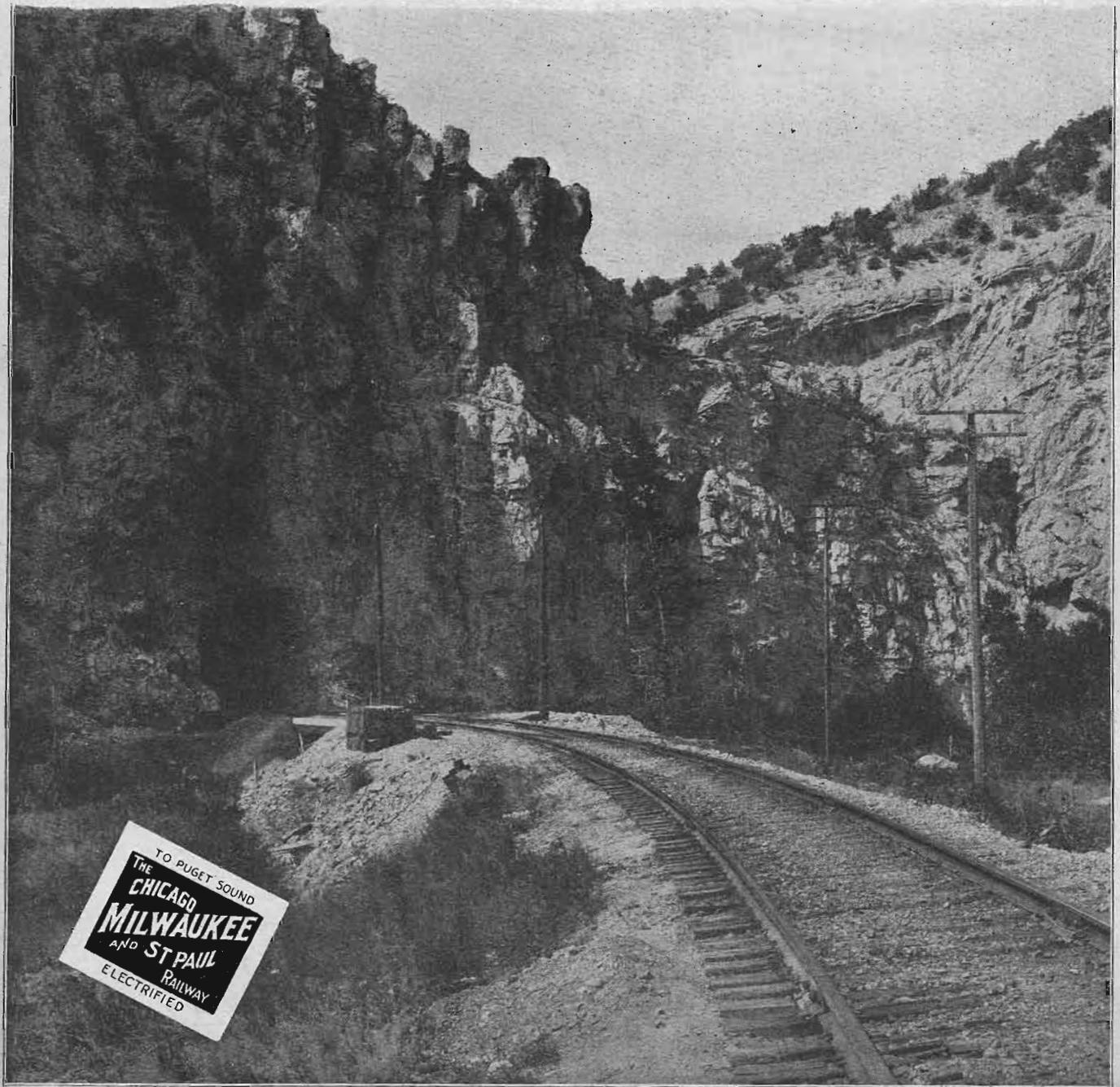
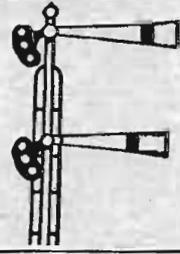
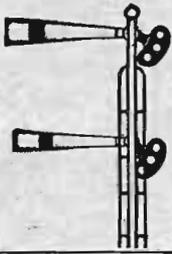


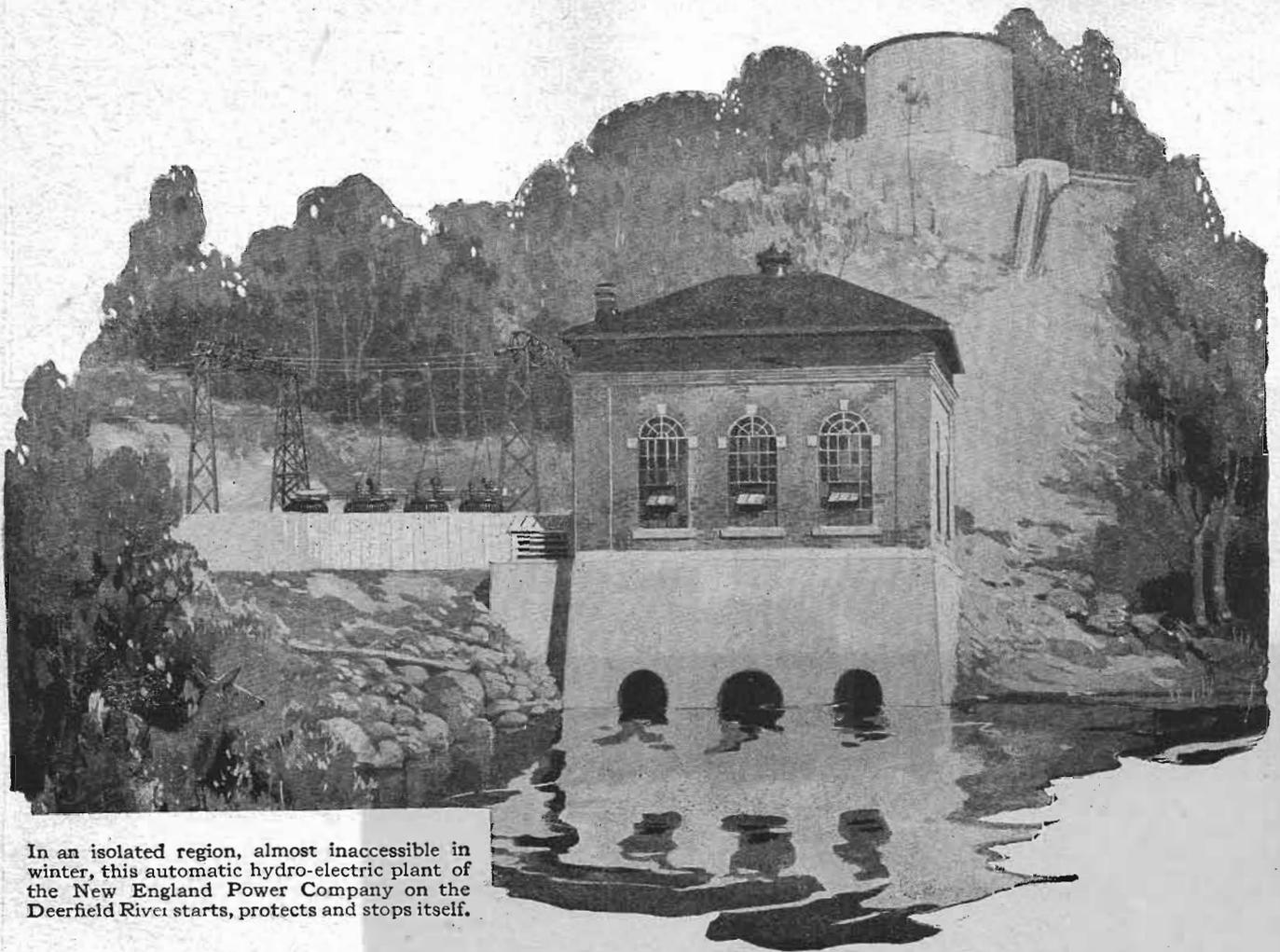
THE MILWAUKEE MAGAZINE



TO PUGET SOUND
THE
MILWAUKEE
AND ST PAUL
RAILWAY
ELECTRIFIED

Tunnel No. 8, Sixteen Mile Canyon

AUGUST, 1925



In an isolated region, almost inaccessible in winter, this automatic hydro-electric plant of the New England Power Company on the Deerfield River starts, protects and stops itself.

These power plants almost *think*



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Each Saturday afternoon, the demand for electric current diminishes. Immediately this plant, at the head of the stream, shuts down, and a storage reservoir begins to fill with water. On Monday morning, the plant starts itself and sends water down to all the others. No human touch. Just G-E automatic control.

GENERAL ELECTRIC



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Right here at home is one of America's most famous resorts where you can spend a delightful vacation at small cost. Golf, tennis, horse-back riding, and other outdoor sports. If you have never been in Excelsior Springs you have missed seeing one of the most interesting points on the Milwaukee line. Come and rest and play for a few weeks, drink the health giving waters, and go back to your work rested and strengthened in body, mind and spirit.

Piles *Can Be Cured* Without Surgery!

Don't be discouraged! No matter how severe your case may be—no matter how long you have suffered—no matter what treatments you have tried without avail, we are ready to prove to you that piles can be cured without surgery.

Dr. A. S. McCleary's mild, serum-like treatment has made totally unnecessary the use of surgery, with its attendant suffering and danger. **TWENTY-FOUR YEARS' EXPERIENCE**, with a record of more than 12,000 satisfied patients, many of whom are

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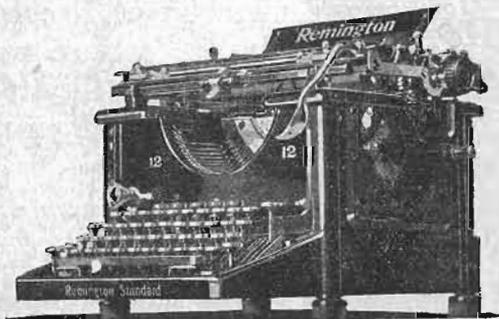
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The Montana Earthquake

Late in the afternoon of June 27th, the strange phenomenon of earthquake shocks in central and western Montana came upon that region without warning, shook up the country in more or less severe tremors for about thirty-six hours and departed, leaving behind a trail of devastation which crossed the Milwaukee's Coast Line in a spot which for a complete tie-up could not have been better chosen. The hills and precipices of the lower end of Sixteen Mile Canyon were severely rocked and a part of the bold promontory at the western end of Deer Park was shaken down on the tracks and into the bed of Sixteen Mile Creek, completely closing the west portal of tunnel No. 8 and damming the creek so effectually that its waters set back into Deer Park, forming a lake from twenty to sixty feet deep. The temblor also created much havoc along the line from Lombard to Three Forks, rolling great rocks down into the cuts and twisting and bending rails as if they were nothing more than hairpins.

That there was no loss of life or injury to passengers and train crews was a fortunate miracle, for with the many trains which daily pass over the railroad in that sector, it was a strange and wonderful circumstance that none were caught in the places where the damage was the greatest. At that, the two sections of No. 15 of that day had some thrilling experiences. First 15 had crossed the Missouri River west of Lombard and had proceeded to a point near Barron siding, when the first shock came. Second 15, following, had cleared tunnel No. 8 just nine minutes when the first shock was felt. Immediately the power went off, but the second train had sufficient momentum to coast clear to Lombard and into a safer zone than the canyon, surrounded by rocking peaks and mountains. The earth was torn and cracked in hundreds of places the entire distance between Mandlow and Three Forks, while there was but little damage west of that point.

Assistant Master Car Builder F. D. Campbell of Tacoma was a passenger on First 15, and he writes a graphic description of the experiences of that train. He was sitting with Conductor Sterling in the forward coach, and said: "We had reached a point three-quarters of a mile west of Barron when we experienced what we considered a sun kink under the train, and we ran ten car lengths before the train was brought to a stop. Looking backward nothing could be seen but dust, black clouds and rocks coming down on the railroad track and bounding into the Missouri River. We did not even then realize it was an earthquake. We got out and walked back to inspect the train and

the track, and when we started toward the head end again, the second shock came which informed us very unmistakably by the upheaving of the ground and terrifying roar, that it was an earthquake.

The train was well loaded and we took extra precaution in the care of the passengers. There were in the tourist car, a detail of regular army men who rendered wonderful assistance; for soon after the second and severest shock our crew managed to find a hand car and, with the assistance of the officers and soldiers, we were able to pull it around the train, over the rocks so that we could get to Eustis and into communication with the outside world. There were no rocks on the track in our immediate vicinity, but many lying alongside and large cracks in the earth; but near Eustis we found rocks in the cut and wires and communication cut off. East of Eustis there were huge rocks, from one to fifteen tons in weight on the track, and rails were bent like hairpins. It was late Saturday night before we were able to get into feeble communication, through Lombard, to Deer Lodge to give them information of our whereabouts and condition.

Sunday morning preparations were made to supply the train with ice and water from Barron, and Conductor Sterling was able to procure an auto-delivery car and proceed to Three Forks for other supplies. About seven o'clock Monday morning, Mr. Greer and Mr. Earling, with other officials and wrecking crews, arrived with a steam engine, which pulled us into Three Forks, and then returned to Lombard, the wrecking crews meantime clearing the tracks; and second 15 followed us within a few hours. At this time I would like to make special mention of the wonderful assistance and cooperation given by Conductor Sterling, Engineer Flynn, Fireman Kunze, Brakemen Breeding and Mullins, and the baggageman, whose name I did not get. I made it a point to stand guard nights, and got what little rest could be obtained during the hot Sunday.

Of the train crew and the sleeping and dining car crews, I certainly take pleasure at this time, in saying that they did themselves proud and went about their duties without complaint. They should all be commended for their wonderful service. "We never sleep when duty demands our presence", and that was what was done on those two fifteens from 6:19 P. M., June 27th, to 7:10 A. M., June 29th."

So much for the chronicle of the havoc wrought by the destructive forces of nature which could in no manner be foreseen or forestalled, be-

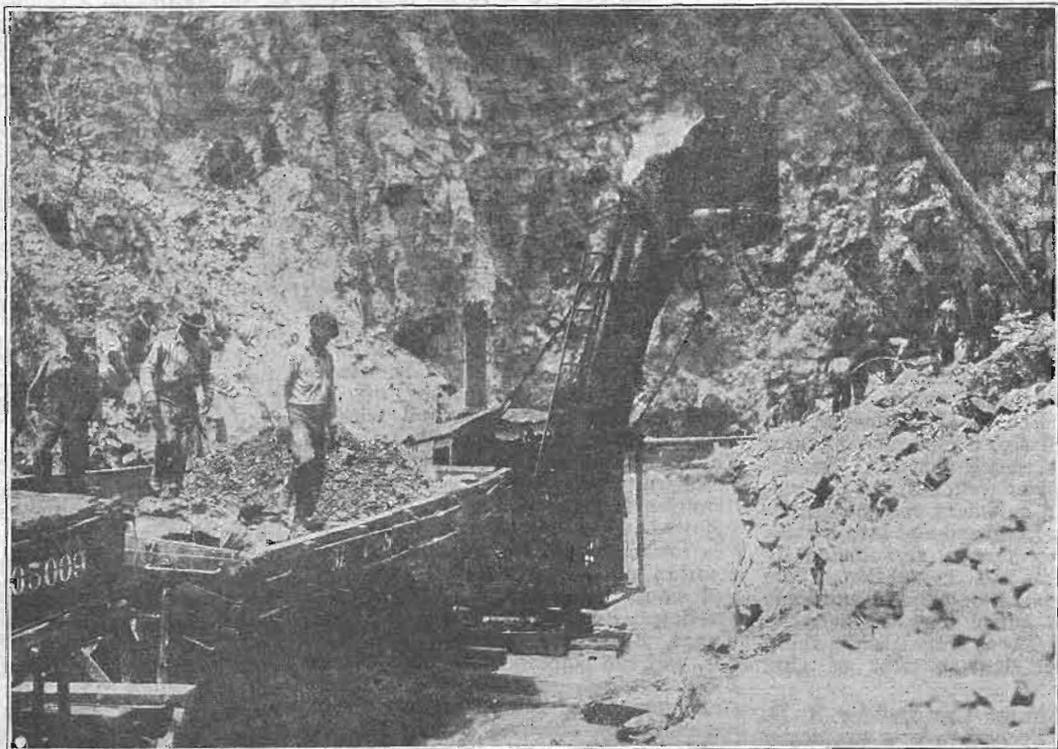
cause whatever the cause of the quaking of the earth's surface, the forces thereof are far underground and their progress to the surface is not heralded.

Now for the story of the splendid job of repairs that got the railroad into operation again in record-breaking time, a task achieved by the magnificent teamwork of all the human element that was mobilized at the scene of the trouble. They worked untiringly and without ceasing, day or night until a new track had been laid down under the great difficulties that existed there, and trains were again in operation throughout the length of the Line.

Advices of the earthquake reached the office of General Manager Bradshaw in Seattle, at 5:35 P. M., Pacific time, which is one hour slower than the mountain time that obtains in the Rocky Mountain region. In spite of the Saturday half holiday, Mr. Bradshaw was still in his office clearing up matters so that he could start the following morning on a vacation trip to Alaska. The news was meager, but sufficient to tell him that vacations were in the discard. Mr. Greer, who was in the west on a business trip, was found, Mr. Earling located and told, and all the other forces gathered together in time to get away on No. 18 that evening. As fast as the wires would work the wrecking crews were summoned from east and west, and before the dust of the tremors had cleared away men and equipment were on their way. No really definite information was received by the official party until they arrived at Butte the next day, in regard to the extent to which the railroad had suffered, or that the missing trains had been heard from and were safe, none being injured. Superintendent Phelan, with Road masters Walsh and Geelhart, had, however, gotten into action, working all Saturday night, Sunday and Sunday night, clearing the tracks to reach 1st and 2nd Section of the Olympian, and by the time Mr. Greer and his party reached the scene, the road was open and first 15 ready to be pulled into Three Forks.

The first positive word of the havoc at Tunnel No. 8, which is the lowest one of the three Deer Park tunnels, was received from Roadmaster Geelhart, who had arrived from Harlowton with his wrecker and crew, and had crawled over the top of the slide and got into Lombard where, by relaying from station to station, he telephoned the news to Deer Lodge.

Without delay, arrangements were instituted for detouring trains 15 and 16 by way of the Northern Pacific between Miles City and Sappington. Trains 17 and 18 were discontinued be-



Above: Where the Mountain Fell Down. The track at the right was the main line track leading to the west entrance of tunnel No. 8. The caterpillar shovel just arrived.

Below: The caterpillar shovel in action. Note the caterpillar deep in the Creek.

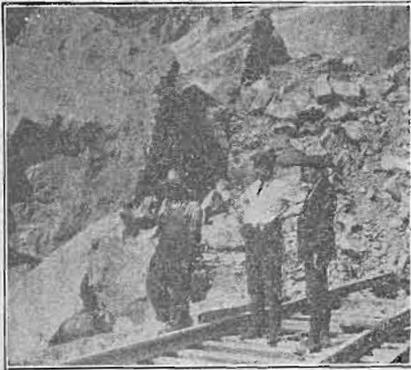
tween Harlowton and Butte, and stub trains put on between Butte and Three Forks, where there was little disturbance to the tracks; and between Harlowton and Ringling, and continued within a few days, as soon as the tracks were lined up and the slight damage repaired, down as far as Maudlow. Thus was the coast traffic kept moving in spite of the almost unsurmountable difficulties that loomed.

When the extent of the damage at Tunnel No. 8 was revealed, the first question was what to do. . . whether to commence immediately to clear away the debris from the wrecked tunnel, or to try to build a shoo-fly. Two cars of dynamite were rushed to the scene and the business of clearing Sixteen Mile Creek of its rock-pile dam begun immediately. But before even this preliminary had been accomplish-

ed, the shoo-fly was decided as the quickest and most feasible first aid to the railroad, and W. H. Penfield, Chief Engineer of Maintenance of Way, put in charge. To those who were on construction work on the Puget Sound Lines, Mr. Penfield will be remembered to have specialized to a certain extent in building shoo-flies, having constructed a remarkable track of the kind over the summit of Pipestone Pass, for

use pending the completion of the tunnel that pierces the Continental Divide on the Pass.

Two steam shovels, bridge material, camps for five hundred men and all necessary equipment were ordered forward without delay, and inside of forty-eight hours, the lines were run for an 1800 foot shoo-fly with a sixteen



Messrs. Penfield and Bradshaw standing in front of the slide.

degree curve around the spur of the mountain that closes Sixteen Mile Canyon, except for the narrow space the Creek has worn for its own exit from the fastness.

As soon as the Creek bed had been shot through the waters of the lake on the east side, of course, began to lower, gradually, and the work on that side was comparatively simple, requiring only the steady chug of the pile driver and the rat-tat of the bridge builders' and tracklayers' tools to record the steady progress of the new track. On the west side the story was different, for the fallen mountain had



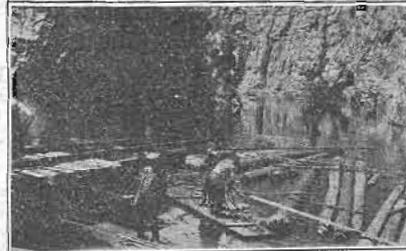
Lifting out the great rocks with cable and pony engine.

tumbled down on the track and stream and great masses of rock weighing hundreds of tons blocked the way most effectually. It took nearly a carload of dynamite to open up the Creek bed, one charge of 60 boxes (about 3600 pounds) was the largest single shot. After the waters were released a caterpillar shovel was able to get in, and very shortly was biting its way through the masses of rock blown out by the dynamite. Soon, as in days of old, the work trains were trundling down the Canyon with loads of debris, while the ponderous shovel, mounted on its irresistible caterpillar motivation, plowed its way steadily along to meet the pile driver from the east side that within a few days was poking its nose around



Making a roadbed through the Creek.

the curve. All the while two to three hundred men worked night and day in water hip high, and sometimes even higher. A like number scrambled over the rocks, manipulating the machinery which was in place to clear up the debris; air drillers blasting the blockade away and bridge and building men rushing material along to expedite the work. Decidedly it was remindful of the days back in 1908, when the old Jawbone was being replaced in Sixteen



Rafting the material across the lake in Deer Park.

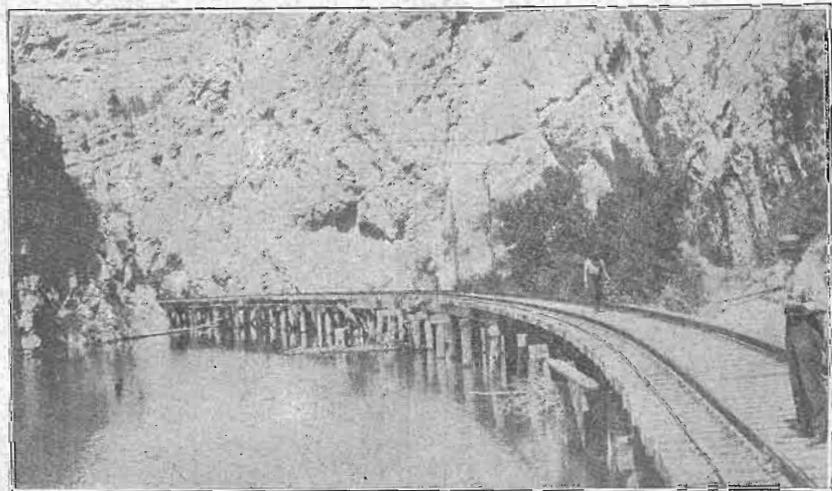
Mile Canyon by the wonderful engineering and construction work that characterizes The Milwaukee's route through that narrow pass in the Big Belt Mountains.

The electrification forces under the direction of H. L. Tavenner were out with the "trouble-shooter" repairing the lines, the signal crews, under Signal Engineer Smith, established their camp on the east side and began their work

one must have been at the scene himself and been an eye-witness of the steady, the long, strong pull all together, that conquered the unsurmountable and had the railroad open and trains running within fourteen days. The earthquake occurred at eventide on June 27th, and at eventide of July 10th, General Manager Bradshaw wired to Mr. Byram that the first train would pass over the shoo-fly at nine o'clock that evening.

No attempt was made to electrify the shoo-fly prior to opening it for passage of trains, and a steam engine was stationed there to pull the trains from one end of the energized district around to the other on the opposite side, and this arrangement will continue until the poles have been set and the wires strung along the shoo-fly track.

From first to last, as has been said, the cooperation of all concerned in restoring train service, has been wonderful, and remarkable to one not previously familiar with the spirit that animates Milwaukee employees. Superintendent Phelan and Roadmasters Walsh and Geelhart spent night and day on the job, snatching only short intervals of sleep, as did Chief Carpenters, L. K. Sorenson, and H. B. Rivers; and Foremen T. A. Hindman, O. E. Blake, Wm. Cullen and Harry Spears. Jim Hayes was there continuously; Tom Kogi, foreman of the Jap extra gangs, performed miracles of service, and Alex Francisco, Yard Foreman at Harlowton, rushed in men and material as fast as the wheels would turn. Among others who were tireless in the work may be mentioned H. Dell of the Store Department; Extra Gang Foreman Nels Hamer; Assistant Signal Engineer Smith, and Chief Line-man D. E. McEwan. J. S. Griffith, Assistant Superintendent of Motive Power, was stationed at Three Forks to handle the steam power which was brought over into the electrified sector to handle the trains that were detouring over the N. P. Ry. Chief Dispatcher D. J. Hagerty, at Deer Lodge,



The East end of the Shoo-Fly completed.

of rehabilitation from the east, where trains were in operation within a few days after the disaster.

To completely realize the extent of the damage and the wonderful achievements that cleared a way and built a railroad in an almost impossible place,

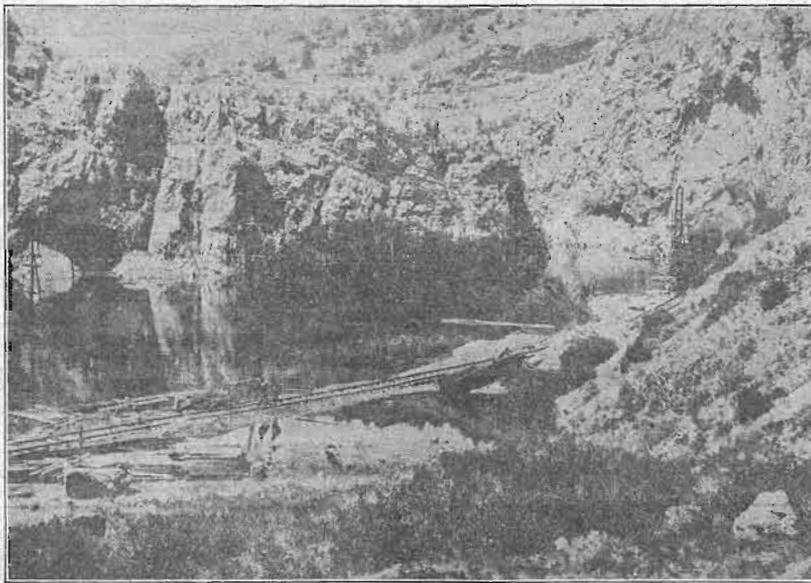
remained on duty all the time that the officials of the railroad were at the slide, working day and night, handling transportation matters, detouring trains and caring for the great volume of extra work necessitated by the exigencies of the situation.

Messrs. Greer, Earling, Bradshaw, Barrett, Penfield and R. J. Middleton, who arrived on the scene at the beginning, took active part in the work. Attired in overalls and high top boots, Mr. Penfield and Mr. Middleton were always in the thick of the fight against the obstructions, here, there and everywhere, mapping out the engineering problems, overseeing the work and taking a hand themselves in the actual operations of clearing the way and building the shoo-fly. Mr. E. H. Barrett, for a long time experienced in track work, was at the front always, where track-laying was going on. Mr. Greer's and Mr. Bradshaw's cars were office, commissary and store department headquarters; and thus in a perfectly organized manner, the big work was rushed through to a successful completion, and this Milwaukee Railroad emerged from a crushing blow, strong and efficient as it always is, due to the determined loyalty of its forces to suffer nothing to long delay its forward movement.

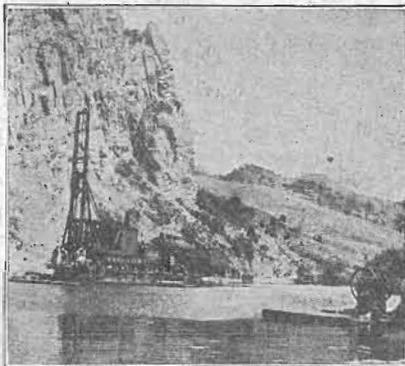
While the work at Tunnel No. 8 was in progress, the stricken city of Three Forks was taking account of its damage and looking about for ways and means



Construction forces taking in the material.



Location of the Shoo-Fly through Deer Park. Note east entrance to Tunnel No. 8 at extreme left.



The pile driver at work.

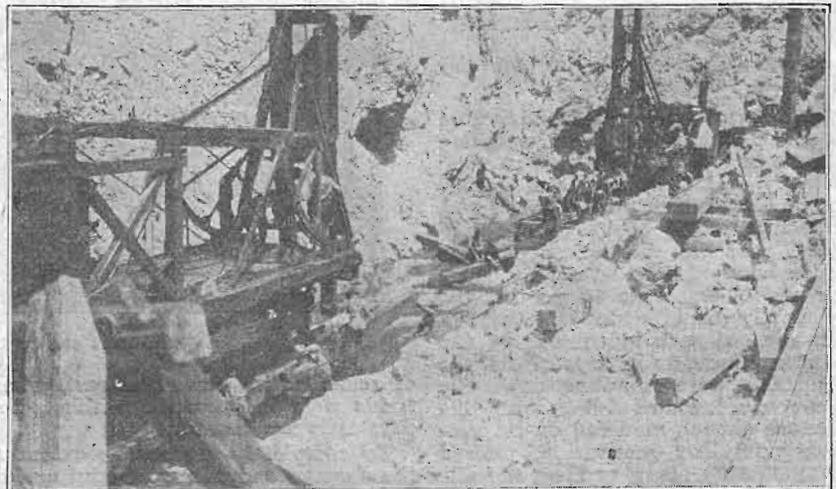
to recoup its losses. The second severe temblor left not a brick chimney standing; brought down the beautiful Methodist Church and laid low a big corner of the handsome new public school; beside smashing plate glass

windows, seriously damaging both of its banks and other brick buildings in the town. The frame buildings withstood the shocks and emerged with only the loss of their brick chimneys.

The little city will have hard sledding to recover from the loss of its beautiful school building, and an effort is being made by the Governor of Montana to have other towns in the state, more fortunately situated and not harmed by the earthquakes, to aid in the reconstruction of the building. West of Three Forks, little damage was reported, some structures in Butte suffered to a certain extent, but nothing of a serious nature occurred west of the Divide.

The following record of the time at which the various tremors occurred was made by Mr. F. D. Campbell, and is interesting data:

The first heavy shock, which stopped the trains occurred at 6:19 P. M., June 27th; the next at 6:23 P. M.; the next heavy one at 6:30 P. M.; the next at 6:35 P. M.; then in succession—6:37 P. M.; 6:45 P. M.; 7:00 P. M., which was a heavy shock; 7:15 P. M.; 7:45, a light tremor; 8:38 P. M., the third heavy



Track-laying machines from east and west approaching each other.

Credit Where Credit Is Due

Editor, The Magazine,

I take pleasure in sending to you for publication in The Magazine, the following message from Mr. H. E. Byram on behalf of the Receivers:

Mr. B. B. Greer:

I received a telegram from Mr. C. O. Bradshaw advising that the shoo fly in "sixteen mile canyon" was completed and ready for business at 8:00 P. M., July 10th.

This interruption of traffic is the most serious one that has occurred for many years and presented difficulties which never before have existed.

I congratulate you and the officers and employes who worked so faithfully and effectively to get the road open and traffic restored in spite of the great difficulties and would like to extend to you and to them our appreciation of the splendid work that was done in accomplishing so promptly and successfully the difficult task.

H. E. BYRAM,
For the Receivers.

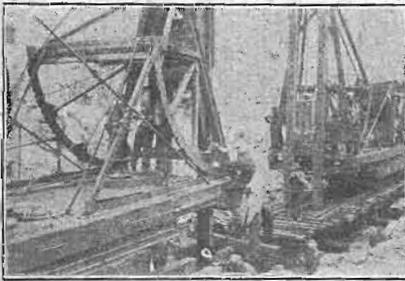
Everybody from the Engineers who laid out plans to get around this slide to the track men who worked day and night to execute the plan are entitled to take pride in the fact that this job was successfully carried out and within the time estimated.

The Train and Enginemen from the Rocky Mountain and Musselshell Divisions, who made the detour of 345 miles for twelve days without an engine failure, contributed their share to the fact that we had practically no interruption in our through traffic.

The Officers from the Musselshell Division, who came over from Harlowton without question, and handled the work on the east end, made a great showing, and Geelhart and Sorenson will always be entitled to anything they want from the Rocky Mountain Division.

None of us ever saw a worse break in the main line and none of us ever saw a bad situation handled any better than this was, and all men who had to do with it are entitled to an equal share of credit.

B. B. GREER,
Chief Operating Officer.

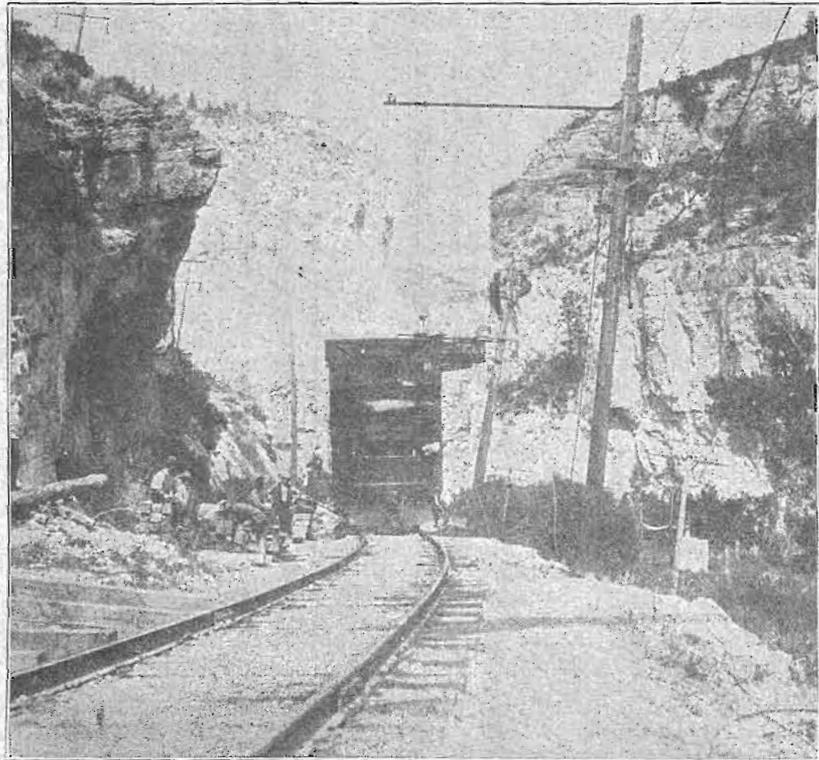


Closing the Gap.

shock; 9:00 P.M.; 9:15 P.M.; 9:30 P.M.; 9:37 P. M.; 10:00 P. M.; 10:10 P. M.; 10:27 P. M.; 10:29 P. M.; 10:40 P. M.; 11:00 P. M.; 11:29 P. M.; 12:15 A. M., June 28; 1:30 A. M.; and then light tremors until 8:50 A. M.; 9:00 A. M.; 9:30 A. M.; 11:00 P. M.; 1:14 A. M., June 29th; 1:41 A. M.; 2:50 A. M.; 5:00 A. M., which was the last that took place for several days, when another slight tremor was felt.



Foreman Wm. Cullen and Mrs. Cullen at their camp in Deer Park.



The "Trouble Shooter" and crew repairing the electric lines.

Before the shoo-fly was completed, the water of the newly made lake in Deer Park, east of tunnel No. 8 had receded sufficiently to permit of an examination of the tunnel itself, and it was found that it had not suffered any serious damage. The fallen cliff had blocked the west portal, and when the debris from that is cleared the entire main line will again be open, but in the meantime, the substantial shoo-fly will serve the trans-continental traffic very efficiently; and its successful construction is a fine illustration of the old proverb, "Where there's a will, there's a way."

A Trip To Stowell's

W. H. Shaver, Conductor La Crosse Division

Many a time on still nights while being held out of the terminal with our long train because of yard profusion, the echo of their singing, shouting and noisy dancing, coupled with the thump-thump of a loud toned piano resounding against the steep cliff in the back ground and drifting across the meadows toward the caboose could be distinctly heard a half mile away. The bright lights of automobiles on the bluff highway darting from and to the city bringing them out and taking 'em in could also be plainly seen.

It was this and what we had heard about the place that tempted Jerry, the brakeman, and me to go to Stowell's.

On this particular night we arrived there on time at ten thirty and found them stepping high. A large acetylene lamp swinging freely at the end of a horizontal staff projecting from the center of the building brilliantly illuminated the surroundings and indicating the lines open to traffic by exposing ten autos lined up in front of the place, three motor cycles leaning against the building "resting" as if from carrying a double load, two bicycles and three rigs sheltered in an adjoining shed.

We hot-footed it via short cut across the meadows. In the place, amusement galore was being furnished by at least fifty people, exclusive of six chauffeurs, two piano players, three bartenders, Mr. and Mrs. Stowell, and two old rounders, "hangerons", harmless of course, but always ready to cop a sleeper "drink" when the occasion permitted, which was quite frequent. Some of the known transients were two lawyers, periodical imbibers judging from appearances, a doctor with two ladies acting shy and taking notes, presumably on a slumming cruise. A policeman in civilian clothes dissenting official activity, and on being kidded as to spying, he grinned and said, "Nothing like that, this place isn't watched or tabbed on, Stowell's a square-shooter, he pays big money for running, the money defrays the towns' expenses and the community is satisfied so long as they don't get rough, and up to now they've played fair".

Men and women of all vocations ming'ed in the throng. Rector's in the rainy days had nothing on Stowell's. A dancing surface fifty by eighty and smooth as ivory offered the disciples of dancing a grand opportunity to indulge in the light fantastic. A bar of enormous length fitted with brass railing and foot rest loomed invitingly. A large mirror polished to perfection, cut glass and bottles containing liquor of all kinds ornamented the back bar. Fancy painted slot machines ranging from a nickel to a dollar stood backed against the wall.

Stowell was the busiest man on the job waiting on customers, coaching the bar-tenders and instructing the piano players. Piano playing is trying work, they changed every fifteen minutes. Coin pianos are fully as good, but Stowell presumably liked the old fashioned way, "it's classy" and it gives the

ivory beaters a chance to make a living derived from the sporting public well able to pay for good music and a good time.

About midnight two big cars arrived with six chorus girls and escorts from the "Pink Widow" Company which had been playing in the city. It being Saturday night and their engagement fulfilled, they turned out for a grand time finish at Stowell's. Fast and gay the fun flowed. Stowell had to help at the piano, Mrs. Stowell helped behind the bar, and the way she could mix drinks was an exception—an experienced hand at it from an observing point of view.

At one thirty a pale looking news-boy wearing his uniform, having probably just arrived on his run, entered accompanied by a girl at whom everyone stared, and for a good reason. Such a wee bit of loveliness, dimples, and perfect contour, draped in togs befitting a prima donna, undoubtedly had never been seen in Stowell's before. Even the girls from the "Pink Widow" Company side-stepped and gave her room, and as for singing and dancing, she had them all beat to a frazzle. She sang best when Stowell played. Stowell being a good singer, they had the crowd gaping when they sang together.

Enjoying myself as a spectator and not seeing everything, thought we were running up to schedule. The brakeman though, being an old timer and not over looking any bets, came to me and whispered, "There will be something doing here pretty quick, look at Mrs. Stowell, see how she is sizing up the newsy's girl". She had stopped her work, stepped from behind the bar and stood rigid. For a moment she stared hard, then darted into an inner room but returned quickly. Close scrutiny revealed a big gun in her hand partly hidden in the folds of her dress. Approaching the newsy's girl with a steady unflinching gait, she whipped the gun from its hiding place and pointed it at her, and say, that 44 looked as big and wicked and speedy as the glistening boiler of an F3 locomotive.

For a moment not a word was spoken, not a sound, the crowd was still as a Quaker Meeting. Then suddenly Mrs. Stowell cried, "See here, you hussy, your number looks big to me now, I didn't recognize you when you first came in. You are the vixen that lured my man away and used him as a partner in that barn-storming vaudeville stunt of yours, and when it got stale and didn't blaze any more, you fired him back. It looks as though you're trying to pull it again and I'll give you just thirty seconds to clear out of here".

"You have me wrong, madam, I don't know you and know less of your man, and little I care for either—"

"Are you going? Times up", yelled Mrs. Stowell.

"Not for you, you can't scare me," retorted the girl.

Crack, spat the big 44 followed by a thin wreath of blue smoke which quickly cleared away and revealing the girl in the same position, she hadn't budged. Mrs. Stowell turned pale, plainly noticeable regardless of the rouge on her face, and advancing another step she, again cried, "I'll give you one more chance, will you go?"

"No"

Crack, spit the 44 again, and nobody hurt, the girl still maintaining her calm pose.

It was then that Stowell sprang in front of his wife and ejaculated, "What are you trying to do?"

"I'll show you Jim Stowell, if you don't mind your own business, I'll shoot you up, too".

"You are out of luck on the shooting stuff, it isn't loaded. I took the shells out sometime ago and put in blanks. I've been expecting something like this to happen and got ready for it, and from now on, we're through. I will stand to put up with some of your crazy stunts, but when you resort to gun play, you are going too far". And he hurried out of the room. The gun dropped with a dull thud, Mrs. Stowell sank to the floor weak and helpless.

The newsy hustled the girl out of the place. In an instant the crowd became uproarious and began to disperse, everybody trying to get out first.

Somebody shouted, "Look out" Sounded like Jerry's voice. I turned just in time to dodge the big dollar slot machine that fell to the floor with a bang (reminding one of the slack running up on a long drag when an air hose bursts) and spilled its contents in all directions. "Get busy, Bill, help yourself," the brakeman's voice again.

We were among the last to go out. Edging close when outside, he said in an undertone, "Didja get yours, Bill?"

"You tell 'em all I did, and I know what will happen if we have to make a run for it. I'll stand about as much show as a winged duck in a fox race, loaded down with all this jack, how did they hit for you?"

"Who me? Oh, I'm more than caught up. All that's worrying me is a hole in one of my pockets".

"How do you account for that big slot machine getting tipped over? It must weigh half a ton".

"It's dead easy," he chuckled, "When you know how. I learned the trick out west, works fine and dandy in a rough house." Leave it to a boomer brakeman. "But come, Bill, let's beat it before we get pinched."

Some distance down the road, an auto swung close to the path in which we were walking and stopped. The door opened and a weak voice that seemed familiar said, "Get in boys and ride back to the city with us." That sounded good. I got a flash of brass buttons on entering and knew that we were in the newsy's car.

"You don't remember me, do you Billy?" this same weak voice exclaimed after we had gotten well on our way.

"No, I do not, and yet it seems as though I remember your voice."

"Well, if I tell you that I was newsy on your train when you were running

between St. Paul and Winnipeg on the Soo Line, you very likely will. I recognized you back there, Bill, but did not want to make myself known when I see that trouble was brewing."

"You're not Ikey Kohn?"

"I'm that bird, or what's left of him."

"I'd never have known you in a life time, you've sure changed."

"That isn't to be wondered at after what I've gone through in the past two years"

"But who is the lady, may I ask?"

"She's only my girl. I copped her from a comic opera company that stranded in Winnipeg and brought her to St. Paul. The authorities arrested and convicted me on a white slave charge preferred by the show manager, jealously on his part. I served six months and spent a wad of money to get clear. We are living quietly at the other end of the line at present and laying low, but she is getting restless, her old stage habits and the call of the spot light are gripping hard and I don't think I can hold her much longer. By bringing her down here for a little excitement I had hoped to relieve the growing tension, but I've made a bad mess of it, gummed the job and banged plumb into the buzz-saw again. We don't know those people back there and never were in the place before. The argument that woman put up was all bunk. I'd have put up a fight at that, but haven't a gun and without one my chances would have been slim against those burly bartenders, and besides I'm weak from a touch of T.B. contracted while in the pen at Stillwater. I'll say this for the girl, she's a good kid, a thoroughbred, stood by me through all the trouble and I'm a goner when she quits. Driver, make the Stoddard your first stop, then take these gentlemen to whatever part of the city they wish to go."

A violent spasm of coughing terminated this mournful soliloquy and he sank back on the cushions utterly exhausted. An opposing auto with glaring lights, gave me an opportunity to observe his pallid, distorted features which told too plainly that he was nearing the home stretch of his last run. My heart went out to this suffering bit of humanity and why not? Didn't he save me one night in a train hold-up at Erskine when two bandits had me covered? Poor Ikey, game to his last trip and bound for the diamond special on God's flowered and broad gauged line.

You, kind readers, should have been told early in the play that Stowell's is, was, a road house anchored close to the bluff highway five miles from town. It's vacant now, has been for some time. The gilt lettered "Old Style Lager" sign that adorns the front has lost its luster, one end having torn loose from the fastenings and it lops in a menacing attitude, swings with the wind and moans, "Do not enter here for fear of my falling on you." The "Old Taylor" sign embedded in its artistic iron frame shows streaks of rust, hanging on one hinge it rubs against the building and squeaks, "Don't pity me, I've played 'em strong in my time and beat the best of them. I'm a hard loser, but I've gone the limit, I'm done." The windows are nearly all broken, one door is missing, the out buildings, auto sheds

and barn are caving in. In all it presents an image of a very forbidding place, more so when the moon creeps over the high cliff and casts weird shadows on it. If you chance to drive that way, you are bound to stare and think and wonder why such a place ever existed.

The Adequate Transportation Service of Today

Extracts from an Address by Mr. R. H. Aishton at The Annual Meeting of the Mechanical Division of the American Railway Association in Chicago June 16th

The ability of the railroads to handle successfully the record breaking freight traffic offered them during the past years with the greatest efficiency on record, and at reduced operating costs, has been largely due to improved mechanical facilities and operating methods put into effect by the railroads since the expiration of Government Control in 1920, according to R. H. Aishton, President of the American Railway Association.

Addressing the annual meeting he said the railroads of the United States have made greater progress in increasing their efficiency and bringing about economies in operation than any other industry.

"There is no question today as to the adequacy of transportation service", Mr. Aishton, said. "The question now is, the economy with which that service can be performed. In order to bring it about the railroads are doing everything possible to devise means of doing that work at a lower cost while at the same time increase the safety both of passengers and employees.

"One of the outstanding conditions which has enabled the railroads to improve their operating performance and reduce operating cost has been the capital invested during the past few years in modern up-to-date shops and engine terminals, more than \$104,682,000 having been invested in the past three years. Recently a number of shops have been installed with excellent results the so-called progressive system of making freight car repairs, such as extensively used in the automobile industry.

The gradual substitution of steel for wooden car constructions has resulted in the practical elimination of the all-wood car and the substitution of the steel frame and all-steel car, which was a large factor in reducing by approximately \$80,000,000 the cost of maintenance of freight cars in 1924 as compared with 1923.

"Safety on the railroads has greatly increased, as a result of the tests that have been or are now being made by the railroads both in their own laboratories and in those of the manufacturer to find the most suitable and reliable type of air brakes, car couplers, wheels, axles and other mechanical devices, while the standardization of parts has not only saved enormous sums to the railroads but has also expedited service by permitting the free interchange of cars of all ownerships all over the country.

"About forty years ago, there were fifty-six different kinds of axles used under freight cars and 58 different kinds of journal boxes. Today there are only one kind. There formerly were 26 kinds

of car couplers, while now there is only one. Through the efforts of the Car Construction Committee of the American Railway Association there has been a continual increase in standardization of detailed parts of cars with the result that at the present time all of the detail parts are highly standardized.

"The American Railway Association is also making an extensive study into the greater utilization of locomotives which, while not complete, shows that many railroads have extended the runs of locomotives so as to cover two or more engine divisions, thus increasing the mileage per day and effecting economies in operation. This plan eliminates the necessity for a considerable number of locomotives. The Atchison Topeka and Santa Fe Railroad, for instance, uses one locomotive to pull a train from Los Angeles to Williams, Arizona, a distance of about 700 miles. Formerly, a locomotive pulled a train only about 150 miles. On through trains, the New York Central uses only three locomotives from Chicago to New York. Many other roads are doing the same thing.

"These are only illustrations of what the railroads of this country are doing to bring about continued increase in efficiency and economy. This policy is continuing with the hope of bringing about further reduced cost. The results are bound, however, to be reflected in the service which the carriers render the public".

J. J. Tatum of Baltimore, Gen. Supt. of the Car Department, Baltimore and Ohio Railroad, who presided, also addressed the convention.

I Wish That He Was Back Again

By J. A. Hendry, Engine Yard Foreman, Minneapolis, Minn.

I've a yearning in my heart and its aching every day
And my thoughts so often wander o'er the sea,
To a little hallowed spot where our Laddie is asleep,
And I often wish that he could only be
Back beside the fire place with his mother, and with me
We'd love to have our Laddie, that's asleep beyond the sea,
Just to love him and to like him, Ah his memory is so dear,
Oh I wish that he was back again, I'd like to have him here.

I remember well the day he went to face the cruel foe,
Just like the lads that marched away so many years ago,
He was smiling always smiling as he said a fond good-bye,
When he went over there to fight, and win for you and I.

Alas the cruel word came back that he would never be
Back beside the fire-place with his mother and with me,
I have often wished that sometime, I would find it all a dream,
And we'd have our laddie back again, I know how it would seem.

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Grant Williams

No man of The Milwaukee Family could have passed into the silent land more universally regretted than is he whom we mourn today.

Grant Williams died at Washington Boulevard Hospital on the morning of July 15th, following a major operation undertaken in an endeavor to save his fast ebbing life. He was 61 years of age and a veteran of 38 years of service with The Milwaukee. He commenced his railroad career as a telegrapher and had served in both operating and traffic departments. He came to Chicago from Omaha, to take the position of private secretary to Mr. A. J. Earling, in 1895, and remained with him until 1900, when he entered the Traffic Department, where he continued in successive positions of trust. He was elected Treasurer of the Veteran Employees Association at the time of its organization and later became Secretary and Treasurer of the Association. He worked untiringly, always, to advance its interests; and he made the Employes Pension Association the crowning glory of his life. It was a great work, and he spent himself even unto death to make it a success. It will remain a monument to his faith in, and loyalty to The Milwaukee employes. He was also Secretary and Treasurer of that Association and Secretary and Treasurer of the American Association of Freight Traffic Officers. His fidelity to these trusts and the confidence reposed in him, are speaking testimonials to the sterling worth of a character refined in the mills of hard work and unceasing thought for the welfare of his fellow men.

The funeral occurred on Friday, July 17th, from his home in Chicago, and was attended by his hundreds of friends from all walks of railroad life, from the Executives to the humblest in the service. Burial took place at Darien, Wisconsin, with a service at the grave, for those who could not be present at the home service, but had gone to Darien from Milwaukee and the surrounding country to pay their last respects to the man they had loved and trusted and who had never failed them.

He fought a good fight; he has finished the course; he kept the faith, and a crown of righteousness shall be his forever.

Charles Emerson Foote

On May 28th, Charles Emerson Foote, veteran conductor of the L. & D. Division, passed away at his home in Sanborn, Iowa, after a lingering illness. Mr. Foote was in his sixty-ninth year and had been in the service of the Milwaukee Road since 1885 starting in train service and serving as conductor in passenger train service since 1886.

Before entering railroad service, Mr. Foote was superintendent of public schools in Sanborn, Iowa, and practiced law in that town for two years, when impaired health forced him to seek outdoor employment. He was a member of the Blue Lodge, A. F. & A. M., and a Knight Templar, which organizations officiated at his burial. Train Dispatcher C. B. Higgins of Mason City, Past Master of the Masonic Lodge of Mason City, at the Masonic burial service, paid this tribute to the memory of a much-loved friend and brother Mason: "I have been intimately acquainted with Charlie Foote more than 37 years, and during that time I never heard him use an oath or blasphemous language of any kind, raise his voice in anger, speak disparagingly of any person or impugn the motive of any man. If he voiced reproach or censure of the short-comings of others, it was with a generous forgiving spirit that left no scar or bitter feeling. He fulfilled the commandment, 'Love Ye One Another,' of the Divine Teacher nearer than any man that I have ever known."

Mr. Foote is survived by his widow, three sons and two daughters, nine grandchildren, one brother and two sisters, to whom the sympathy of the many friends on the Milwaukee Road tender their sympathy.

Freight is the Cheapest

Parcel post and express rates are low, but the cheapest way of shipping is by freight. The biggest savings are made by our customers who plan their purchase in advance. Instead of having small orders shipped to them by express or parcel post, they figure out all the supplies they will need for two or three months and order them all at once shipped by freight. In this way they make a considerable additional saving on the larger order.

—From the catalogue of Sears, Roebuck & Co.

The Veterans' Meeting

Arrangements for the annual meeting of the Veteran Employees' Association, to be held in Milwaukee August 24th and 25th, are practically completed; and the program promises a fine time to all of the visitors.

As usual the morning of the 24th will be devoted to registration, assignment of members to the various hotels, according to their previous reservations, visiting, etc. In the afternoon the annual business meeting, election of officers, etc. The annual banquet will be held at 6:30 P. M., in the Arcadie Ball Room of Hotel Antlers, which has been selected as headquarters for the meeting. An attractive menu has been provided, and entertainment features will alternate with the addresses from the speakers' table. The list of entertainers has not been completed, but it will be along the same lines as last year. There will be no dancing, however, at the close of the banquet, and the program, therefore, may be lengthened to some extent.

A picnic at Hilgen Springs Park, Cedarburg, is planned for the 25th, and visitors will be transported to that point by special train. Luncheon will be served at a charge of 75 cents per person. The picnic at Waukesha Beach last year proved such a popular feature of the meeting, that it was decided to repeat it again this year, and perhaps make the picnic a regular outing feature of the Association meetings. Messrs. Otto Hoppe, Theo. Saveland and Ed Drears have been appointed Field Marshals for this outing, and a fine program of games, "stunts", etc., will be provided.

Every Veteran, member of this Association, is urged to be present at the coming meeting. The exigencies of the railroad, within the past year call for the loyal support of all of us, and the manifestation of the Milwaukee Spirit is never more in evidence than when the Veterans get together. Let there be a big turnout.

The money value to commerce of adequate dependable transportation appertains to every branch and department of trade. For example: The manager of a large copper company recently made a check on several hundred cars of ore and found that the average time required in transit had been reduced from 27 to 13 days. The saving in interest alone, due to expedited service on this copper would, he said, go a long way toward paying the entire freight bill.

—Alfred P. Thom, General Counsel,
Association of Railway Executives.

Justice, and Honor, in him is found.
Here is the Milwaukee Railway: To
PUGET SOUND.
Devoted to COMMERCIAL IDEALS—
Everything that ships as freight—on wheels;
Give him your needs—today;
No practical transportation plan turned away!
A trial of the Milwaukee—please ALL—
Now phone Agent J. H. Degnan. Or CALL!
Dedicated to J. H. Degnan, agent at Fargo,
North Dakota.

With the composer's friendship and best regards.

William Edwards, M. S.
Christine, N. D., U.S.A., June 27, 1925.

Some Freight Car Maintenance Problems

By C. G. Juneau, Master Car Builder

Extracts from a paper read by Mr. Juneau before the American Society of Mechanical Engineers' Meeting in Milwaukee

Undoubtedly the greatest problem today in connection with freight car maintenance revolves on the constant endeavor of the railroad to obtain the maximum use of the car unit. The utilization of cars is the product of their loading and their movement. Successful attempts are continually being made to load each car with greater tonnage, and to increase the distance each car is hauled per day. Again, wherever there is an opportunity to fit the trains to the traffic, this is being done so that the tonnage will be handled in fewer trains, and thus effect a saving in those transportation expenses that fluctuate with train mileage.

Along with this steady increase in the utilization of the freight car has gone a steady change in the construction and strength of the car. The all-wooden car is fast disappearing and its place is being filled by the composite car and the steel car. During the past 20 years the average carrying capacity of freight car has increased from 29.4 tons in 1903 to 43.1 tons in 1922. The light weight of cars has also increased. The all-wooden box cars acquired in the 1880's weighed from 14½ to 16 tons, whereas the composite box cars acquired in 1919 weighed 23½ tons.

These changes in the weight and capacity of the freight car have resulted in its increased punishment. Although freight cars have been greatly strengthened to meet the additional burdens placed upon them, and while there is really no disagreement throughout the country covering the strength requirement of these cars, the railroads do, however, continue to have bad order cars in great numbers. What is actually occurring is increased punishment to freight equipment because of the lack of cushion formerly provided in train movement by reason of the wooden car's disappearing. If operating methods are to proceed as in the past there is absolutely no question but what resilience will have to be furnished through the medium of a suitably designed draft rigging, or else we may expect distinct failure of parts following a progressive cycle, depending upon considerations of relative strength factors.

Furthermore, while the freight car as a whole has been designed and constructed to meet modern operation conditions, many of its parts are not equal to the tasks imposed. The draft gear seems to be about the weakest part of most cars, when as aforementioned, it must be depended upon to lessen the punishment received by the car. Very little has been done to improve the foundation brake rigging and air brake apparatus on the modern car as compared to the old unit, and yet experience shows that air brakes are responsible for approximately one fourth of the transportation delay to cars made in

bad order in train yards and running repair tracks.

Railroads cannot well continue this kind of performance if they desire to keep the modern car in continuous service a maximum amount of time.

The design and construction of freight cars was never of more importance than it is today. Each acquisition of new equipment should be made the subject of special study by the mechanical and transportation officials to determine, first the actual necessity for the cars; second, the size and capacity which will give the greatest net returns to the company, and third the type of car. A thorough study of the design should be made before any cars are built. It is undoubtedly true that maintenance expenses are considerably increased due to failure to take everything into consideration when preparing the designs. The only way to insure that new cars when acquired will be a credit to the mechanical department, is to keep designs of each type constantly underway. Each detail must be critically analyzed and compared to existing types, and an endeavor made to eliminate its defects. A comparison of the final result with the original will usually show a surprising number of changes, and will convince anyone of the necessity of giving long and painstaking attention to every design.

Few cars designed today can be criticized as lacking in strength in the essential parts, but it is also important that cars should be light so they can consistently be made easy to repair, and well protected against corrosion. Few cars meet these requirements, and their failure to do so has led to severe criticism of car design from a maintenance and operating standpoint.

In the matter of designing and constructing a modern car, the details of material, as previously mentioned, cannot be judged entirely from the strength requirements. The question of deterioration over a period of years need to be given serious thought, because, for instance, if a roof become defective in one-half the time that the remainder of the principal portions of the car run before needing attention and has to be repaired, the car as a whole is held. This emphasizes the need of studying the parts in relation to their cycles of renewals, so that they may be grouped and the number of days they are detained on the repair tracks consequently reduced.

Deterioration of Cars.

One of the greatest sources of deterioration of freight cars, irrespective of the material or construction, is corrosion or decay, which continuously exerts its destructive influence whether the equipment is in service or not. In the case of wood parts there are very few re-

newals which are not directly caused or greatly hastened by decay. A close analysis of failures which appear to be purely mechanical will generally disclose the gradual destruction of the piece by decay as the original source of weakness. The matter, therefore, of preventing the destruction of material by chemical action in case of metal; and by the propagation and growth of the destroying fungi in case of wood is worthy of considerable study.

A car must also be considered from the standpoint of items affected by friction or transportation, such as wheels, brake shoes, draft rigging, couplers and the truck as a whole. The wear and failure of these parts constantly increase with the greater utilization obtained from the modern car. To withstand this greater hardship it is essential that proper designs and proper material be employed in each case. The use of correct metals and alloys requires a more thorough study. Certainly we never should use a brittle steel for parts subject to great shocks, or soft iron for parts subject to much friction, yet this has been done, resulting in failures. Sills, framing members, etc., are subject to strains that in time wear them out. These parts must be of such construction that shocks and vibrations incident to service will not impair their efficiency.

Consideration should be given to building cars strong enough to meet general requirements and yet so put together, materials and otherwise, as not to be unduly heavy. In other words, cars should be designed to have a high ratio of load to total weight. This is important because dead weight is a factor in train movement. A five-year average of freight trains handled on one western road showed that for each net ton of revenue freight carried the train hauled 1.2 tons of dead weight exclusive of locomotive and tender. Approximately 66 percent of the cars hauled were loaded. It is a well known fact that automobile manufacturers have made successful attempts to reduce the weight of automobiles, yet retain or increase their loading capacity. Certainly this matter needs very serious study on the part of car designers.

It is not a good policy to materially sacrifice the design of a car to accommodate details. Standards, however, are unquestionably excellent. At the present time details that will absolutely interchange between all different cars are too few. As long as cars are built for some particular service we may expect to have a difference in construction due to the commodity to be transported. The present tendency is toward refinement in car design, and, if it continues, equipment built a few years hence will probably be radically different from what is considered standard practice today. Already a remarkable number and variety of new designs of cars have been introduced.

In the matter of maintaining freight cars it must be continually kept in mind that cars that can be kept in continuous service with a minimum cost of maintenance and which are sufficiently efficient to protect the lading in transit, mean dollars and cents to the railways.

Classes of Freight Car Repairs

Freight cars are subject to many defects which make them unfit to operate. Some are of little consequence; others require considerable time and labor to repair. In general freight car repairs are governed by frequent renewal of certain parts and infrequent renewal of other parts. They are roughly divided into two classes: lights and heavies. Light repairs consist of work done to offset current wear, breakages, and loss of parts accruing from ordinary handling and movements of cars day by day. Heavy repairs accrue, generally speaking from four different sources: wrecks, ordinary wear and tear as accumulated over a period of years, natural deterioration and obsolescence.

To a certain extent the problem of handling light repairs is easily dealt with; that is given reasonably adequate supplies of tools, material and standard parts, and a certain force of men, that part of the maintenance problem, will take care of itself, and the cars will be switched on and off the rip track daily without much fluctuation. It has generally been found that sixlight repair cars are repaired during the day to every one left over at the end of the day, and it is this feature of the work which results mostly in an increase or decrease in the bad order car situation.

The situation with respect to heavy car repairs is entirely different. Repairs to cars due to wrecks and accumulated ordinary wear and tear are usually accomplished by replacements in kind, but more extensive work is required to overcome obsolescence as in this case it becomes necessary to strengthen and remodel the cars to overcome inherent weakness in design and construction. These cars remain a comparatively long time out of service and require a comparatively large expenditure to place them in proper condition. It is in the handling of heavy car repairs, therefore, that the greatest opportunities exist to produce economies and reduce the time that the cars are held out of service.

The wisdom of having freight cars in good condition cannot be doubted and the expense of maintenance is justified, particularly where the general condition of equipment is such as to require heavy work to overcome what we might call "inherent obsolescence." In other words, where the proper cycle of heavy repairs as previously explained has not been maintained in due course, a certain extent, obsolescence, which must be overcome sooner or later.

In order to maintain a normal situation as to design, construction, and obsolescence, the average age of equipment should be carefully noted at all times, as this reflects whether or not old equipment is being retired as due and replaced with new or rebuilt equipment. It has been customary to assume an average life of 20 for freight cars. Assuming that a road has an ownership of 100,000 cars normally at all times, then from year to year it should retire or rebuild an average of 1/20 of 100,000 or 5,000 cars and should acquire new equipment each year equal to the number actually retired and not replaced with rebuilt equipment.

Freight Car Maintenance Appropriations

The matter of appropriations for freight car maintenance deserves special study. Operating revenues have many mouths to feed, and when heavy retrenchments in operating expenses become necessary it is to a certain extent inevitable that the maintenance departments bear more than their proportion of such retrenchments because maintenance work can be temporarily deferred without immediately destroying the effectiveness of the transportation machine. However, injudicious savings in maintenance result in actual loss to a road through increased transportation costs and heavier later costs to overcome deferred maintenance. The problem, therefore, is to be determined where economy ends and loss starts in the retrenchment of maintenance expenses. An ideal condition would be to have the repair work equalized over the twelve months' period by arbitrary charges against income in the months of great business for credit and use during periods of revenue depression.

There is every reason to believe that the traffic on railroads in this country will increase as rapidly in the future as it has in the past, and that the locomotives and cars will continue to grow larger. Bigger power is demanded at all times, and yet to haul a maximum train not only requires strengthening of freight cars, but roadways, bridges, round-houses, shop facilities and tools; and it must be remembered that when the freight cars are not used to the fullest degree they present a corresponding loss in all these elements, such as make these extreme and uneven developments oft times a poor net result.

Every freight car involves not only the cost of maintenance, but interest on the investment and current depreciation charges, both factors now being higher because of increased investment cost. The object of the design of cars, and the installation of facilities to make maintenance cost relatively low, should be to increase the days of service by decreasing the days of detention in bad order because the greatest present-day cost of maintenance, interest and depreciation charges imposes upon proper railway management a greater availability for constant use.

The Pioneers Celebrate

The annual meeting of the Puget Sound Pioneers' Club was held in Vancouver, B. C., June 25th, 26th and 27th; with a dance in the passenger station at Seattle on the evening of June 24th as a starter. The trip to Vancouver was made in the magnificent new C. P. R. steamship, Princess Kathleen, which was enjoyed by the entire party, the weather leaving nothing to be desired, and the sea as smooth as glass.

Headquarters at Vancouver were at the palatial Hotel Vancouver, and as soon as rooms were assigned, the party gathered for a sight-seeing expedition about the beautiful old city.

The Club teams, Conductors and Engineers, lined up for their regular annual game, and it was a hard fought contest, but tied at the end, the score being 16 to 16. Conductor Foley's daughter was the mascot for the conductors, saving them from defeat.

The regular business meeting was held and the following officers were elected for 1926:

H. R. Calehan, President, Tacoma.
W. S. Johnson, 1st Vice President, Tacoma.
P. H. Sheridan, 2nd Vice President, Spokane.
E. L. Dunlap, 3rd Vice President, Miles City.
Paul Znelke, 4th Vice President, Al-ber-ton.
L. J. McCormick, 5th Vice President, Deer Lodge.
Geo. Sheldon, 6th Vice President, Mobridge.
L. S. Cunningham, Secretary and Treasurer, Tacoma.

During the business meeting a very urgent telegram was received from the mayor of Victoria, B. C., asking us to come to that city for the 1926 meet, and the invitation was accepted. The Club suggests that all members and as many of the Veterans as can get away for that meeting, commence laying their plans now to attend, as a splendid time is assured. A large gathering is hoped for next year.

Reports received from the sportsmen of the Pioneers to the effect that Conductor Fred Wilder distinguished himself by fishing for salmon from the deck of the ship and hooking a 14-pound salmon off the Canadian shore indicate that the fishing was good, or that the sea-breeze fanned the imagination to a high pitch. However, it is said that Fred had the fish to show, for his prowess.

The Club had as its guests a number of Veterans from Lines East, and also a bride and groom, from Milwaukee, Mr. M. H. Larson and wife, who attended the dinner dance given by the Club at the Vancouver Hotel.

All those who attended the 1925 meeting unite in the verdict that while the Pioneers have in the past "put over" some very fine entertainments and meetings, this was surely a pleasure trip from start to finish, and the Club desires to offer its thanks to Messrs. H. B. Earling, A. P. Chapman, A. J. Hillman and the Division Officials of the Coast Division for their kindness and assistance in carrying out the program. Also to Messrs Earling, Bradshaw and O'Brien of the O. & W. Ry. for the use of the passenger station for the dance which was attended by about 300.

The Club had hardly landed back in Seattle on the 27th, when the news of the earthquake misfortune reached them, and many of the Pioneers started immediately for the scene of operations, hardly waiting to get out their old mountain boots and togs that had seen service in the years far back when the rattle of the steam shovel and the roar of dynamite shots were more familiar in their ears than the rythm of the dance or the moan of the saxophone.

Beg Your Pardon

The title to the leading article in the July Magazine, by Mr. L. K. Sillcox, was in error, printed "The Economics of Shipping Steam Locomotives." It should have read "The Economics of Shopping Steam Locomotives."



Iowa Division Engineer, John Conway.

John Conway Wears A 45-Year Button

Ruby M. Eckman

Engineer John Conway of Perry, Iowa, now wears the button that indicates he has been with The Milwaukee Ry., for forty-five or more years. The badge was sent to him recently by Secretary Williams of the Veteran Employees Association.

Engineer John Conway is now wearing a button which indicates that he has been with the Milwaukee Company for a period of forty-five years. The badge was sent to him a few days ago when he paid his dues in the Veteran Employees Association, which is composed of employes who have had twenty-five or more years service with the company. At a recent meeting it was decided to distinguish the veterans as they passed certain mile stones and now, instead of all men wearing the 25 year button which was the official badge of the association, as they pass the 35 and 45 year mark they are supplied with a new emblem.

John started his work when a lad of 15 as a caller at La Crosse, Wisconsin. That was back in 1879 and he has been working ever since. He was the first caller the company ever had on the day shift but he worked twelve hours each day however and all for the sum of twenty dollars a month. There was perhaps no prouder boy in La Crosse than John was when he would walk up to the pay car and get his twenty dollar gold piece which he always took home and gave to his mother. John was too busy to need much spending money in those days as he was pretty near ready for bed when his twelve hour shift had expired.

After working for a year as a caller John was promoted to the job of wiper. He was assigned to work under the engine, such as the trucks and under mechanism of the locomotive and even though the work was out of sight, it could not be slighted. The master mechanic would come around through the round house and slip his hand under a truck or some unseen part of the engine and if his hand was even slightly soiled when he drew it out, some wiper was sure to hear about it. John worked that job for eight months and never did graduate to an outside wiper's job as such jobs were always held by the older men and the boys were assigned to the milder jobs. His next job was that of a switch engine fireman. They had wood burners in those days but now and then

John would get a trip on one of the new coal burners. His engineer, John Morrison was the oldest engineer in yard service and when the wood burners were brought in from branch lines enroute to Milwaukee shops to be converted to coal burners. Morrison and Conway would be called to take the wood burner to the shops and bring back a coal burner. He served six years and six months as a fireman before being promoted to an engineer but never did any firing after his promotion.

John's days as fireman were often as long as those of a wiper or caller as it was customary for the fireman to spend a lot of his time when off duty, scouring the brass on his engine, the engines all being assigned to the crews then and each man taking a great personal pride in their appearance. These were the days when the floors of the round houses, which were wood planks, were scrubbed. Now a days a round house man would not know what to do if he saw a crew coming with scrub pails and brushes to scrub the round house floor.

John was called in for promotion to engineer on December 5th, 1887 and was sent to Western Avenue to run a switch engine. His first Sunday there was one which he will remember forever as his engine turned over in the yard. He was not injured and no damage was done to the engine but something went wrong and the engine was derailed and turned over in short order. John stayed in switch engine service in Western Avenue yard for three months, making occasional trips on the road between Chicago and Milwaukee. In the spring of 1888 there was an influenza epidemic at Savanna and there was a shortage of engineers. Eight engineers were called to go to Savanna for relief work but all seemed to be afraid of the epidemic and none would go.

When John was called, nothing was said to him about the epidemic being the cause of the shortage, or that eight other engineers had turned down the job so when he was asked to go he accepted with alacrity and it was not until he arrived at Savanna that he learned the real cause of the trouble. At that time the engineers had system rights and John transferred to Savanna and the Iowa division with his rights. In the fall of 1888 he came to Perry and has worked here with the exception of a few months in the winter of 1890 when he worked on the C. and M. division. He worked in freight service on the Iowa division until about fifteen years ago when his age entitled him to passenger service.

John has a clear record with the company, never having been suspended or given demerit marks. That is saying considerable when it is recalled that years ago if a man failed to have his watch inspected, or missed a call, or committed various other common misdemeanors, he was suspended from service for anywhere from ten to sixty days. The only time that he has ever missed drawing a check on the regular pay days was at the time of his mother's sickness and death.

A "Report" From Foreign Lands by Station Agent

There was a little note in a recent number, stating that this yankee was in Scotland and was going to England, Italy etc., could not have return pass unless "report was sent". Well what shall I report? Do you want me to write a book? The subject is a big one, it would make a long letter if I tried to tell only of the funny situations; I think I will take one thing at a time.

I came over with the intention of spending the month of May in Ireland, June in England, and July in Scotland, have carried out the plan so far. Arrived in Ireland May 3rd and in England June 2nd.

In traveling over the south and west of Ireland, and the north as far as Belfast, and in England from Liverpool to London, via Chester, Birmingham, Stratford-on-Avon, Warwick and Oxford, I have had an opportunity to observe railroad methods and compare them with ours in the states. If some of our men who handle the big trains and engines in America, could be dropped down in the middle of things over here, I am thinking they would have a big laugh, for engine and cars are babies as compared with ours, but we must not laugh too much. Their system is OK and sufficient for their needs. First the track is good, of heavy steel well ballasted with crushed rock. Then there are very few grade crossings, teams and traffic go under or over head. All lines except branches; are two or four track, there are no coaches, passenger cars are "Vans;" doors on the side admitting to small compartments, very nice for little parties of friends.

The conductor is a guard; the brakeman a shunter; the station agent a station master; a freight train, "A Goods Train." A freight car is a truck, and will carry ten tons. Several open trucks are coupled together to accommodate long articles. Some trucks are covered but many open trucks are used and the load covered down with heavy painted duck tarpaulens.

Their trains are lighter but they run more of them, and the lighter weight of engines and trucks is not so hard on the track.

Trains make good speed and the service is good all around.

Autos are not so common as in the states on account of the heavy tax, it being about six times what it is in the states. Bicycles and Motor Cycles are very common, but as the population is large, the encroachment of such methods and means of travel is not so noticeable as with us.

The stations, both in Ireland and England, are well and substantially built of brick, stone and cement, no wood shanties such as you often find at small places in America, here the small country station is as well built as the big ones only smaller. All are uniform, as to general plan, so that when you learn one you learn all.

Both Ireland and England are pretty countries, as fine as the best of our northern Illinois and southern Wisconsin and that is saying a whole lot.

Railroad Freight Rates

The following advertisement which has been running in the newspapers throughout the country is printed here for the information of those of our employes who may not have seen it elsewhere.

It is generally conceded that if the country is to have private ownership of railroads they must be supported by the shipping and traveling public.

The returns from existing rates during the past few years have not been adequate to pay a fair return or even any return to the owners of many railroads. This is especially true of the roads of the northwest, of which the Chicago, Milwaukee & St. Paul Railway, now in receivership, is an important one.

An application for increased freight rates on western roads is now pending before the Interstate Commerce Commission.

The Receivers of the Chicago, Milwaukee & St. Paul Railway have proposed and will advocate before the State and Interstate commissions a new plan of rate making by which a very small increase in freight rates on western railroads can be so distributed among them that the maximum benefits can be given to weaker lines without unduly favoring the strong, prosperous roads.

The plan involves segregating the money produced by a small increase in freight rates on all western railroads and putting it into a common fund or pool and distributing the money to all roads by which it is earned in the ratio that each road failed during the preceding year to earn the 5¾% on its property investment which the Transportation Act of 1920 allows.

If this plan had been in effect during 1924 the Milwaukee Road would probably have avoided a Receivership.

The Receivers of the Chicago, Milwaukee & St. Paul Railway have not been able to secure the support of the other western railroads to their plan and, therefore, have decided to advocate the plan independently for the benefit of this property and as the plan which best solves the railroad problem with the lowest burden to shippers. For this purpose the Receivers of the Chicago, Milwaukee & St. Paul Railway have engaged former Secretary of State, Mr. Charles E. Hughes, to assist them in presenting the plan and urging its adoption.

The Railroads of the United States Today Versus the Motor Buss of the Present Time

(A prize-winning essay delivered by Zenon Hansen, high school student of Sioux City, Iowa, and sent to The Magazine by Mr. F. H. Allard of Assistant to General Manager's Office, Chicago, to encourage our young citizens to familiarize themselves with the railroad situation.)

A subject, though at the present time not a subject of international discussion or of international publicity, yet has every promising feature of becoming one in the near future, is: The Railroads of the United States Today, versus the Motor Bus of the Present Time.

Since the end of the great World War, the number of automobiles and motor busses in the world has increased "100%". At the present time there are 20,000,000 automobiles and motor busses in the world, and 17,000,000 of these are here in the United States. Along with the increase of the automobile the large motor transportation or interurban bus of today has come into our life, and it looks as though are here to stay. At the present time these large motor busses are operating between cities of considerable size and many miles apart, thus causing a great loss to the railroads of the country.

The United States Government has thoroughly investigated the losses sustained annually by the railroads, and have come to the conclusion that something must be done and done at once to relieve the present condition of the railroads.

The demand for better highways, ladies and gentlemen, has given the motor bus a decided advantage over the railroad, from the fact that the taxpayer is being taxed excessively in order to gravel and pave the highways. The railroads, on the other hand, are placed in the peculiar position of be-

ing assessed to maintain a competitive business. Complaints are becoming more and more numerous in the states in which the motor busses operate, regarding the attitude taken by the motor busses between their terminal points. Recently the state of South Dakota appropriated several thousand dollars for the purpose of gravelling and paving their state and county highways. All the roads that were previously repaired or constructed are at the present time in a ruined condition, due largely to the motor bus travel. The State Road Commission met and found that the fees obtained from the licenses of the motor bus would not cover one-tenth the cost of repairing the damage done. If the motor busses were required to maintain their own highways as the railroad companies are their tracks, there would be no motor busses in operation today.

No less authority on the subject than Senator A. B. Cummins, United States Senator from Iowa, and Chairman of the Interstate Commerce Commission, recently stated that about fifty Class 1 railroads would have to discontinue approximately 61,000 miles of track that are not on a paying basis and are a burden to the railroads.

An excellent example of the present railroad situation is the recent failure of the great Chicago, Milwaukee & St. Paul Transcontinental Railroad, with 11,000 miles of track extending westward from West Port, Indiana, to Puget Sound, over the Rocky Mountains. This railroad has tracks extending through thirteen states of the Union, and pays yearly in taxes about \$9,000,000. It employs 56,000 and has an annual pay roll of \$83,000,000. Besides the 11,000 miles of steam track owned by the C. M. & St. P. Ry., it has 64 miles of railroad operated by electricity, extending from Harlowtown, Montana, to West Portal, Mon-

tana, and from Othello, Washington, to Tacoma, Washington, this being the longest electrified road in the world. and was constructed at the cost of several million dollars. One of the difficulties that this road encountered was the great reduction in passenger transportation. In 1920, fares collected amounted to \$21,000,000, a decrease of \$10,000,000 in four years, due, largely, to motor bus competition.

In the past the public has demanded better service, more conveniences for their comfort and lower fare. After all this was rendered them at a cost of many million dollars, they forget the railroads, except on long trips where service and comfort are necessary.

An impossible question, I believe, for almost any one to answer is, what would happen if all at once the railroads of the country ceased to service.

Now, the question of today is whether you people desire the great railroad, which has in the past been the very arteries of our civilization. This is a serious question, and one that is worthy of your consideration.

The following is a poem composed by Mrs. A. R. Harris, wife of our painter foreman, which reflects her impressions on her first trip West on the "Olympian":

"The Trail of The Olympian"

The mountains, the valley, the deep tangled wildwood,

"The Trail of the Olympian" resents to my view;

And how near to the land of my dreams, since my girlhood—

An overworked memory tells me is true.

Miles along beautiful Mississippi—
Thru the famed land of Hiawatha—
On thru the wonderful granaries of
The Dakotas and Minnesota.

On over bridges—thru tunnels and canyon—
The "Olympian" pursues its unerring way,
The towering monoliths surely impress one—
The clear, rocky streams bring delight to the eye.

On o'er the Rockies and Belts of Montana—
And forested Bitter Roots to far Idaho—
O'er snow crowned Cascades of Great Washington—
On thru the region of grandeur we go.

In unique panorama lies wonderful Spokane—
The capitol great of the "Inland Empire".
Then the trail springs away o'er trestle and on—
On thru the vast rolling wheat fields there.

Shadowy St. Joe—out in Idaho—
A broad, placid stream whose wooded hills
Descend in slopes graceful far below—
All about St. Maries—it mirrors and thrills.

On—On—thru the Cascades—
The "Olympian" presents scenes diverse.
From bright early morn to evening shades—
No weary moment the entire course.

The trip from the East to Pacific Northwest
Brings memories pleasant to those who know.
Anticipation eager for those not versed—
An education—liberal—as you go.

The luxury of the "Olympian" is unsurpassed,
Nor are there words adequate to describe
The beautiful route across the Continent
From the Five Great Lakes to Pacific tide.



ATTENTION: Superintendents!

Special mention is made herein regarding the Divisions that have made the best record on the System for the first five months of 1925:
 January—Musselshell Division—lead the System in accident reduction.
 February—Trans-Missouri—were in the lead.
 March—River & I. & M. Division were heading the list.
 April—Madison Division—in the lead.
 May—Northern Montana Division—leading.
 I would like to mention that every effort should be put forth by each individual Superintendent on the System to get their Division mentioned in the Magazine as being the leading Division in accident reduction for the year 1925.

The standing of the Districts, is as follows:

February.....	1—Middle		3—Southern
	2—Northern		4—Lines West
	3—Southern	May.....	1—Middle
	4—Lines West		2—Northern
March.....	1—Middle		3—Southern
	2—Northern		4—Lines West
	3—Lines West		
	4—Southern		
April.....	1—Middle		
	2—Northern		

By:—
 A. W. SMALLEN,
 General Supervisor
 Safety & Fire Prevention.

THE VALUE OF "SAFETY FIRST" WORK ON THE RAILROADS

Extracts from an Address by L. F. Shedd, Superintendent of Safety, Rock Island Lines. Reprinted from Rock Island Magazine.

Safety on American railroads is no longer in an experimental stage. It has become an institution, meriting the enrollment and earnest support of every member of the railroad organization; an institution whose aims are high, whose purposes are noble and if, as successful as we anticipate will bring added joy and peace to mankind, reduce pain and suffering, mitigate poverty and permit the bread winner and his dependent loved ones to get a brighter view of life and to grasp many of the opportunities that rightfully are theirs.

Safety deals with the conservation of human life and limb, and because of this humanitarian principle, naturally commends itself to thinking people. In short, Safety means success and advancement to the human family—"It Pays."

There are two angles from which the Safety movement must be viewed; name-

ly, the humanitarian (or the sentimental side, if you please) and the efficient, or financial side.

It is recognized, and admitted that through the humanitarian aspect, multitudes have been won to higher thought and deeper consideration for their own personal safety, and, reflecting this same sentiment in the lives of others, have undoubtedly assisted in the accomplishment of results in accident prevention, attractive and beneficial, and with no thought whatever of the financial advantages which naturally and logically accrued to them.

Two Sides to Subject

Others, beyond doubt, give serious consideration, not alone to the human side of the question, but to the financial side as well, and to interest this latter class, something more than sentiment must be seriously considered, and rightfully so.

The railroads of our country were pioneers in the field of Safety and, because of the interest displayed by the management and reflected through co-operative response and assistance on the part of a large percentage of the employes, America's railroads today stand as undisputable evidence that it is possible to conduct the

ever-increasing railroad business without serious loss of life and injury.

Credit and commendation are, therefore, due to those who are responsible for the safe and successful operation of the American Railroads—for the assistance given, financial and otherwise, to those who have been delegated to lead this most humanitarian movement. It may be said that when the ways and means so necessary to carry on the work were logically presented, official sanction was not withheld. This example stimulated interest all along down the line, and, permitted present conditions and results to become a reality.

We must not minimize the real assistance given by those who run our locomotives, who shovel the coal, carry the switch list, lay the steel and tamp the ties, maintain the bridges, repair the equipment, and many others too numerous to mention, all of whom have played such an important part in accident reduction and prevention. Due credit is given them also.

Through the Safety Movement, with its Safety Committees, Safety Meetings, the offering of suggestions, frank discussions, changed or remedied conditions, elimination of dangerous practices and kindred features "Management and Men" have been drawn more closely together, have come to know each other better, have felt a closer relationship, gained a broader understanding of each other's problems and every-day difficulties, and because of these means of contact, have been benefited, mutually, in a manner not offered through any other movement.

Evidence that the Railroad safety movement has been successful is reflected in the fact that during the past fourteen years employe fatalities decreased 54%; passenger fatalities decreased 58%, with a substantial reduction in casualties to trespassers. The decrease in employe fatalities, despite a large increase in the number of persons employed, is evidence again of co-operative procedure between employer and employe.

Passenger casualties decreased even though there was a large increase in the number carried, showing that the efforts of the railroads in that direction, with the assistance of patrons, were successful. The same reasoning can be employed in accounting for the decrease of casualties to trespassers.

Perry Friends Congratulate Mr. Urbutt

Perry friends were all glad to hear of the promotion of C. F. Urbutt to the position of superintendent of the Illinois division. C. F. formerly was a trainmaster on the Iowa division at Perry and was very popular with the employes.

The mystery about the removal of the roadmaster and chief carpenter's office has been solved. The office was located at fourth street alongside the railroad track but when Mr. Cherwinker came to Perry it was moved down to second street near the depot and the report now is that Roadmaster Cherwinker was not doing any night work in the office as he was afraid to be left up there alone. Now that he is down

in good company he spends numerous evenings at his office work.

Mr. O. M. Stevens Promoted

On June 1st, Mr. O. M. Stevens was appointed Assistant to Mr. Byram with headquarters in Chicago. He will have charge of the proposed new motor bus line service which is being put into operation by the C. M. & St. P. Ry. in connection with its train service, in various sections of the country.

Early one Christmas morning, little Johnnie said to Paw: I saw Santa Claus trim the tree last night, and then jump in bed with Maw.

A Broad Hint

She (moonlight and all that rot): "Do you know what a dumb waiter is?"

He (same surroundings of course): "Sure, an undeveloped elevator for use in hotels, apartments and so on."

She (still in the moonlight): "I should say not. It's a man who asks a girl for a kiss and waits for her to say 'yes'."—Rice Owl.

Rrrr-i-n-g-g-g. "Hello. Is Rose there? No. Is Violet there? No. Is Lily there? No. Is Pansy there? No. Say, this is a sorority, not a hot house."

Things We Should Know

What Adequate Transportation Service Means to the Country

"Much has been said here and elsewhere of the habit of day to day buying which has come to characterize practically all merchandising, of the curtailment of the activities of middlemen, and the refusal of the retailer to carry the inventory load, now that transportation betterment relieves him of the necessity of buying twice a year and storing stocks.

"An interesting study of this situation has been made by the Southern Pine Association; and an obvious conclusion from it is that retailers will not be readjusted to their old habits of buying but that the producer and manufacturer must conform to the present mode in manufacturing, storing and selling.

"The Association finds that until 1923, lumber retailers anticipated their needs by four to six months, whereas today they are buying for necessities ranging from thirteen to twenty-one days ahead.

"Many important reactions result from this, but the most important is the conclusion of the association that nearly perfect transportation service and new buying habits have released 5,500,000,000 feet of lumber which heretofore was permanently tied up in transit, ordinarily referred to as being 'afloat'. In other words, the net result of this buying habit has been to add to the available stock of lumber about 12½ per cent of annual production."—Chicago Journal of Commerce, June 23, 1925.

The following quotations are taken from an address entitled "The Balance Sheet," delivered by Mr. Alfred P. Thom, before the annual convention of the Railway Accounting Officers' Association, Atlantic City, N. J., June 11, 1925.

"By means of this (new) investment and by greater and more intensive effort, the transportation situation was completely changed from the deplorable condition existing at the termination of Federal control so that at the expiration of the first quarter of 1923 there was no car shortage and since that time the service has been substantially perfect."

"This is shown in the following expression from Secretary Hoover in the annual report of the Secretary of Commerce for the fiscal year ended June 30, 1924: "This fiscal year marks the first occasion since long before the war when our railway facilities have been completely equal to the demand of the country. There were no car shortages of any consequence. There was a speeding up of the delivery of all goods. This complete reconstruction, expansion and growing efficiency in transportation facilities marks a fine accomplishment on the part of our railway management. Its economic effect is most far reaching."

"It was again recognized in this encomium from a member of the Interstate Commerce Commission: "Never before, anywhere in the world, at any time, under any circumstances and conditions, has transportation been so efficient as that exhibited at the present time by American railways generally."

"The manager of a large copper company recently made a check on several hundred cars of ore and found that the average time required in transit had been reduced from 27 to 13 days. The saving in interest alone, due to expedited service, on this copper would, he said, go a long way toward paying the entire freight bill."

"It is reliably stated that at one of the largest automobile assembling plants in the Northwest, the dependability of transportation service has become so assured that it is no longer necessary to have in the warehouse the day before, or longer, the parts that will be needed in the process of assembling next day; but, because of the certainty of transportation service, the supply needed each day in the process of assembling can be taken that day direct from the car to the assembling plant and thus one handling, namely, that from the car to the warehouse floor, is saved, and this without incurring liability for demurrage on cars, thus saving the cost of labor in one handling, the cost of storage, and interest due to reduced volume of supplies necessary to be kept on hand."

"It is also reported that the Ford Motor Company, which in 1920 carried in transit and in their plants supplies of materials for from 60 to 90 days, are now operating on a five day supply, thereby making a saving in interest for 55 to 85 days."

"An instance has been cited where a sheep raiser in Montana has declared that he was saved, in shrinkage alone, by expedited service, a dollar a head on lambs; and by adequate and dependable transportation service, which makes possible intelligent and systematic marketing, the sheep raisers of Idaho are said to have saved a million dollars during the past year."

"The head of one of the leading department stores in St. Louis is reported to have said recently that in 1923 his company, because, as he said, of improved transportation service alone, carried an average stock of one million dollars less than the year before, at the same time doing considerably more business, and that the saving in interest on this one million dollars of reduced inventory had been sufficient to pay his entire freight bill for the year 1923."

"The merchant, whether he be engaged in the retail or in the wholesale trade, is enabled to carry on his business with a smaller stock on hand at any one time and consequently with substantially less capital investment—which means smaller interest payments, more rapid turnover of stock, less risk from price fluctuations, better and fresher stocks of goods, and greater saving of loss from goods which have become out of date."

"The manufacturer is likewise benefited. He can carry a smaller stock of raw materials; he can make more frequent purchases; he can systematize his business as to output with steadier cost of production; and he can count on a dependable fuel supply—all of which means to him a substantially smaller investment and a decrease in tied-up capital."

"The miner, as all other business becomes systematized on the basis of adequacy and certainty in transportation service, is enabled also to systematize his business, to form in advance reasonable estimates of market needs, and to control, with intelligent regard to market demands, the quantity of his output, thus saving waste in labor and unnecessary cost of producing and accumulating an unneeded surplus."

"The banker, as all business is conducted, without—or with reduced—waste, with intelligent adjustment to the law of supply and demand, and with greater dependability and certainty of movement, finds himself dealing in a field of improved credit and business stability and, by reason of the losses and risks which he avoids, is enabled to prosper on lower charges for the money which he lends."

"The farmer, being assured of an adequate, prompt and certain transportation service, can wait for, and when they come, can reach and enjoy with certainty and promptness favorable markets. He can avoid loss from over-maturity and depreciation of his live stock while waiting for cars. He can dispose of his crops at the time necessary to meet his financial obligations and to provide for his other requirements. He is thus able to place his farming operations on a systematized and business basis, to purchase his farming utensils and other supplies at the time and not before he needs them, to secure the best returns on what he has to sell, and to pay his banker a lower interest and for a shorter time on the money he has to borrow."

The foregoing are some of the savings and benefits resulting to the shippers and the public from the present adequate and efficient transportation service. This service cannot be maintained indefinitely, however, unless the western railways are allowed to earn from it a fair return. The