill located on Fish Creek above the electric plants. No cutting is being done at the present time. The water supply of Fish Creek is extra good, it having two main forks which head up under the snow banks on the north slopes of Belknap and "Baldy Peaks. And the headwaters are covered with a good forest growth.

November 6, 1902 - 15 miles. Leaving Kimberly I went up by the Annie Laurie mine and then taking the left-hand road followed it to the top of the mountain, passing the Blue Jay mine. The ridge has had the timber cut off pretty clean for use in working the mines. ON top of this ridge there is a trail leaving the road on the right-hand side which leads down to the Silver King mine on the head of Deer Creek. This mine has had about \$50,000 spent upon it in development work but did not prove satisfactory and is idle at present. About one mile down Deer Creek there is a mill known as the Butler Beck.

Many mining claims have been taken up in this district and are being constantly worked in a small way.

The indications of mineral are good and it is quite likely that some good paying mines will be developed sometime in the near future. There is a new road being built from Marysvale to Kimberly which crosses the ridge from Deer Creek to Beaver Creek and then follows down that stream. There are good bodies of spruce and fir on the north slopes of all the ridges. The south slopes being covered with aspen, mahogany, cedar and oak. There is considerable chokecherry and deer brush on the head of Deer Creek, cottonwood and birch along the stream beds. On Beaver Creek there are a few longleaf pines. The fish warden has made a reserve of Beaver Creek for the purpose breeding fish and has notices posted warning the public not to catch or in any way destroy the fish. It is a beautiful little stream and deserves to be taken care of. The ridge between Beaver and Pine Creeks is a high mesa and is good grazing ground for sheep. There is good growth of spruce on the north slopes of the little canyons. Aspen on south slopes and cedar on the lower eastern end, sagebrush on the open places. This is mostly all mineral lands.

November 7, 1902 - 40 miles. Leaving Marysvale went south to Cottonwood Canyon and then took the road up the canyon. The ridges on both sides are very high and precipitous. The east points are covered with cedars and high up a few spruce. After entering the canyon the spruce is confined to the south side of the canyon, the north side being sparsely covered with cedar and aspen. A scattering growth of sagebrush is also found on the open places and among the cedars. Along the streams and extending out into the valley are cottonwoods and birch. The tops of these high ridges are mostly open country and are used for sheep grazing; country seems to be too rough for cattle and horses. About one mile up the canyon there is amine tunnel into the mountain on the south side. There is also another about four miles up on the north side and just above this there is quite an extensive lot of mining buildings on the south side. The tunnel is up on top of the high cliff about 600 or 800 feet above the creek and the mill down about half a mile above the last mine and leads to the sawmill which has been set in four different locations in the timber which I saw and probably several more. The timber cut has been mostly red and white spruce. Only the best has been taken and there is still a large amount of good sawtimber standing.

After reaching the end of the road I followed the log slides to the top of the ridge coming out on top just south of Delano Peak. Sons of the largest and best timber is up near the

summit. Crossing a little open valley on the head of Lake Creek I went down on the north fork of Three Creek for about a mile and then crossed the divide south to Puffer Lake. All of the ridges on the headwaters of Three Creek and its branches and also on the East Fork of Beaver Creek has a good growth of spruce timber.

On one choice area where I counted the trees I found it to average about 125 trees per acre over 8 in. D.B.H., the largest being 38 in. and about 110 feet high. The average of the area would be about 16 in. and 80 ft.

There were about 250 trees per acre under 8 in. D.B.H. showing the reproduction to be good in this vicinity.

There are several open areas along the top of the mountain where the timber has been destroyed by fire.

Along most of the creeks there are long narrow open valleys. All of this country is grazed over by sheep and in some places is badly tramped. The section which shows the damage the worst is along the Grizzly ridge.

On the north fork of Beaver there is quite a large open park or valley. All of the ridges and the mountain on the head of the north fork of Beaver and its branches is covered principally with aspen, the spruce being very scattering. There is a high ridge running north and south just about on the township line between Range 5 W. and 6 W. and on the west slope of the ridge the spruce gives place to mahogany and cedar, the country within the proposed reserve in T. 28 S., R. 6 W. being mostly covered with cedar and sagebrush.

November 8, 1902 - 12 miles. Met some of the citizens of Beaver during the forenoon. Find there is considerable opposition to the proposed forest reserve. The large amount of timber on the East Mountain makes people careless of its care. They seem to think that what they need the most is wagon roads to reach the timber so that they can cut it out and use it. They have not yet thought of such a thing as a scarcity of timber and do not realize the importance of protecting it. They could sell telephone poles for a line running south from here if it was not for the restriction which prevents them from cutting the. A small reserve around Puffer Lake probably would not meet with opposition. The selfish interest of men will crop out.

There is need of a division of the range between cattlemen and sheepmen for the protection of the cattle interests. Many of the ranges of the mountain could be used by the sheepmen to advantage and without injury if they were properly restricted as to number and time and would use care with fire.

During the afternoon I went up to Pine Creek. There are agricultural lands in Sec. 29 and it would be just as well to cut this section out. Section 32 which joins it is bench land covered with sagebrush and being a school section, might just as well be cut out also.

November 9, 1902 - 40 miles. Leaving Beaver took road leading up Birch Creek. The west line of the proposed forest reserve runs along in a large mesa valley which lies between the mountain and a series of rough foothills which are covered with a heavy growth of cedars.

There is very little spruce on the west and south slope of the mountain. There are a few small aspen thickets extending down the ridges. The valley is covered with sagebrush which extends south to the Fremont Pass Creek. On the south side of Fremont Pass the hills are covered with cedar again. Going east through the Fremont Pass the country is all rolling foothills covered with sagebrush.

Just beyond the Pass there is a sink a couple of miles across known as Dog Valley and then a little range of hills on the edge of the Sevier River Canyon. This entire mesa is about 3,000 feet lower than the high mountain to the north.

To the southwest of Fremont Pass the country is quite broken, many sharp, rough peaks all of which are covered with scattering growth of cedars. There is no water in the country passed over today except the Fremont spring. It does not seem to be either a timber country or an important part of any water shed. Much of it appears to be more winter than summer range.

November 10, 1902 35 miles. Going west up a sandy creek I took a road which looks through a rough canyon to a valley inside of the first range of hills in which there are a number of fields which are found by people living in town. Passing these fields the road leads up the northwest fork of the canyon to the foot of Bear Valley Peak and then crosses the divide to Upper Bear Valley. There are a few yellow pines in the canyon and scattering spruce on the north slopes of the high peaks; outside of this the country is covered with cedar and pinon.

Upper Bear Valley is a sagebrush country. There are several fields fenced along the creek in the lower part of the valley. Good crops of hay are raised but no grain or fruit. This is a cattle range country and the ranches are owned by people engaged in the cattle business. The rough mountains on either side are mineral in appearance but no mines of any consequence have been discovered here.

Crossing the divide south to Little River the country is about the same, sagebrush grazing lands. The forest lies farther south on the higher mesa. Following down Little Creek there is some oakbrush and a variety of other brushes but most of the hills are covered with cedars.

November 11 and 12, 1902 - Snowed at Parowan. Met Mr. Adams, manager of the co-op store. He is strongly opposed to the reserve.

November 13, 1902 - 15 miles. Leaving Parowan with Mr. Jesse Lowder we went up the main Spring Creek to Wilcox's sawmill which is located at the mouth of a small canyon coming in from the east. There seems to have been a good body of yellow pine timber on

the mesa but it has been pretty closely cut out. Turning to the east we went along a road leading up the canyon. There are many thickets of aspen and spruce above the mesa which has the yellow pine. Passed a ranch belonging to Mr. Burton of Parowan; also one which is the property of W. Lyman. Crossed the line of the proposed Sevier Forest Reserve near the head of this canyon and on the north of Section 1 in Twp. 36 South, Range 9 West. The snow was about 18 inches deep on the level and the horses had to break a trail – consequently travel was very slow. There are some good patches of spruce timber in this section, many of the trees being over 18 in. D.B.H.

Crossing the high divide the elevation of which is 11,000 ft., we went down Lowder Creek to the ranch and camped.

Mr. Lowder's ranch is in a long open valley with east exposure. He says the meadow is covered with a splendid growth of grass during the summer. In some of the lower damp parks good crops of hay are cut. The outside range nearby is used by Mr. Lowder for cattle range. He has considerable trouble with sheepmen crowding him.

November 14, 1902 - 12 miles. Went from Lowder's ranch to the top of the ridge southwest towards Brain Peak. Passed through some good spruce and fir timber which will run 125 trees per acre over 8 in. D.B.H. Snow is about 2 ft. deep on level and it certainly makes the horse puff and perspire to plough through it. Reaching the top of ridge a fine view is had of the country to the south, southeast and southwest.

There are several long open valleys on the first high bench and towards Hancock Peak, the ridges between having a splendid spruce and fir forest. The second bench has a good growth of spruce, fir and aspen; the lower benches yellow pine, cedar and mahogany.

South towards Duck Lake the forest extends as far as one can see. It will be impossible for me to go down there now on account of the deep snow.

Southeast of Hancock Peak there is a volcanic blowout covering about 3 or 4 miles square of country which has only little scattering patches of timber. Beyond this there seems to be a good forest again. Returning to the ranch we packed up and started for Panguitch Lake. Commenced storming and snowed hard all the afternoon. Could not see much of the country. Passed through many aspen thickets in reaching Castle Valley where Hatch Bros. have a large sheep ranch. It was just a solid patch of snow about two feet deep.

Crossing the divide to Deer Creek the country pitches off rapidly towards Panguitch Lake and we soon passed from the spruce and fir to a country covered with yellow pine. Many good sawlog trees; saw some which would measure 5 ft. D.B.H. This kind of timber extends to the edge of the lake. At the west end there is a large valley of meadow land which is owned and fenced into pastures by stockmen.

November 15, 1902 - 15 miles. Leaving Panguitch Lake we went up Clear Creek about 2 miles to a sawmill belonging to the equitable Co-op of Parowan. There is a good body

of yellow pine timber on the ridge to the south. Turning to the north we climbed the side of a rough high ridge and then followed the top of it north. The country is covered with patches of spruce, fir and aspen. Could see the top of a sagebrush sticking out of the snow in some of the open places. Going north about 5 miles we came to a large open valley known as Horse Valley. There are several summer stock ranches here which are owned by citizens of Paragonah. Turning east we went across a high mountain mesa country covered mostly with aspen and then turning south again returned to the lake. The mesa north of the lake is covered with sagebrush.

November 16, 1902 - 22 miles. Leaving the Equitable sawmill went east to the lake and then took the road to Panguitch. The country on the northwest side of the creek for several miles back is rolling hills covered with sagebrush and is used by the stockmen for grazing. There are a number of ranches along the creek and also several on some of the branches coming in from the northwest. They seem to be hay lands and pasture.

The country on the southeast side of the creek which slopes north is covered with a scattering growth of yellow pine timber. After crossing the line between Twps. 6 and 7, Range 35 S., the hills and ridges on the northwest are all pretty well covered with cedar and pinon. On the south side the pine continues down along the top of the ridge but the lower part also has cedar and pinon.

Looking to the west from the hill south of Panguitch a body of yellow pine can be seen on top of the mesa which lies between Panguitch Creek and Three Mile Creek.

The peaks on the high divide are quite an interesting study. Bear Valley Peak, which is formed of volcanic rock and barren of timber, has retained no snow from the recent storm while the Little Creek Peak, which is covered with timber and brush, is white with snow, making a good demonstration of the value of the timber in protecting the snow.

Met Mr. W. M. Lloyd Bros. Located homestead claims on Panguitch Creek in 1892 and 1893. Have been engaged in sheep raising since 1894 and have used this range continuously since. Lamb on ranch and on land in Myers Valley which have been bought from State and range during summer on lambs north in Little Valleys and on the high divide toward Little Creek Peak; winter on the west desert, sometimes in Hurricane Valley and have fed sheep on home ranch three winters. Feeding hay in morning and ranging out during day. Need 150 tons hay for 900 sheep. Would ask for privilege of grazing 2500 sheep on the range mentioned adjacent to ranches.

Own 30 acres in school Section 16 for which paid \$3 per acre.

Attended a mass meeting which was called for the purpose of having me talk to the people and explain to them the object of the creation of forest reserves, the policy of the Government in their management and the Rules and Regulation which would be enforced.

There were about 200 people attended the meeting. After addressing them for about one hour, I volunteered to answer any questions relating to the administration of the reserves and was kept busy for another hour making explanations. The spirit of the meeting indicated that the people are anxious to understand the matter correctly before signing any petition either in favor of or against the establishment of the proposed forest reserve.

November 17, 1902 – Layed [sic] over at Panguitch. Met a large number of citizens who were interested in getting information. There is a strong opposition to the proposed Sevier Forest Reserve among the sheepmen and a few others who object to having to comply with any regulations, but I believe the majority of the citizens are in favor of the establishment of the reserve.

Met James Cameron, treasurer, and Alfred Luther, recorder, of the county; both are strongly in favor of the reserve. Met J.B. Heywood, bishop of Panguitch and found him to also be in favor of the reserve.

Made arrangements to start south in the morning and look over the country in the vicinity of Duck Lake and south of there.

November 18, 1902 - 25 miles. Leaving Panguitch with Mr. B. Cameron, having fitted out with a team and wagon and supplies for three days, we went south to Rock Canyon passing through a cedar and sagebrush country. Then turning west took a road leading to Mammoth Creek. Rock Canyon opens out into a wide sagebrush valley covered with sagebrush and known as "The Pass". At the east end of this valley met J.H. Henrie and brother with band of sheep which they are driving to Washington County for the winter. They have ranches in Pole Canyon and on the head of the East Fork of Sevier River and run their sheep in that vicinity during the summer, lambing on the lower parts of the mountain.

Going west we came to a yellow pine forest in the western part of Twp. 36 S., Range 7 West. Mr. Cameron of Panguitch is running a sawmill in this section. Trees average about 80 trees per acre over 8 in. D.B.H. Very poor reproduction, young trees being scarce. Saw an acre on which 20 trees had been cut which would yield at least 10,000 ft. of lumber. Many of the trees are defective and there are quite a number of dead trees scattered through the forest which appear to have been killed by the little black pine beetle. Arriving at Mr. B. Cameron's ranch on Mammoth Creek, found about 160 acres of good farming land under fence on which good crops of small grain and hay are raised.

Just above this ranch there is an old water power sawmill which has been run for the past 25 years. The forest is almost exclusively yellow pine and contains a large amount of good merchantable timber yet. Leaving this ranch and going south about four miles we came to Hansen's sawmill which is located in the east and or a little open valley in the yellow pine forest. A large amount of good timber has been cut by this sawmill and there is still much good timber left. The forest extends west to Duck Creek and south to the breaks of Long Valley. All of this timber is outside of lands withdrawn but should be included in the forest reserve.

Met Mr. _____ of Kanab who is acquainted with the Duck Lake and North fork country. He informed me that the mountain breaks off from the head of Strawberry Valley and the country to the southwest is a series of canyons and oak-covered ridges sloping towards the North Fork of the Virgin River. There is a settler in almost every canyon who farms a small area of land and run a few cattle. Of late years the country has been over run by sheep from the adjoining ranges. There is a small settlement of people on the head of the North Fork of Virgin River which is within the limits of the lands withdrawn.

On top of the high mountain south of Duck Lake there is a large amount of dead and down timber and it is very hard to travel through the forest which is mostly of spruce and fir. On the edge of the breaks there is some white pine (Pinus flexilis). Under the breaks in places there are small areas of yellow pine. The high valleys are all covered with sagebrush.

To the south of the head of Strawberry Valley there is a high point known as "Vermillion Point". From here a splendid view can be had of all the country to the south as far as the Buckskin Mountains and the Grand Canyon of the Colorado.

This entire mountain forms an important part of the watershed of the Sevier River and should be taken care of. It is all a good grazing country and would furnish pastures for a large number of cattle, horses and sheep without injury to the forest if the grazing was properly regulated. Most of the watering places have either taken up under the U.S. land laws or purchased from the State of Utah by the stockmen. The outside range has been overstocked with sheep, many of which belong to some of the ranch owners. The cattlemen does not stand much chance for pasture outside of his own lands.

November 19, 1902 - Snowed all day and we could not see anything so did not travel. Met Mr. Cope of Tropic who came for a load of lumber. He is running a band of sheep which he pastures on the desert south during the winter returning to lamb on the East Fork of the Sevier on about May 15.

After lambing he ranges over on the Escalante Mt. in the proposed Aquarius Forest Reserve. Mr. Cope is running this band of sheep on shares. He pays all of the expenses including taxes. Makes the losses in numbers good and pays the owner 1-1/2 lbs. of wool for each sheep and 10 lambs for each 100 sheep taken in original herd.

November 20, 1902 - 25 miles. Snowstorm still raging; concluded to abandon further examination of the mountains this winter as the deep snow makes it almost impossible to travel in the high part of the mountains. Started out to return to Panguitch. Snow is 18 inches deep and hard to travel through with wagon. Arrived at "The Pass" about 1 p.m. Found Mr. Henrie still there with his band of sheep snowed in. The sheep were on a sidehill where there was plenty of sagebrush and a few cedars.

If the storm clears up tonight they will be able to trail out without loss.

Continued journey arriving at Panguitch at 6:30 p.m.

November 21, 1902 - 10 miles. The snowstorm appears to be general over all of this mountain country and it will be impossible to continue my examination of the withdrawn lands and work to any advantage. Consequently I have decided to abandon the trip and return to Salt Lake City.

There are two bands of sheep snowed in on the East Fork. The mail carrier from Tropic got lost in the storm and wander around all night. Reports deep snow on the East Mountain.

Leaving Panguitch went north to Orton and camped for the night. Snowing again in East Mountain at sundown. Water for the coming season is assured.

Met Dr. Steiner of Panguitch who owns a ranch north of Marysvale about 1-1/2 miles. He has ranged cattle on Beaver Creek for past fifteen years; is now running about 150.

November 22, 1902 - 27 miles. Leaving Orton took road through the Sevier River Canyon north. The farming lands extend down into the canyon for 3 or 5 miles, narrowing down to a single file string of forties.

The places farthestmost north have apparently been abandoned, the area of farming lands being very small. The canyon beyond these ranches is very narrow for 2 or 3 miles, the bluffs ending in close to the river.

The formation is a puzzler to me. Much of the rock is a blank, burned conglomerate and other parts seem to be a brown altered sandstone The soil along the river bottom is quite sandy.

The bluffs are covered with a scattering growth of cedars except in the places where it breaks off in almost perpendicular cliffs. All of the places which have any soil are covered with sagebrush. Beyond the narrow part of the canyon it widens out again to rolling, gravelly hills which surround Circle Valley and the farming lands are soon reached again.

The north slopes of the mountain southwest of Circle Valley is well covered with spruce, fir and aspen forest.

Transcript located in USU Special Collections and Archives.