Thursday, August 1st.

Left Portland accompanied by R.M. Townsend and T. H. Sherrard on the 4:45 car bound for Estacada. We had our grips loaded with trappings and necessary changes of clothes for a week to ten days trip in the mountains. Mr. Sherrard and I stopped off at River Mill to inspect the Estacada water power plant and were there till 9:00 o'clock while Mr. Townsend proceeded with the baggage to Estacada Hotel, where we met him at 9:15.

The Estacada plant is now entirely completed except for the painting of two of the units, and looks fine. Mr. Sherrard, who is the U. S. Forest Supervisor, for the Cascade reserves, was much interested and impressed and asked many questions. He was especially interested in the construction of the dam and we made a very minute inspection of it. Just at this time no water is flowing over the spillway and a daily inspection is being made below the dam for evidences of percolation, but so far everything is entirely tight and no leaks have been observed.

After reaching the hotel we made some preliminary arrangements for our start in the morning and went to bed.

FRIDAY, August 2d.

We were up at 6:00 o'clock, had breakfast right away and then were busy for some time getting all details finished up. We did not get away from town till about 9:20. The party consists of Messrs. Sherrard, Townsend (our property agent), Frank Ewing (engineer at North Fork and S. P. developments), McMillen (also of North Fork and S. P. developments, who acted as cook), the packer, Tom Rhodes and myself. We each had a horse and the pack train consists of seven horses.

Our route passed out of Estacada (elev. 460') up the hill through the Garfield country where there is some very good looking farming land. We passed Davis' ranch about 10:30. The morning was overcast and at times foggy but cool and just right for traveling. There was some dust on the road but it did not bother much. Met a man with a light team and rig coming out to Estacada from the German Burn Country, which we could see in the distance. We traveled on the wagon road all the way to Fanton's Mill, a distance of about 12 miles, where we stopped and had lunch. The Forest Service has a ranger's station here and as it is located at the end of the wagon road, it is a sort of starting point for pack train outfits, the heavy materials being conveyed this far by wagon and then repacked on horses.

Leaving Fanton's we took the trail which leads off into the North Fork section of the water shed. It runs along the divide between the South Fork of Eagle Creek and the North Fork of the Clackamas. After traveling along this divide for some distance and getting some glimpses down the Eagle Creek canyon, we passed down into the North Fork canyon and going around the head of the fork started to climb up Squaw Mountain. During the first part of the afternoon we passed through a second growth of fir trees which were growing on an old burn. Later we passed by some white fir, hemlock and a few trees of noble fir. We passed within 400' of the top of Squaw Mountain about 400 o'clock in the afternoon.

This mountain is about 4200' elevation above sea level. After passing the divide we started down the opposite side of the mountain, catching a glimpse of Squaw meadow and Lake on our right. We could now see over into the Roaring river basin and got an idea about the size of Roaring river burn. This is one of the very large burns; Mr. Sherrard estimates that it is 225,000 acres in extent. Roaring river does not hold up to a very good flow in the fall of the year and it is probably due to this large burn. We again did some climbing and reached our destination for the night about 5:15. This is a Forest Ranger station called Plaza. There is a good meadow here with plenty of horse feed, into which the horses were turned. It goes without saying that horse feed is one of the principal factors determining the location of a station. We carried oats for feed, starting with about 1100 pounds, but these must be supplemented with grass. Fortunately there are numerous marshes or meadows scattered through these mountains and while the grass at some of them is too rank for horse feed, most of them have good feed and water. A few hundred yards from our camp there was a superb view to be had of Mt. Hood. Townsend and I went out after supper and had a good look at it, but did not secure a photo, thinking that we could do so in the morning.

Sherrard took a picture of the camp and so did Ewing. The cook had brought along some steak from Estacada which we had for supper, this being the last fresh meat we were to have unless some fish were caught, Ewing's wife had baked up several loaves of bread, both brown and white; this lasted us several days and tasted very good. Biscuits were made nearly every meal in a stove if one was available, or if no stove was at hand, in a reflector and they were usually very good.

During the day we made 23 miles. Those of us not used to traveling in the mountains were somewhat tired, but I was not as much done up as I had expected. Some of us slept outside and others in the Ranger's cabin. Most of the time on the trip everyone slept outside even though there might be a cabin.

Saturday, August 3d

Woke up at 5:00 a.m. after a good night's rest. Found everything covered in a bank of fog and were unable to get any photos of Mt. Hood as we had planned. We had our breakfast by 6:30 and were packed up and on our way by 7:00 o'clock. The Forest Service has built some new trails in this part of the country during the past year or two and we started out over the new trail in route for Clackamas lake. Our way lay along a high backbone forming the divide between Roaring river, a tributary of the Clackamas, and the head waters of the Salmon river, a tributary of the Sandy river. In other words, we were on the borders of the Clackamas river water shed. The trail is on the very top line of the ridge and Sherrard said that when clear there was a most magnificent view of this entire section of country with all the mountains in sight and streams at one's feet; but we were to have no luck and so had to content ourselves by going through the mist and imagining the rest.

The early trails in the mountains were made by the Indians and trappers and were in general ill chosen and precipitous, and as a result it is often impossible to travel over them with any reasonable loads. The Forest Service is now engaged in putting in new and better trails where necessary and in fixing up the old trails where advisable. Numerous telephone lines are also being put in and doing good service. The object in view being to provide means of rapid transportation of materials and men from one point to another in case of fires. I had an excellent opportunity on this trip to acquaint myself with what the Forest Service is doing and its aims and intentions. Mr. Sherrard has had entire charge of this work for several years and is well versed in the work of the service and

I had some very entertaining and instructive talks with him on the subject. Incidentally I had a chance to talk with him about trees, soil, forestation, etc. By the time the trip was completed, I could recognize nearly if not quite all of the trees we came across.

After about 5 miles of travel we reached Hambone mountain where the huckleberries, or Ollallies as the Indians call them, grow in great abundance. However told that a party of Indians were there picking berries and it is possible we were told that a party of Indians were there picking berries and it is possible they were, but we did not see any, due to the thick mist. We picked a few berries they were, but we did not stop but a few minutes. Our route now took us to High Rock ourselves but did not stop but a few minutes. Our route now took us to High Rock which we reached about 11:00 o'clock. High Rock is an immense chunk of lava about which we reached about 11:00 o'clock. High Rock is an immense chunk of lava about 4800 feet elevation. The Forest Rangers use it as a lookout point. The trail lays along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit. It is easy riding to along the side of the rock about 500 feet below the summit.

We could now see down into the Oak Grove water shed and proceeded on down to Black Wolf meadows where we found one of Sherrard's crew putting in a telephone line. We had lunch here and fed the horses for half an hour. Some photos were taken. There is a lake called Dinger lake located just off this meadow over behind a ridge. It is a good half hour's ride, however, and so we decided not to go over to it. There was no station on the meadow.

Our next objective point was Timothy meadows, a few miles down from Black Wolf meadows. Here we remained about 3 hours, sending the pack train ahead to Clackamas lake station. I wanted to examine this meadow carefully because it was one of the places that had been selected by the S.P. engineers as a site for a storage reservoir. Some quite accurate surveys have been made of this site and the amount of storage has been calculated. McMillen, who is acting as our cook, was here with the party which made the survey and he was of considerable assistance In locating the contour lines and the dam site which was selected. The upper contour is about 11 miles around. The dam site looks like it might be an entirely good and practical one. A test hole or two were sunk under Mr. Blockley's direction, but some drilling should be done in order to determine more accurately the character of the materials underlying. There is plenty of timber right at the site for building a substantial timber dam and seems to be a good quality of fill on the hillsides. The extent of the meadow is considerable and the Oak Grove extends right through it, winding around through the marshy land. I have been told frequently about the large springs which supply water to the Oak Grove and so I spent som time in looking for some of them. After some difficulty and clambering around, McMillen located two of the springs which he had seen at the time he was there on the survey. The elevation of the top of the lake which would be formed by the water of the dam planned by the S.P. Company is 3,260' above sea level. The entire proposition looks to me like it is a good one and I believe the dam could be built at a relatively small expense.

A branch of the Oak Grove extends from Timothy meadows up to Crater lake and meadow which drains directly into the Oak Grove. Another branch extends to Clackamas lake and also to Clackamas meadows which are near same.

After leaving Timothy meadows, we proceeded to Clackamas lake where the Forest Service has a very fine Ranger's station and headquarters. The lake itself is a small one. Dr. Hiller of Portland has a place here which he has under permit from the Forest Service. He has built a road in to it along the summit of the range from a point about 6 miles north where it joins the Oak Grove wagon road which is the road built from Government Camp over into Eastern Oregon after the Barlow road beyond Government Camp was abandoned a number of years ago.

The doctor has extensive buildings on his place and is spending the summer here with his family.

Overlooking the Clackamas lake station and standing up prominently above everything on the range is Mt. Wilson, which is a peak about 6,500' high. It is used as a lookout station by the Clackamas lake rangers. One of the rangers told me that it was possible on a clear night to see the lights of Portland from the mountain.

Sunday, August 4th

After a good night's rest we were up early and Sherrard and I were off by 6:00 o'clock on a side trip we had planned for the day. Our party and horses remained at the lake to rest up and do some fishing and we went on horses borrowed from Graham, the Head Ranger, along the summit as far as Summit Prairie swamp and back again. It was a long day's journey.

Our way lay along the Miller wagon road as far as the intersection with the Oak Grove wagon road and thence along same to our destination. Enroute we passed by Clear lake, a large marshy lake which is at the head waters of White river which flows into the Columbia at the Dalles. It is, therefore, on the other side of the summit of the Cascades. The waters of this lake have been filed on by Jo Meeks and associates for irrigation purposes but Sherrard says that there is little chance of his using much water for irrigation because the Wasco Milling Company had already filed on the entire flow of the stream for power purposes and the water would all be used by the Milling Company when the irrigation season is on and would, therefore, conflict.

A little later on we reached Frog lake, a small lake from which we secured a picture of Mt. Hood. After leaving Frog lake we hurried on to Summit Prairie swamp or meadows. This is a very large meadow lying on the summit of the range about 8 miles south of Mt. Hood. It is fed from swamps lying immediately at the base of Mt. Hood and deriving their water from the mountain by seepage. It is quite evident that the water is not obtained directly from the glaciers for the creek flowing through the meadow and Salmon river, a tributary of the Sandy river, into which the creek flows, are both clear water carrying no glacial silt.

This summit prairie is the one which the Mt. Hood Company filed upon for a storage site to feed the Sandy river. It is a large basin and would form a very large storage if there is a suitable site for a dam. We spent about an hour trying to get down to the point where the hill should come together in order to find out something about what sort of a dam could be put in, but with the time available, were unable to do so. The lower end of the meadows is heavily timbered and the underbrush was thick.

I do not consider this storage a proposition which should be considered seriously at present. The drainage area is small and if the project should figure out a practical one, there is as yet but one plant on the Sandy river to be benefited and the storage would hardly be warranted yet. The elevation of the meadow is 3,6000' above sea level. We met a sheep herder tending to a flock of sheep in the meadow. Had our lunch there and then set out on our return to Clackamas lake.

We followed the road back to Clear lake and there took a trail leading up to the summit. We passed through Dry meadow about 3:30 and at 4:00 o'clock came to the summit trail which we took in a southerly direction at about 4,000' elevation. The timber along this trail was mostly lodge pole and white pins, larch hemlock and noble fir. About four miles from our junction with the Summit trail we reached Crater lake and meadows. These are quite extensive, the meadows being perhaps three miles long. The upper end of them is overflowed by a lake formed by a beaver dam. Crater lake itself (this should not be confused with the Crater lake of Southern Oregon) is in reality merely a large spring. It is formed in a depression or hole in the lava out in the center of the meadow. This hole is about 80' across, circular and is about the same depth at the deepest point. The water is very clear and at the time of day we were there was almost indigo blue in color. This lake has an outlet flowing into Oak Grove and forms a feeder to the Timothy meadows into which it flows.

We left Crater lake and proceeded along the summit trail to Clackamas lake which we reached at 7:15. It had been a pretty strenuous day; we covered about 40 miles. Had a good meal on our return. I took a bath in the creek and now feel fine and believe I will do some tall sleeping tonight.

Monday, August 5th

This morning we left Clackamas lake early and went over to Clackamas meadows. These meadows lie at an elevation of about 50' above Clackamas lake and are separated from the latter by a rock ridge. This ridge seems to be rather porous as is evidenced by some very large springs which are located in the lower part of this ledge on the Clackamas lake side and feed same.

This is another of the proposed storage sites of the S.P.Company. We found the evidences of the survey made by the S.P. Company and the dam site. The dam for this project would be 1,000' to 1,200' long and much more material would be required to make same. It is doubtful if it would hold the water on account of the porosity of the ledge. The stream draining the meadows is dry at this time of year and the only flow of water from same seems to be to the springs just mentioned. After spending an hour or so here we proceeded back around the opposite side of the lake to Dr. Miller's where we took some pictures. Met camped there Fred Harlow of Troutdale with his family; they are fishing and hunting.

Leaving here at 9:15 we proceeded again south along the summit trail to a point where it joins with the trail over to Summit lake. Just here we could see the Agency Plains of the Warm Springs reservation. They were at a distance of 15 miles and looked very fine with the sunshine on them.

We followed the Summit lake trail over to the lake, where we had lunch. This lake is a fair-sized one at the head of a small branch of Oak Grove, but we could see no visible outlet to the lake and it is possible that an underground outlet exists.

Leaving here we proceeded around to Peavine mountain where we followed the fire line of last year's fire clear around to the main Clackamas trail.

We got an idea of the extent of the Peavine mountain fire and what it means to fight fire in the mountains. After reaching the main trail, we proceeded down it till we came to Austin Hot Springs, where we spent the night. Het some fellows camping there who had caught a lot of fish. They supplied us with enough for supper and breakfast. We used the hot water of the springs for cooking and dish washing and drank some also, but no one took a bath in it because there was no good place to do so. We went to bed early, having made 23 miles during the day.

Tuesday, August 6th

This morning we were up at 5:00 o'clock and had an early breakfast. Sherrard and I started out at 6:30 a little ahead of the rest for the Fish Hatchery on the Clackamas. Reached this point about 8:30. There was formerly a fish hatchery here but it has not been used as such for a number of years and there is now a Ranger's station there. The telephone line from Portland extends up to the hatchery and we were, therefore, able to get in touch with the outside world. We talked to the Cazadero station and into Portland and Sherrard called up a number of the various Ranger stations and had talks with his men. The phone system worked very well except for the ringing which I think may be improved by making better ground connections. The rest of the party arrived about 9:00 o'clock and we left at once on the trail up the Clackanas to the ford at which point we looked into the matter of a bridge. We found a very large fine log over the stream at this point which looked to me like it would probably survive the floods for several years, so I suggested to Sherrard that it would be well to spend a little money in fixing it up and taking the chance rather than spend a lot of money on a bridge. This we decided to do and Ewing, who is to make some measurements of stream flow here and in the Collawash branch this fall during the lowest water, will fix up the log Itself and Sherrard will have his men fix the approaches.

Leaving here we proceeded along the trall which is a very good one till we came to the Collawash and there crossed same on a good bridge built by the Forest Service last year. We lunched at the end of the bridge. It is a most beautiful spot. A great large cluster of rocky cliffs hangs up in the air just above the bridge and there are some deep pools in the river. A growth of cedar stands on the lowland just below the bridge. The Hot Springs fork of the Collawash joins the main stream just below the bridge.

As soon as lunch was over we packed up again and started for Bagsby Hot Springs going up the Hot Springs fork which we forded back and forth about six or seven times. We reached the springs about 5:00 o'clock and prepared things for the night. There are a number of bath tubs (hewed out of wood) and each and every one had a bath before goin to bed. The water is similar to that at Austin Hot Springs but not quite so hot. The springs come up out of the ground in the midst of a beautiful grove of large sized firs and hemlocks, and it is a charming spot. It is on the Forest Reserve and owned by the Government and if the park were situated at a point more accessible it would undoubted attract considerable attention. There were some campers there at the time of our visit and they were taking plenty of baths for the benefit of rheumatism.

We used the telephone line again and talked to Cazadero and Portland and to the Ranger at Elk lake, telling him that we would be with him the following afternoon. Slept a good sound sleep on a hemlock bough bed underneath a giant fir tree about 8 feet in diameter. Perhaps it was the bath, or it may have been due to being pretty tired after the day's journey. Our route today covered about 22 miles.

Wednesday, August 7th

Camp was astir about 4:45 this morning. Had breakfast and were away by 6:30. "Curley" Thompson, one of the rangers located here, made us some of his famous biscuits for breakfast and we did them justice. From necessity some of the rangers become pretty good cooks and learn how to make good biscuits and bread. If they have a stove, it is cooked in the oven; if not, it is cooked in front of a campfire on a reflector.

On this journey we traveled up over some pretty high mountains. The trail passes over the top of Silver King mountain and down again and then over Battle Ax mountain. This whole section was very interesting to me and I was on the lookout for evidences of why the Collawash and its brances are of such a flashy character. There was plenty of it. The hillsides are all extremely steep and precipitous and there is but little soil in evidence. I was surprised that there were as many trees as we saw due to the lack of soil. There is a large piece of country in the Collawash water shed which is mainly rocky cliffs and peaks. It is spoken of as the Pikes Peak country. What forest there was on it originally has been largely burned off and there is little vegetation or soil and when rains descend on it, the water runs off at a very rapid rate.

After passing over Silver King we next started the ascent of Battle Ax mountain. This is a peak about 6,000' above sea level. The trail to it is very steep and quite rough in places. It passes within 3/4 of a mile of the top and in this 3/4 mile there is a rise of 1,100'. It took us about an hour and a quarter to ascend this steep grade but it was worth the while many times over. There is a complete panorama all around the 360 degrees and it is the best place I have been on yet to get a comprehensive idea of the extent of the Clackamas river water shed. The Clackamas river water shed is so large, however, that one cannot get a complete idea of it from any one point. We spent fully two and one half hours on the peak and it was a good study in geography. The day was pretty clear but there was a little haze due to its being about noontime when we were there. We could see Mt. Rainier, Helens, Adams, Hood, Jefferson, Three Sisters, Oliallie Butte, Mt. Wilson, Mt. Washington, Three Fingered Jack and all the minor peaks so numerous that they are not all named.

At our feet lay Elk lake which empties into the Hot Springs branch of the Collawash. We could see Coffin Rock which is a prominent point to the west in the Breitenbush water shed.

Battle Ax is used as a lookout point by the Forest Service and during the summer season there is a man stationed on the mountain all day. He only goes down to get food and water. I called up Portland by telephone while there and sent word to the Oregonian office that we were there on the mountain and were using the extensive telephone system of the Forest Service to communicate with the outside world. The distance from Portland is about 90 miles. We secured a lot of pictures on the top of Battle Ax and are in hopes they will turn out good. After leaving the top of Battle Ax at 6,000 feet elevation, we dropped down a steep trail to Elk lake at 3,000 feet elevation. At time of writing in my diary, looks like it might rain. Had a swim in the lake before turning in for the night. Made 11 miles today.

Thursday, August 8th

We had an experience last night all will remember. We made up our beds outside of the cabin as per our usual custom and got settled down to sleep about 8:00. At 9:15 a thunder storm came up and we had a most wonderful display of

lightning and claps of thunder. Battle Ax was struck apparently a number of times. The lookout man there telephoned later that it struck once within 25 feet of his tent.

Mt. Jefferson lies just east of the lake and the display around it was very brilliant.

As we were sleeping outside, we were due to get wet it it rained much. Our beds were covered by canvas flaps but these would not protect from a steady downpour. Our packer at the first drop of rain went into the ranger's house and made up his bed there. We all had an idea that it would be a dry storm and not much rain and decided to stick it out and joked with him for being a quitter. But after a lull of a few minutes the rain began to come down heavily and we all had to pull up our beds and get inside to keep from getting a drenching. Well, it was a lively scramble and we had a lot of fun out of it but did not get back to sleep again for quite awhile. The thunder storm continued for several hours.

It was still raining in the morning and the clouds were hanging down over us. We started early for Bagsby Springs and rode all morning in the rain retracing our steps. We reached the spring about 11:00 o'clock and as we had to repack some of the pack animals we had lunch before starting again for Cold Spring. On this trip we climbed up to the top of Baty Butte, 4,800' elevation, down again into Lost Creek and up again on Miners Butte, 4,750' elevation, and then along the ridge to Cold Spring at 4,500' elevation. The trail is excellent all the way, having ridge to Cold Spring at 4,500' elevation. The trail is excellent all the way, having been fixed up last year by the Forest Service. The weather was cloudy during the afternoon but it did not rain. Fortunately for us the sun came out late in the afternoon just as we were going along the high ridge toward Cold Spring. The view was again a wonderful one. We could see glimpses of the Willamette Valley on the west; Mt. Hood was in sight, but not Mt. Jefferson; we could see considerable of the Molalla water shed, Battle Ax, where we were yesterday and this morning, was in sight in the distance. We secured some photos and they will be fine if they develop well. We traveled 27 miles today and the horses are pretty tired tonight. We have another hard day ahead tomorrow, but if everything goes well, we should be in Three Links camp tomorrow night.

Friday, August 9th

When we awoke this morning at 4:00 o'clock and began to get up it seemed like we had just gone to bed. We slept in the Ranger's cabin because everything outside was so damp and the boards on the floor were not particularly soft. Cold Spring is located in a grove and it was rather cold there this morning at 4,500' elevation.

After a good breakfast we started for Salmon Hatchery 14.5 miles distance over what is the roughest trail we are to experience. It is almost on end it is so steep at points. From 4,500' elevation it drops down to 2,000' elevation, where Fish Creek is crossed and then goes up again to 4,000' elevation on Fish Creek divide and finally down to elevation 1,750' at the hatchery. There was no chance on this journey to see any of the country as we spent most of the time in the deep canyons.

We reached the hatchery at 12:00 a.m. but the pack train did not get in until 1:30 and by that time we were all pretty hungry and got lunch fast as we could. We left as soon as lunch was over for Three Links camp. En route Ewing and I turned off the main trail at Oak Grove crossing and went up this stream a ways till we came to the trail leading up to the canal line grade for the Three Links development. We followed this down into camp, a distance of 4 miles. Had a good opportunity to see how the grade stood up during the past winter. Also stopped in at Jehu Davis' ranch, but as Jehu was not there we came right along.

Reached camp at 6:00 o'clock and after an early supper and listening to the graphaphone for awhile, went to bed in the first real bed since we left Estacada.

Our journey is now nearly over as we only have to go down to North Fork camp tomorrow to get the car. We covered 23 miles today.

Saturday, August 10th

Upper or Second Clackamas) and followed down trail built by the S.P. Company Upper or Second Clackamas) and followed down trail built by the S.P. Company directly to our destination at North Fork camp. Trail was in pretty good shape. Reached North Fork camp at 11:00 o'clock, having put in 5 hours on the road. Hrs. Ewing had a fine lunch prepared for us and we spent about an hour there and then took the car down to Cazadero. This last journey on horseback was 18 miles, making a total of over 200 miles horseback for me on the entire trip.

Reaching Estacada about 1:00 o'clock, we changed clothes and from there I proceeded to Portland by automobile, stopping on route at the camp of the forces of the Clackamas Power and Irrigation Company at Clear Creek. Met Rands there and he showed me over the work they are doing, which at present is merely preliminary core drill work.

Reached my office in Portland at 4:30 in the afternoon.