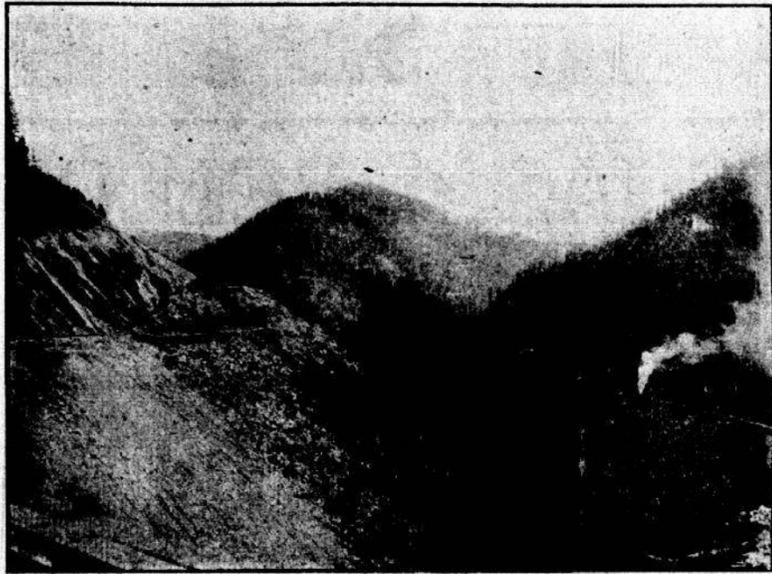


MISSOULA, MONTANA, SUNDAY MORNING, SEPTEMBER 12, 1909.

ACROSS THE BITTER ROOT MOUNTAINS INTO IDAHO IN THE PIONEER YELLOW CARS OF THE MILWAUKEE



ON THE BIG LOOP.

there on the side of a hill are scattered deserted prospect holes, some well developed, and some left after but little work has been done, but all representing perhaps a tragedy, and certainly all representing the disappointed hopes of a lonely miner of a generation ago. A short run through the hills here and the train stops at Haugan, one of the new road's "mush-room" towns. The Northern Pacific tracks are on the same level again and, side by side, not 10 yards apart, the two roads run through the town.

The Oil Burner.

On the Puget Sound this little town is an important one, for here an oil-burner takes the place of the coal-burning locomotive used before. This step has been taken by the road in an effort to stop the destruction of the forests by fire, for the oil-burner throws no sparks, and since the next hundred miles of track run through a forest reserve the use of this type of engine was a necessity. An oil tank stands beside the water-tank, and here the engines get their fuel for the long pull over the divide.

From Haugan the road pull is started. Immediately on leaving the yards here the track rises at a grade of 1.7 feet to the mile. This grade is uniform from Haugan clear to the other side of the mountains, and to the maintenance of this grade is due some of the great engineering feats which have been accomplished on the road. Gradually the rise asserts itself. Every mile sees the roadbed just a little higher above the river, and every town through which the road passes is just a little farther below the track. At Saltese the road goes over the town by means of a high trestle, which clears the main street by 100 feet.

The magnitude of the task of securing this uniform grade becomes more manifest with every mile. Long cuts through solid rock along the sides of the mountain and big fills and trestles across the canyons show the extent of the work and the importance of the



THE BIG LOOP. CLEAR CREEK TRESTLE AT RIGHT.

Nature has been lavish in her gifts to the Puget Sound railway; she has bestowed upon that road the best and most beautiful scenery which the northwest can offer. On the Missoula division, west of the Garden city, the road builders, in their search for a short route to the Pacific, have traversed a country unknown heretofore to the tourist, which is wonderful in its natural beauty, and which is, as yet, untouched by the westward march of civilization. For a hundred miles the Puget Sound train runs through a region which is practically as wild as when the Indians roamed over it. Not a tree has been cut nor a prospect hole dug, and to the traveler it presents an unrivaled opportunity for seeing the western country as it was before the white man came.

To the engineer it presents an unusual treat as well. On the Missoula division more difficulties in the way of construction have been met and overcome than on any other part of the new road. Tunnels, which are a wonder to the engineering world; steel trestles, the material for which have been carried on the backs of pack horses for hundreds of miles, and road cuts, the size and number of which are staggering, all are among the sights of the division, and the whole, from Missoula clear over to Avery, Idaho, is a treat to the tourist, whether his taste for sight-seeing be of a natural or a scientific bent.

Out From Missoula.

Immediately on leaving Missoula—west bound, the train enters the richest farming land in western Montana. After the hundred miles of long, hard mountain climbing, with nothing but towering rocks and a little patch of sky above, the sight of the peaceful, prosperous farmlands come as a relief to the traveler. Right through the heart of the Orchard Homes goes the road, and in no way could Missoula and the big valley tributary to it be given a better advertisement than the sight of these pleasant looking homes with their productive fields to the tourist.

For 30 miles, through Frenchtown, the peaceful little village down the river; through Huson and Alberton, orchard and wheat field alternate, and everywhere the evidences of prosperity are overwhelming. At Frenchtown the train stops at the end of a little lane half a mile from the town itself, and nothing could better describe the atmosphere of the entire town than does the sight of this little lane with bare across the lower end of it, never show-

ing a sign of life except on bare occasions when someone leaves or arrives in the village.

A Crossing.

Just east of Frenchtown the Northern Pacific comes into view, high up on the side of the hill, apparently never to come down to the level again. Gradually, however, it descends, running alongside the Puget Sound track to Huson, where it crosses to take the other side of the river. Here at the crossing an automatic locking device is being installed under the direction of the two railroads, which will eliminate all danger of collision. One operator is to control the whole system. As soon as he sees a train coming he throws a lever, and instantly the track before the train is thrown open and the other locked. At the same time the semaphore for the empty track shows red and an automatic deraill opens ready, in case the semaphore is not heeded, to send the wrong train off the track. Not until the approaching train has passed can this be unlocked, but as soon as the rear coach passes over the junction the lever flies back, the semaphore turns clear and both tracks are automatically opened.

A Good Town.

A few miles from Huson, Alberton, the train division point, is reached. This little city, located right at the gate of the mountains, is to be the division headquarters for the Missoula division within a short time, and a great deal of building is going on there, giving the little town an unusually prosperous appearance.

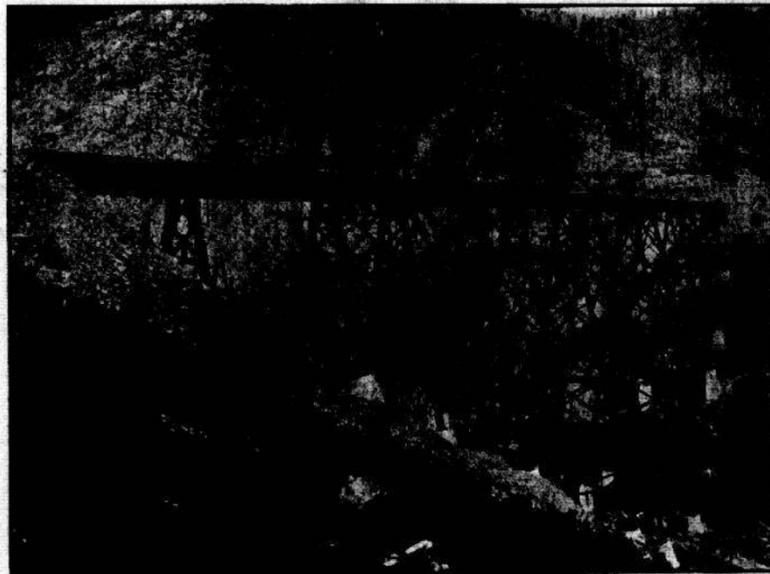
At Alberton the wide valleys and the rich farmlands, which have for a moment delighted the eyes of the traveler, are left behind, and once more the long mountain stretches are encountered.

Gradually the road begins to rise in preparation for its long pull over the Bitter Root mountains. Every few miles it gets just a little bit above the river, passing over it above Alberton on a massive steel bridge, then dashing into the mountains again, only to cross the same stream just above Cyr on a bridge higher and more picturesque. This bridge, known as Missoula crossing No. 3, is one of the sights of the division. Under it the river boils and seethes in great rapids, and back of it rises a beautiful vari-colored bluff. This rock, standing straight up for over 700 feet, is composed of beautifully stratified stone, the colors ranging from almost pure white, through blues and reds, to a dark purple. Beside this wonderful cliff

the bridge, which is really a big one, looks like a mere toy, and as a rule the bridge is never noticed at all, so taken up is the tourist with the cliff behind it.

Climbing the Mountains.

On through long cut and longer fill, through mountain town after mountain town, the road passes until at last St. Regis is reached. Here the road enters



KELLY CREEK TRESTLE, 229 FEET HIGH.

the town by means of a long steel bridge, which passes clear over the Northern Pacific tracks, this fact being the first visible evidence of the slow, upward climb which the train has been making. Here the mountains begin to take on their natural beauty again. Between Alberton and St. Regis the hills are nearly stripped of timber, but as the train goes on the signs of the lumberman becomes less evident, and the miner's trail is the only mark on the hills. Here and

construction from an engineering standpoint. Ten miles above Saltese, Taft, the unrighteous, the town which has secured a national reputation as the worst in the country, comes into sight, situated far below the tracks in the bottom of the canyon along the Northern Pacific right-of-way. The road curves straight to the south here, and clear across the deep canyon can be seen the camp at the end of the big St. Paul tunnel.

A Winding Way.

As the crow flies the tunnel is only a short distance away. But the train covers a good many miles before that side of the canyon is reached. A glance at the other side shows this. Away up towards the summit on the other side the grade can be seen as it approaches the tunnel. This big loop is a marvel to the tourist and a treat to the engineer for its beauty is wonderful and as a feat of engineering it would be pretty hard to beat. For miles the road goes up into the mountains through tunnels and over trestles until, turning on a long curved trestle the train takes the west side of the canyon and dashing through a long tunnel begins its climb toward the summit. So accustomed has the traveler become to the sight of the grade high above on the opposite side and so perceptible has the turn been that when he sees the track below him he can scarcely believe his eyes. A few days ago a woman who was journeying over the road in the little passenger train stood out on the rear platform as the train turned at the end of the loop. When she saw the other track below her she asked, "What road is that?" One of the company's engineers who was on the platform told her that it was the track the train had just left. The woman looked at him a moment and then turned to another tourist and asked him, "He told her the same. She looked at the grade below, then at the men who had told her of the loop and said, disdainfully, as she went forward into the

car, "Young men, you are not telling me the truth."

So it is with everyone and not until the end of the loop is reached can the average tourist believe his eyes.

The Great Tunnel.

The train climbs the mountain swiftly over the easy grade and soon Taft comes into view again far down at the foot of the mountain which the train

crossed another state. The St. Paul Pass tunnel is one of the biggest engineering wonders encountered on the road. Straight as a die for 8,768 feet, or just a little less than two miles it runs through the hill. Work on it has not yet been finished and the interior of the bore is still untouched so that the water pours down from it in torrents, a fair-sized creek issuing from each end. Despite this disadvantage many people have walked through the tunnel and most of them say that the trip was worth it. One portal can always be seen and from the middle of the tunnel both openings are visible so straight is the bore, each a tiny point of light. Some of the surveyors stationed at the East Portal tell a story of a party which walked through the tunnel which illustrates the different attitudes with which sightseers generally regard it. When the party came out of the bore all wet and bedraggled, one of the girls turned and looked at the mountain, then at the tunnel and said, "Say, ain't that great?" One of the men, slightly the worse for wear and very evidently out of temper, answered her, "Great," he said, "that's nothing but a prolonged cold shower."

In Idaho.

Whatever admiration the big Taft loop on the Montana side may have elicited from the tourist is quickly forgotten when the trip down the mountains on the Idaho side is begun. Right through the heart of the mountains with never a sign of human habitation save the occasional construction camp and the sight of the railroad grade below, the trip through the mountains is a wonderful one. To come down the mountains here the train must traverse another loop, one which dwindles the Taft grade in

comparison. Every inch is cut out of the side of the mountains. Tunnels and fills alternate in swift rapidity, the grade running along the steep side of the mountain down which can be seen nothing save a mass of trees with an occasional glimpse of the waters of the North Fork of the St. Joe.

A Lofty Trestle.

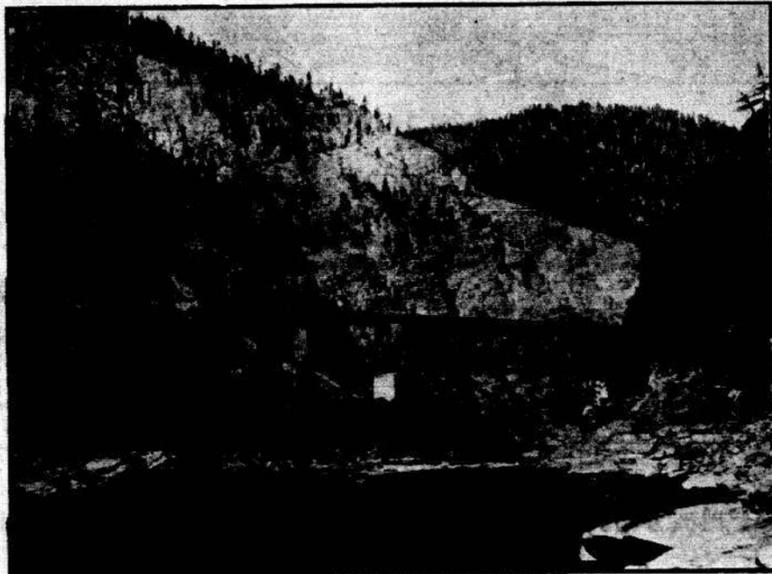
The train crosses Kelly creek over a trestle 219 feet high and a few minutes later goes over a high bridge at Clear creek, which is 229 feet above the water, the highest trestle on the road. A way over on the other side of the canyon a faint white line shows the location of the other end of the loop. Sometimes the tracks run almost within a stone's throw of each other and then again they are so far apart that the farther track can scarcely be seen. The train gradually descends, however, running back into the mountains until the turn is reached. Three tunnels are met on the turn so completely blinding the curve that one scarcely knows that the big loop has been traversed until he sees the other track above him.

Through a Wilderness.

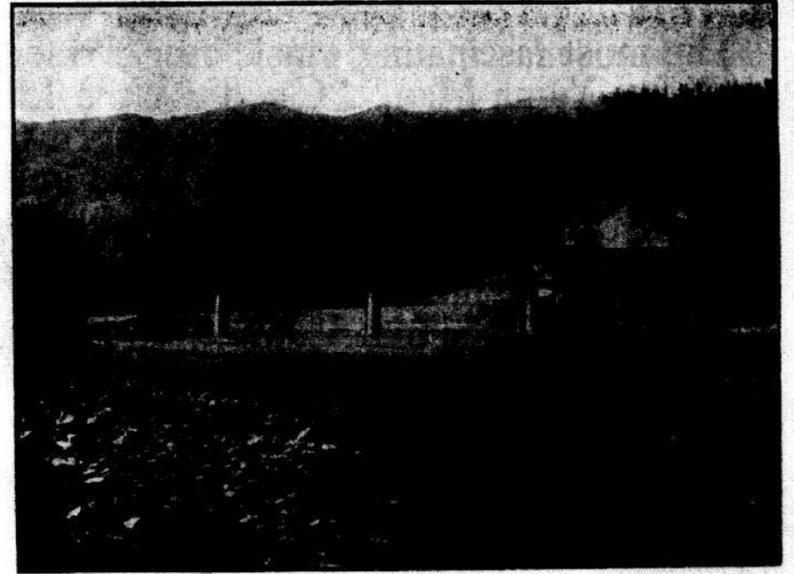
Running along side of the track through the heart of this wilderness, which is uninhabited by anyone, is a perfect road without a rock or stump in it and rockballasted all the way. This is the road built by the railroad for the transporting of supplies. When the first surveys were made there was not even a pack trail through the mountains. As the surveyors progressed it was necessary for them to blaze a trail and the marks of this can still be seen now above, now below the road. Over this the first supplies were carried and work commenced on the wagon road. For nearly a year work was carried on on this wagon road before the railroad grade itself was even touched. To finish this long road cost the railroad company \$150,000, and while the railroad builders were at work and supplies were brought clear from Taft on the one side and St. Maries on the other, hundreds of men were kept at work on the road keeping it clear of stones and ruts.

Slowly the train gets down to the level again. As it turns out onto its course again the train runs once more alongside the river and, by the time Avery, the end of the division is reached, 50 miles from the summit, the

(Continued on Page Nine.)



CROSSING NO. 3 ON MISSOULA RIVER. TWO MILES WEST OF CYR.



C. M. & P. S. BRIDGE AT ST. REGIS. N. P. TRACKS AT RIGHT UNLER BRIDGE.