

Do You Wear Overalls? Yes

Why not wear the best when it costs no more?
 Won't you try a pair?
 Ask and keep on asking for

Finck's Detroit Special Overalls

Until you secure them

W.M. Finck & Co., Detroit

If your local dealer can not supply you send us his name, or the name of a good wide-awake dealer, and we will send him a supply.

COUPON In the mean time, if you are in a hurry for a pair, send us \$1.00 and we will send parcel post paid.

My measurements are: Waist..... Inside Leg.....
 Breast of Jacket.....
 NAME.....
 Address.....

MILWAUKEE RAILWAY SYSTEM

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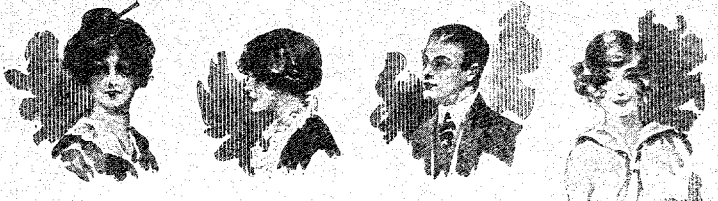
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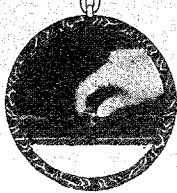
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Announcing the NEW MODEL ROYAL No. 10

**"The Machine with a Personality"
FEATURE No. 2**



No Matter
What Your
Personality
May Be—
The ROYAL
MASTER-
MODEL 10
will fit it:



"Just
Turn
the
Knob"

EVERY keen-witted stenographer, every office manager, every expert operator on the firing-line of "BIG BUSINESS" will grasp at once the enormous work-saving value of the *New Royal Model 10.*

Because it is "the machine with a personality"—*your* personality! Think of a master machine with an adjustable touch—a typewriter you can "tune up" to fit your own *personal* touch, simply by "turning the knob" until it strikes the keynote of **YOURSELF.**

Think of getting through your week's work with the *minimum* of effort and banishing the dull grind of "typewriter nerves."

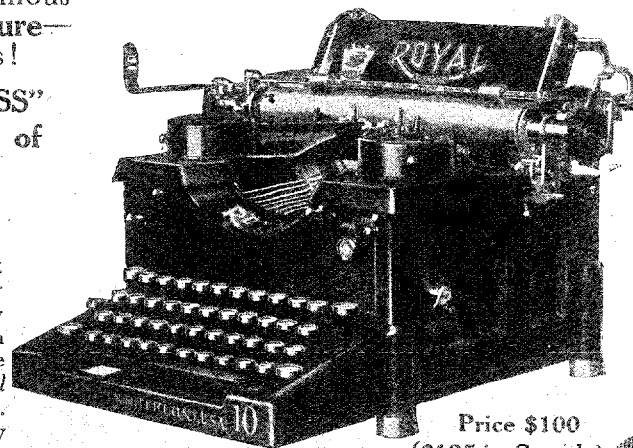
That's only *one* reason why the No. 10 Royal is the *master machine.* There are many other big, vital new features. Combined with the personality of its *regulated* touch, you get a typewriter with 100% speed—100% accuracy—100% visibility—100% durability—making 100% **EFFICIENCY.** A machine with 1,000 working-parts "*minus*"—a typewriter of *long-term service*, that need not be "traded out" and won't "die young."

The No. 10 Royal introduces many exclusive Royal features not found on any other typewriter in the world. It carries all standard improvements: **Tabulator, Back Space Key, Bichrome Ribbon and Automatic Reverse,** and has the famous **Royal Triple Service Feature**—it writes, types cards and bills!

BUILT for "BIG BUSINESS" and its GREAT ARMY of EXPERT OPERATORS.

Get the Facts!

Send for the "Royal man" and ask for a **DEMONSTRATION.** Or write to us direct for our new brochure, "Better Service," and a beautiful Color Photograph of the new Master Model 10, showing *all* of its many remarkable new features. This advertisement describes only one. "Write now—right now!"



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BEN ROSE, ENGINEER
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S. C. & D. Division
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1821 18th Avenue
Seattle, Washington
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C. M. & St. P. Watch Inspectors and Engineers

IN the October issue of this Magazine we asked the employees to visit their respective watch inspectors and get posted on the merits of the B. W. RAYMOND Winding Indicator Watch. We offered four prizes—four B. W. RAYMOND Winding Indicator Watches—for the best letters from employees describing this watch.

We take pleasure in presenting the prize winners. We received hundreds of excellent letters and it has been a difficult matter to make selections. We thank the many employees who investigated the merits of our watch and wrote letters. We congratulate the winners, knowing their new timepieces will give them lasting satisfactory service for years to come.

ELGIN NATIONAL WATCH COMPANY

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Instructed by H. Hammersmith
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C. M. & St. P. Watch Inspector and Engineer

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The Milwaukee Railway System Employes' Magazine

Railway Exchange Bldg., Chicago

Published monthly, devoted to the interests of, and for free distribution among the 65,000 employes of the Chicago, Milwaukee & St. Paul Railway System

Single Copies 10 Cents Each

Outside Circulation \$1.00 Per Year

Address articles and communications relative to editorial matter to
CARPENTER KENDALL, Editor, Libertyville, Illinois.

GEO. E. WAUGH.....1242 Railway Exchange Building, Chicago, Ill.
MRS. ANNA M. SCOTT.....Libertyville, Ill.

ASSOCIATE EDITORS.

VOLUME I

JANUARY, 1914

NUMBER 10



John T. Conley

The news of the appointment of Mr. John T. Conley to the position of general freight agent of this company will be received with pleasure among his many friends all over the system.

Mr. Conley's appointment emphasizes in the happiest manner the words of our president, in the opening number of the

Magazine. "The future officers of this company are somewhere down the line doing the work that is the only practical preparation for advancement." Mr. Conley has come up from the foot of the "line." He entered our service in 1880 as telegraph operator at La Crosse, and occupied successively the positions of station cashier, chief clerk to division freight agent, division freight and passenger agent, assistant general passenger agent, commercial agent and assistant general freight agent. And from the last named, he steps into the office of general freight agent.

The scene of Mr. Conley's activities has been generally, northern Wisconsin and Minnesota, and his headquarters, with one exception, when he was in Milwaukee a couple of years, have been Winona, St. Paul and Minneapolis. For the last ten years he has resided in Minneapolis.

The promotion is deserved, for Mr. Conley's service has been characterized by the most loyal and intelligent thought and work and his zeal in the company's interests has been unflagging. He is well and widely known as a traffic man, and his association as Assistant General Passenger Agent, with that arm of the service, gives him an added qualification and he is exceptionally popular in the business world throughout the northwest.

Public Opinion and the Railroads

Geo. E. McKay.

When the history of these first years of the twentieth century is written it will chronicle more numerous and radical changes in the business history of this country than were ever before crowded into so short a period.

The industry which thus far has been most affected by the extension of governmental control of business is the transportation interests.

The result is that the men who today are responsible for the management of the various railroad systems are confronted with problems which are entirely new; therefore they cannot find precedents to aid them.

While it is true that the changes of recent years are affecting all lines of business activity, still as yet the railroads furnish the only example of a nationwide industry which has had the price which may be charged for their product taken entirely out of the hands of the producer.

The placing of the power to regulate interstate rates with the interstate commerce commission and the recent decision of the Supreme Court confirming the power of state commissions over intrastate rates, places the railroads face to face with the problem of the high cost of living.

Briefly stated, the problem of the high cost of living is that of how a constantly increasing cost of the necessities is to be met by an income or source of revenue which does not proportionally increase.

The old maxim, "necessity is the mother of invention," was never more justified than by the numerous inventions and improvements which have in recent years reduced the per ton mile cost of transportation.

However, any decrease in cost of operation which has resulted from the introduction of economies, larger cars and more efficient engines, elimination of grades and curves has more than been offset by the increase in price of those things necessary to a railroad.

The two largest items of operating expense are labor and fuel, both of which have risen in recent years.

All classes of lumber products have materially increased. Oak ties are today seventy-five cents apiece, whereas they were sixty cents in 1903. Cedar ties have increased eight cents apiece during the same period. Steel rails are today quoted at \$30 per ton, compared with \$28 ten years ago.

One of the largest increases during the past ten-year period is that of taxes. In 1900 the railroads paid \$47,415,433., in 1910 \$99,423,112., or an increase of over one hundred per cent.

There exists no co-ordination between the powers which buy railroad taxes and the powers which regulate railroad rates, the effect of these upper and nether millstones being to make profitable railroad operation extremely difficult.

There is no business by which new capital is more constantly in demand than by railroads. But today the credit of the American roads has sunk to the lowest level since the panic of 1893.

There is no more erroneous idea in the popular mind concerning American railroads than the one that the stocks are owned by a small group of capitalists.

Figures which appeared in the October issue of the Milwaukee Magazine show six roads, representing less than half the mileage in this country, to have a total of one hundred and fifty-eight thousand individual shareholders.

The rate question is soon again to appear before the Interstate Commerce Commission for consideration.

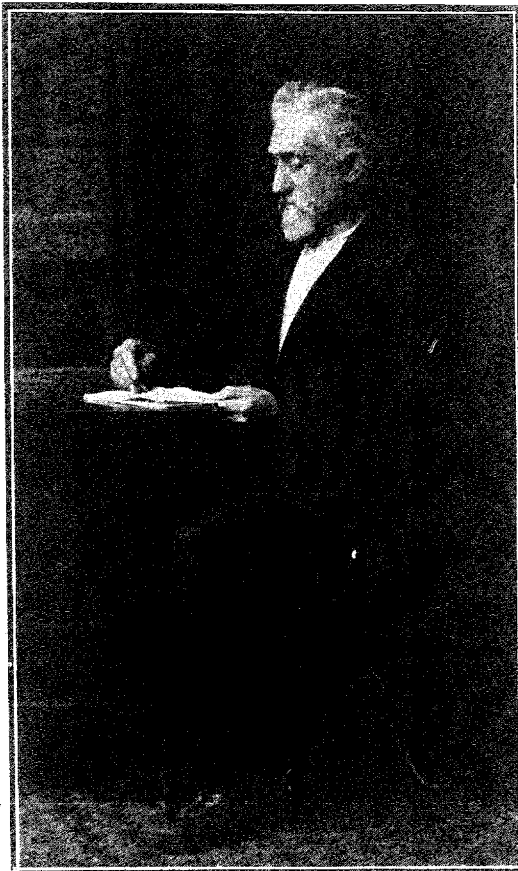
While the Interstate Commerce Commission is the rate-making body today, it is generally conceded that the real rate-making power is that of public opinion.

Any move which is certain to add in any way to the already high cost of living is to be regretted. But considering deeper, a continuation of the present attitude of the American public is just as certain to eventually affect the ability of even the strongest roads to give the high class of service which is a material factor in our national prosperity.

That the prosperity of each individual employe is indirectly affected by the prosperity of the employer is almost too obvious to need repeating. However, a fact of equal truth, but seldom recognized, is that every line of business is directly affected by the condition of the transportation facilities of the country.

Any attempt to manufacture public opinion, to have inspired views appear as spontaneous conclusions of an impartial thinker, cannot be too strongly condemned.

But the presentation of facts which will contribute toward the moulding of a fairer and more enlightened public sentiment on the subject of railroad rates, is a thing of such vital importance to all citizens as well as railroad men, that opportunities to do so should not be neglected.



Jens Jensen, or "Old Jens" as he is affectionately termed by his associates, is Oil-House Man at Council Bluffs. He has held that position more than twenty-five years and has an enviable record for fidelity. His oil-house is a model of neatness and he takes as good care of the company's property as if it were his own.

Getting Started

D. R. Foud.

On one of these cold frosty mornings when the temperature is hanging down around zero, have you ever stood watching a train trying to get started out of the yard. You noticed, if you have, how the engine snorts and pants, the drivers slipping and spinning around, the engineer shutting off and taking the slack two or three times, finally getting the cars to moving, dragging out of the yard at a snail's pace, but as the cars begin to get warmed up the train gathers momentum and after gathering headway, the engine has no trouble whatever in keeping them going.

Isn't this a whole lot like the majority of us. How much time do we waste? How much energy do we spend getting ready to do something, and after we once get to going, how easy it seems to keep moving!

It seems as though the same physical property that makes it hard to start a thing makes it easy to keep that thing going, the tendency of a body at rest to remain at rest and the tendency of a body in motion to keep in motion.

Try and keep this in mind the next time a hard job turns up. If you are anything like the most of us, your only object in life is to avoid starting that job until you absolutely have to. You will put it at the very bottom of the pile on your desk or bench and wait until you are "warmed up a little before you tackle that."

The longer you put it off the harder it seems. The longer you put off thinking the more difficult it becomes to think.

Try and see if you cannot dispense with the idea that you are "planning" to do a hard job and using up all your valuable time in planning it. Begin it. It won't be easy. But you will find that once you have started you will make the interesting discovery that inertia when you have once overcome it will help to create momentum.

The harder a thing starts the easier it is to keep moving, and remember that any train, whether a train of box cars or a train of thought, must be started before it will go.

Oil as Fuel

T. J. Hamilton, D. M. M.

With the exception of seven of the older and smaller engines and a couple of "K" engines, that are being used in work train service, we are now using oil exclusively on lines west of Deer Lodge as a locomotive fuel.

In order to use oil as a fuel, it is necessary to make quite extensive changes, as follows:

The ashpan is removed and is replaced by what is called a flashpan. The arch tubes in firebox are removed. The firebox is then bricked up a reasonable distance on side sheets, door sheet and flue sheet. The seams in side sheets are also bricked over. These brick are held in place by suitable studs. The removal of these brick for a short space of time while the engine is being worked heavily will cause the seams to open up and leak badly in a very short time. This is due to the intense heat. A burner is placed in the forward end of the firebox and is so constructed that it will spray the oil instead of throwing it out in a solid body. This burner is not a very large affair, only 4 inches wide, 12 inches long and 1½ inches thick. The opening that the oil passes through is about 3½ inches long and about 3/32 inches wide.

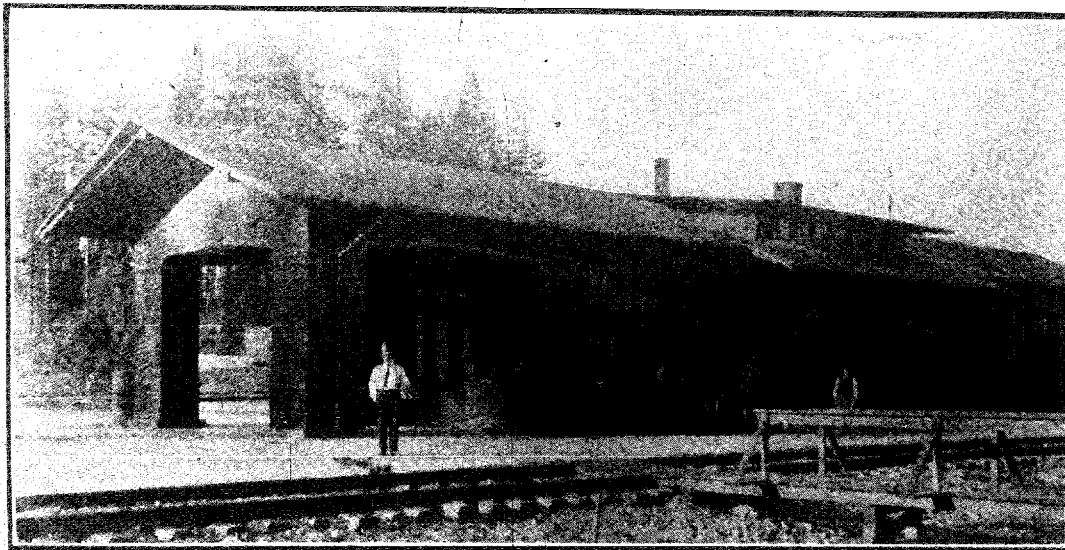
A supply of fuel oil is carried in a tank made for that purpose that fits into

the coal space of regular coal-burning tanks. These tanks vary in size according to size of engine. On our G-4 engines these tanks hold 1,650 gallons; K engines, 3,300; F-4 engines, 3,450; Mallets, 3,000; G-6 engines, 2,150.

The oil is carried from the oil tank to the burner through a suitable feed pipe. The flow of oil is governed by a firing valve. There is also a superheater and an atomizer. The oil in the supply tanks is heated to a temperature of between 80 and 100 degrees. If it is at a temperature of less than 80 degrees, the locomotive will not steam well, and the same is true when the oil gets to a temperature of over 100 degrees. When the oil gets too hot there is a great deal of the natural gases that will escape; consequently, it is not so good as a fuel.

Practically everything is taken out of the smoke box, with the exception of the draft pipe. It is not necessary to have a diaphragm and netting in the smoke box of an oil-burning locomotive.

In order to take care of the oil supply at terminal points, we have storage tanks or sumps, ranging in capacity from 500,000 gallons down to a lesser amount. There is also a service tank at nearly all oiling stations, that has a capacity of 54,000 gallons. These are placed above



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the ground at about the same height as our regular water tanks and oil is taken onto the locomotives in about the same manner as water is taken. It is necessary to have steam coils in the sumps, storage and service tanks. This is in order to warm the oil in cold weather so that it will run freely. It is also necessary to heat the oil in the tank cars in cold weather before it can be unloaded.

The unloading of the oil is handled as follows: A sump is constructed alongside of the unloading track below the surface of the ground. The oil is taken from the bottom of the car through a suitable opening provided for that purpose and is run from the car to the sump in a trough. It is then pumped from the sump to the storage tank and service tank. We do not have the unloading sump at all oiling stations. For instance, at Deer Lodge the 500,000 gallon storage tank is constructed of concrete and is below the level of the track, doing away with the necessity of an extra sump. At Alberton, Mont., it is taken care of in the same manner, while at Avery, Idaho, there is a sump, a 500,000 gallon, steel storage tank, also a service tank. At Clinton, Mont., we have no storage tank; therefore, oil is taken direct from the cars by pumping it from the car to the locomotive tank. It is understood that this is a temporary arrangement and was installed on account of locomotives not being able to haul their maximum tonnage from Alberton to Deer Lodge on one tank of oil.

In addition to the places we have named, we also have permanent oiling stations, storage tanks, etc., at Haugan, Mont.; St. Maries, Idaho; Bovill, Idaho; Malden, Wash.; Othello, Wash.; Cle Elum, Wash.; Laconia, Wash.; Cedar Falls, Wash., and Tacoma, Wash. At Seattle, Hoquiam, Mineral and Everett we have no regular supply tanks, but instead, oil is pumped directly out of the car into the locomotive tanks. It is handled in the same manner on work train engines that lay up nights away from regular oiling stations; the only difference being, with the work train engines we have a portable pump stationed on a flat car.

In order to fire up an oil-burning locomotive after the steam has been blown down, it is necessary to have either steam

or air to be used as a blower to create a draught, as the oil will not burn successfully without a pretty good draught. It is also necessary to use considerable care in firing up an oil-burning locomotive, in order to avoid explosions in the firebox. These explosions, if they occur, are liable to injure the person who is firing up the boiler. Steam can be generated very quickly when firing up and in a great many cases is generated entirely too fast; consequently, causes quick expansion of the sheets and extortion and is very liable to cause leaks. Steam should not be generated on an oil-burning engine any more quickly than with a coal-burner engine.

The question now arises—Is the oil-burner engine as efficient as a coal-burner engine, or more so? Experience has taught us that the oil-burner engine, on an average, is more efficient than a coal-burner engine, due principally to the fact that there is no manual labor required to keep up steam on an oil-burner locomotive. They do require just as much attention on the part of the fireman as a coal-burner but the fireman's work is very easy, for the reason that he has only the dampers to look after, the firing valve, which is only a short handle and the other four or five valves that are used in connection with an oil-burner locomotive; such as the blower, heater and atomizer. There is another thing that it is necessary for the fireman to watch very closely and that is the flues, and in burning oil on locomotives we find that the flues stop up badly with asphaltum. These are kept cleaned by the use of sand. The sand is carried in a quite large sized steel box on the floor of the tank, just ahead of the oil-supply tank and is very handy for the fireman to get at. The sanding is done by working the engine reasonably hard and applying the sand through the small opening in the fire door. The draught carries it through the firebox and against and through the flues. If sand is applied at the proper time and in sufficient quantities, the flues can be kept clean at all times. If they are allowed to become stopped up or partially stopped up with asphaltum, there will be an immediate failure of steam.

There is another reason for an oil burner being more efficient than a coal burner and that is due to the fact that

ordinarily one of our "K" engines will haul their maximum tonnage over the entire division on one tank of oil. For instance, between Othello and Malden, our K engines handle 2,000 tons during the summer months, a distance of 103 miles, on the one tank of oil, so it can be readily seen that there is considerable time saved on account of not having to take coal between terminals.

After arriving at a terminal point, it is only a matter of 20 or 30 minutes to get an oil-burner locomotive into the roundhouse, provided there is room in the house. This is made possible on account of there being no coal to take and no fires to knock or ashpans to clean. The only thing that is necessary is to take water, oil and sand.

The boiler work on the oil burners is somewhat heavier than with coal burners, but it is the opinion of the writer that this is not necessary, providing an oil-burner locomotive was handled with the same care that coal burners are handled. For instance, in pulling out of a station, the steam can be maintained on an oil burner regardless of how hard the engine is being worked. You all know that this cannot be done, as a rule, with a coal-burner engine; consequently the firebox sheets and flues in the oil-burner engine suffer to a certain extent. There is also a very sudden drop in temperature in the firebox of an oil-burner locomotive when shutting off steam suddenly after the engine has been working hard. This is the time when the engine crew should use a great deal of care and not allow the injector to work too long at a time with the fire cut down too low. We have also found in some cases, where an oil-burner engine has been worked extremely hard between stations, and, in fact, requiring the use of both injectors in order to hold up the water. This is another case where considerable injury is done and it is something that cannot be done for any great distance with a coal-burning locomotive, at least, those of the larger type, on account of the fireman being unable to shovel the large amount of coal that would be used under such conditions.

The steaming qualities of an oil burner and a coal burner are about on a par; that is, I mean, with reasonably good coal. And as for the draught, it re-

quires just as severe a draught in order to burn oil successfully as with coal. And, in fact, with some good grades of coal it requires less draught than with oil.

The comparative cost of the two fuels, taking everything into consideration, on the lines west of Deer Lodge, is slightly in favor of oil.

A Glimpse of North McGregor (Iowa)

Mrs. H. L. Monty.

If a pocket were not useful, we have an idea the small boy—and the grown-up too—would be in a sad plight; and those being pockets of invention they have become a necessity.

This place has been dubbed "A Pocket of a Town," but the dubber didn't realize the business interests centered here in this pocket Mother Nature formed in the eastern coast of Northeastern Iowa, where the waves of the Mississippi river lash its shore, and which the C., M. & St. P. Company has utilized in its progression.

The census gives us a little less than nine hundred population, but this being the terminal of the I. & D. Division, the P. d'C. Division, the White Line and the Elkader Branch, it brings many men here.

A fine modern depot with interstate lunchroom was opened to the public May 1, 1912.

The Milwaukee Company has a capable force of men to look after their business interests here.

J. A. Lang, roundhouse foreman, and Burt Willard, night foreman, keep things humming in that part of the pocket. George Rehm, general yardmaster, and Henry Schott, yardmaster, are competent men in that department. Fred Shrader, station agent, is an efficient man for the place, and if the Milwaukee has a better small pocket on its road than this, it must be represented for proof.

Secretary E. H. Foster announces that the 1914 membership cards of the Puget Sound Pioneer's Club are ready and the dues for the ensuing year may be sent to him now. Mr. Foster also wishes to be notified of any change of address of members of the club.

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Supply Cars on Puget Sound Line

A. J. Kroha, Storekeeper, Tacoma, Wash.

Cars for distributing supplies to station agents, section foremen, extra gangs and pumpers have been in practical use for five years, the first set having been put into service during November, 1908.

We have fitted up two regular sets of these supply cars, consisting of:

1. Car systematically arranged with shelves for all miscellaneous station and section supplies, as well as providing ample room for the living accommodation of the supply-car clerk.

2. Car with necessary tanks for oil supply in one end and remaining space given over to bins for waste, shelves for oilcans, track shovels, lining bars, tamping bars, claw bars, etc.

In addition to the above we usually have a third system stock car in which is carried the kerosene oil in barrels, track spikes, track bolts, tie plugs, grindstones, etc.

One set of these cars we operate from the Tacoma store, serving the lines west of Deer Lodge, Mont., the other from Miles City, serving the lines east of Deer Lodge.

They are handled over the various divisions on our way-freights.

The aim is to start the two sets of cars over their respective routes simultaneously each month.

Requisitions made by agents, roadmasters and others, and approved by heads of various departments, are sent in to the storekeeper's office, where they are duly booked and turned over to the supply-car clerk, who makes a recapitulation of materials needed and stocks up the cars accordingly, the day before they are due to leave. Sufficient extra material is always carried to fill emergency orders.

Schedules are sent out in advance designating divisions, subdivisions, dates and trains on which the cars will be handled, in order that superintendents and roadmasters may advise all agents, section foremen and pumpers just when to expect their supplies.

Only in emergency cases may the supply-car clerk deliver anything but oil, wicks and lantern globes without an approved requisition.

All worn out and bad order tools are gathered up and exchanged for ones in good repair. Tools worth repairing are turned in at the shops, put in good condition, and returned to stock to be supplied on future orders.

On the requisitions which the supply-car clerk sends in at the end of each day's trip all articles are circled (O) in the order of their delivery; and on receipt of filed requisition at the store-



Foreman A. Fischer and Force, La Crosse, Wis.

house items circled (O) as delivered are billed against department ordering same.

In the general economy of things the satisfaction and advantage accruing from the adoption of the supply car is manifested in some degree throughout all departments of the railway service.

The store department, naturally, realizes the most signal benefits from the constant saving of labor and material; such as packing, boxes, way-billing, etc., from the elimination of all claims for shortage or leakage of oil, as well as from the satisfaction of knowing that materials and oils reach their proper destination.

Steel Gang on the C. & M. Div

Rollin R. Parks.

In response to the call of the Magazine for track news of general interest we are sending an account of the repair work which is being done on this division this season. The work is carried on under the direction of Mr. D. Maw, roadmaster on this division for the past thirteen years. He attained his position after continuous service with this company from water boy up. Mr. Emil Cush of Roundout, Ill., is foreman of the gang. He has been in the service of this company for the past nineteen years.

The gang, consisting on the average of seventy-five American laborers, is housed in a camp of sixteen cars equipped as bunk cars, diners, kitchen, etc. A signal crew of six men under August Koenig, foreman, follows the steel gang, bonding the rails, maintaining the track circuit for the automatic signals and adjusting the switches of the interlocking plants. A bridge crew of four men accompanied the gang in the work in the city of Chicago on the elevated tracks between Pacific Junction and Mayfair. One or more work trains are almost continuously in service distributing new rails and fastenings and picking up the old rails and track scrap.

When the work is complete thirty miles of main line track will have been renewed, thirty-seven switches relaid, the turnouts of the more important sidings and business tracks relaid with 100 lb. rail taken from the main line, and the inside rail of several curves renewed.

The new steel is 100 lb. A. R. A. Open Hearth, product of 1913. Weber joints were used for the greater part, with the exception of a few miles of heavy straight angle bars substituted, pending the delay on a shipment of Weber joints. The rail was laid with broken joints, no slots were spiked or joint ties spaced. P. & M. anticreepers were applied, four to a rail.

All the usable rail was shipped to the McKenna Process Co. at Joliet for re-rolling. All scrap rail and all joints were shipped to the supply yard at Savanna. About half of the rail was relaid with the tongs. The remainder was done with the Three Man Layer invented by P. Madden, roadmaster on the La Crosse Division. The best record made with this machine was 184 rails in four hours and fifteen minutes with twenty-five minutes delay for trains. The use of this machine made it possible to work to advantage as small a gang as forty men when help was scarce.

The cost of relaying the steel varies from \$250 to \$350 per mile, depending on the traffic on different parts of the division. This does not include the distribution and collection of new and old materials.



The above is a picture of Engineer E. S. Cunningham of the Kansas City Division and his daughter, Claire. Mr. Cunningham is one of the old-timers. He began firing on a wood burner out of Waukesha about the year 1873, and has been continuously in the service since that time.



D. J. Marlett.

A Suggestion to Conductors

I submit herewith my photo taken November 17, 1913, which was my fiftieth birthday, and hope to see all conductors on the system do likewise.

My idea is to have each conductor on his next birthday furnish the Magazine with his photo, stating age and years of service.

Since appeals so frequent and earnest have been made to secure material of general interest for the Magazine I think we, as conductors, can do much in that direction.

I entered the service November 10, 1888, or in other words, have spent half my life on C. & M. Division.

Two years ago I took my first trip west, which proved an educator to me in methods employed on foreign lines.

I was especially pleased to hear our road and service well spoken of by passengers who had no knowledge of my connection with it. This fact confirmed my belief that conductors can do much

good work toward co-operation and efficiency on any railroad.

As to our Safety First movement, I am thoroughly satisfied a lasting good has been brought about in many ways. There is no way of measuring the benefits as a result of our meetings. The cause is worthy of our earnest thought and co-operation.

While I have read the Magazine each month with interest this is my first contribution.

Hoping that other conductors will take heart and let us see how they look.

Yours for Safety First,

D. J. MARLETT,
Conductor, C. & M. Div'n.

"The New Steel Trail"

C. D. Williamson.

If you live in the East and want to come West—

If you want to travel the route that is best—
Just take it from me that for comfort and ease,

Attendants real courteous, a service to please,

There is just one way you will like without fail,

And that is the route of the "New Steel Trail."

When you leave Chicago enroute to Seattle
You'll ride in a car where the windows don't rattle.

A large, roomy seat and a book to peruse,
A snowy white pillow all fixed for a "snooze."

Ah, its' great to get into this home on the rail

And follow the line of the "New Steel Trail."

If you live in the West and want to come East,

And you want to glide where resistance is least,

In new, "comfy" coaches, easy to ride.

Berths that are longer, higher and wide.

My word for it, friend, you'll be pleased without fail

If you travel the route of the "New Steel Trail."

When you start from the Sound to the famed "Windy City,"

Your trip should be glorious. But O, what a pity

If you miss the route where "De Luxe" is outdone,

Where service and cuisine surpass "No. 1." I'm sure 'twould be sad if by chance you should fail

To travel the route of the "New Steel Trail."

Heavier Car Loading

G. E. Simpson.

With a view of securing better car efficiency and thereby decreasing our operating expense, which will result in increasing our net earnings, I desire to call your attention to the following statistics, compiled from our annual statement, and would earnestly request that all our employes read this article very carefully and make every possible effort to secure heavier loading and more mileage for our equipment.

While the statement showing tonnage loading of 260 cars lumber, coal, cement, flour and grain gives the average loading of 80%, the loading of all cars during the fiscal year was about 60%, losing 40% of the carrying capacity of the 1,683,000 cars loaded. It appears that cars loaded with grain and coal are loaded to nearly their capacity, while cars with flour and lumber did not make as good a showing.

Of course, we cannot hope to load our cars to full capacity with merchandise or light, bulky commodities, but I believe every agent can give personal attention to this matter and easily increase our average load per car, by at least two tons, which would, you will note, result in a saving of operating expenses of nearly two and a half million dollars.

Statistics show that freight equipment is in transit only four out of twenty-four hours, and I am satisfied a decided improvement can be made by reducing the delays at local stations and in our large terminals.

The per diem balance last year was heavily against us, and special attention should be given to curtailing the use of foreign cars in our local service. While we cannot avoid foreign cars coming to us in service from connecting lines, we should make a special effort to have them promptly released and loaded for home or in the direction of home.

I would suggest that division freight agents as well as local agents discuss with shippers the question of full capacity loading of cars, explaining to them that increasing our average loading will tend to give us a better supply of cars, and therefore be mutually beneficial both to the shipper and carriers.

The average mileage per car per day, last year was 27 miles. Increasing this mileage as shown in the table would enable us to handle the tonnage with a less number of cars.

We shall be glad to receive suggestions from our employes on the above subject, and invite correspondence from agents and others interested.

FOR THE FISCAL YEAR ENDING JUNE 30TH, 1913.

Cars loaded	1,683,000
Tons freight carried	34,805,491
Tons freight carried one mile	9,970,736,125
Miles run by loaded freight cars	510,841,035
Average tonnage per car	20
Average capacity tonnage of equipment	33
Percentage loss in available loading capacity	40
Average loaded freight cars per train	21
Average revenue per ton, revenue freight car mile	\$0.79
Operating expenses	\$62,883,967.60
Of this, transportation expenses were	35,065,842.01
Cost per car handled averaged	14.79
Average miles run, per car per day	27

A recent examination of way bills showed that on

40 cars lumber	we lost	36	per cent	of	carrying	capacity
38 cars coal	"	9	"	"	"	"
48 cars cement	"	13	"	"	"	"
64 cars flour	"	37	"	"	"	"
61 cars grain	"	5	"	"	"	"

260 cars average loss 20 per cent

Had we increased our loading as noted below, it would have saved the handling of equipment, decreased the number of miles run by freight cars with a saving in operating expenses as shown:

4,000 lbs. (2 tons)	less cars	168,300	decreased miles	51,084,103	Saving Exp.	\$2,489,157.00
2,000 " (1 ton)	" "	84,150	" "	25,542,051		1,244,578.00
1,000 " (½ ton)	" "	42,075	" "	12,771,025		622,284.00
500 "	" "	21,037	" "	6,385,512		311,142.00
100 "	" "	4,207	" "	1,277,102		62,228.00
The average miles per car per day was	27,	cars loaded	1,683,000	Saving		
Increasing this 1 mile per car per day	28,	would load	1,623,000	60,000 cars		
" " 3 miles	30,	" "	1,514,000	169,000 "		
" " 5 "	32,	" "	1,420,000	263,000 "		
" " 7 "	34,	" "	1,336,000	347,000 "		
" " 9 "	36,	" "	1,262,000	421,000 "		

Our Railroad the Very Best

Geo. H. Terry, General Foreman.

The Bridge yard at Tomah, or more generally speaking, our general supply yard, has, with all the rest of the departments, grown to large proportions. This yard supplies the system with almost everything needed in lumber work, including also lots of iron work and all kinds of concrete work. Our mill is kept busy all the time manufacturing all depot frames and finish, tanks and finish, etc., in short, all work demanded in the construction of buildings. We operate two traveling cranes—one a 5-ton cap and one a 15-ton cap, and the work they perform is simply great.

In this year just closing we received into the yard 1,820 cars loaded with material and billed out in the same year, 2,378 loaded cars. This will give some idea of the amount of work done up here.

In looking back over the years gone by, I review with satisfaction the growth of this, the very best railroad in the world. I have been constantly in its service since 1881 and have seen the many changes that have accompanied its wonderful growth.

From the organization of our bridge and building department, with Mr. Onward Bates at its head, I have worked for and with many of its ablest men and have made many valued friends. Mr. Bates had as assistant, Mr. G. W. Smith,

and there were besides, Messrs. A. J. Hart, H. E. Simpson, A. D. Campbell, Chas. King, Chas. Ingham, N. H. La Fountain and others. The district and chief carpenters of early days are well remembered, among them Alex Gammons, A. Ames, Lew Stevens, Wm. Ross and Jesse Bennett. Many of the oldest men are gone, some of them "into the silent land" and others changing location.

The feeling that we are today the best railroad in the world, is shared by most of my fellow-workers; and I am free to say that this feeling is the result of the pleasure we have all experienced in working hand in hand and shoulder to shoulder. Our department you know is famous for its "teamwork." If this had not been the fact, we could not have done the tremendous amount of work on the Puget Sound Line that was done in order to get the line ready for its opening in the short time we had allotted to us.

So my dear editor, taking all these things into consideration, am I not right in saying that we are the very best railroad in the world?

The beautiful magazine, with its circle of co-operation upon its cover is a symbol of unity, and it is certain that its good influence is being felt. From the pick to the pen, all are concerned, and we should, with the good and wholesome advice given in its pages, become broader and better men.

The New Great Falls Water Power

In the west, at least, water power is king of the industrial world, and it is gradually reaching out for dominion over the realm of the railroad. In mountainous and hilly countries where rivers have a fall sufficient to turn the water wheel, which nowadays is the turbine, this mode of generating electricity is both economical and efficient. We may, therefore, confidently expect anything, everything, from the mysterious "juice."

Our company, progressive in all things, is already preparing to lift its trains over the mountains of Montana with its help. The electric locomotives will "hook on" at Harlowtown and swing the long, heavy trains up the mountain grades with noiseless ease, while away north at the great falls of the Missouri river, the dynamos keep up their ceaseless task of supplying the current, and the river pours its flood through the huge pipes and keeps the turbines everlastingly moving. No rest may those slaves ask, and how easily they accomplish their task! Then, with the wheels in motion, onward goes the river, swirling down through mountain and plain to join the sea, as great in its capacity for good or ill as if it had never paused in its course to keep industry moving or the wheels of commerce rolling.

The Great Falls power is second only to that of Niagara, the greatest on this continent, and that which is already developed, even now in addition to running the big smelter at Great Falls, is furnishing power to the Butte mines, the Anaconda smelter, pumps the Butte city water, operates the Butte, Anaconda & Pacific Railway, and furnishes power for a dozen cities and towns; for the reclamation service work in various parts of the state; and in short, "lights homes, streets, draws street cars, grinds flour, pumps the water supply, smelts ores, digs coal, cooks food, furnishes entertainment at the picture shows, irons the linen, and will soon be heating buildings of all sizes."

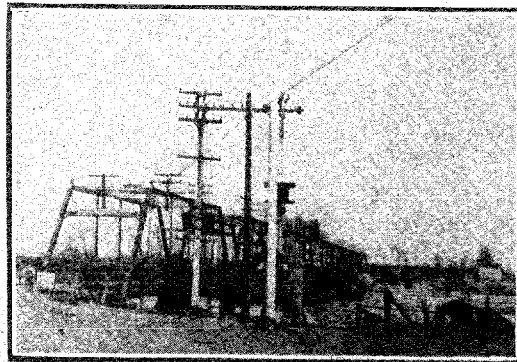
All this is done now in Great Falls city, and most of it, in the other cities and towns of Montana which are supplied



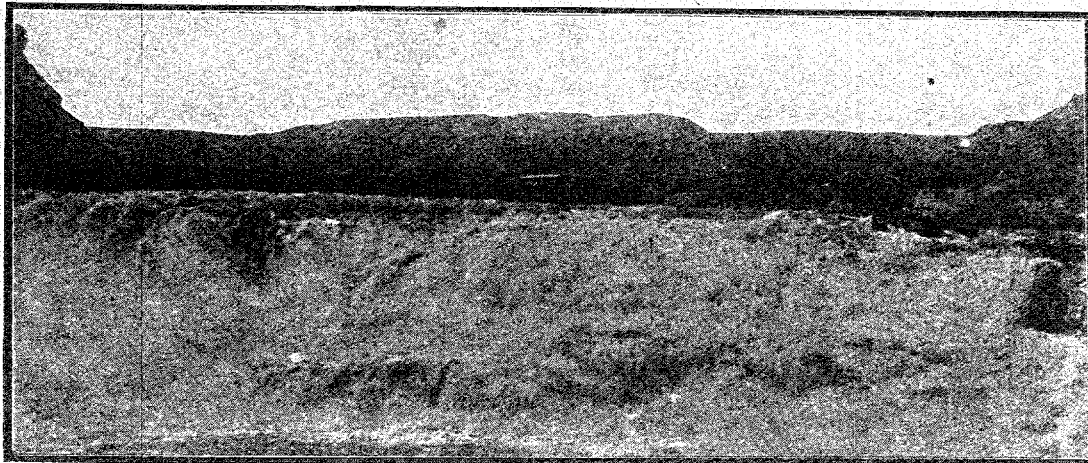
The Great Falls of the Missouri.

with power from the existing plants on the river.

The new plant, under construction, destined to supply The Milwaukee with power to move its trains over the mountains, will be one of the largest of its kind in the country. Over four hundred miles of our main line in Montana will eventually be operated by electricity, although of course the change from steam to electric power will of necessity be a gradual one. The location of the new plant is at the foot of the big cataract, about ten miles from the city of Great Falls, in one of the most sublimely picturesque spots in the state. The banks of the river are high and precipitous, worn by the action of water into formations that make you think of the Grand Canyon on a small scale, not even excepting the color, which in the wonderful Montana atmosphere, shows deep reds and fading tints that blend or contrast with startling effect, while down in the gorge the great river plunges madly over its precipice, and shoots on in a flying cloud of creamy foam.



Piers of New Milwaukee Railroad Bridge at Great Falls.



Looking Down River from Head of Falls.

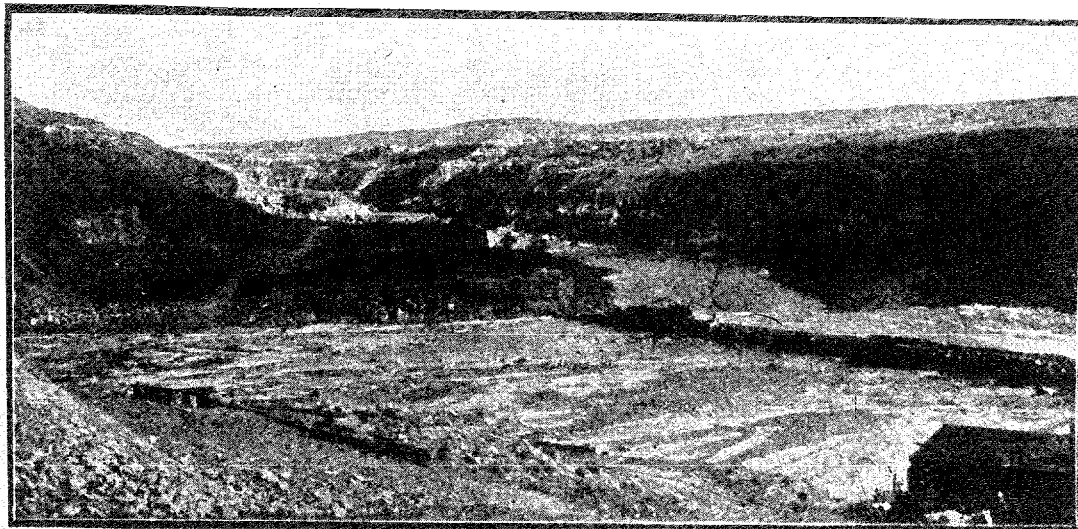
The dam at the new power plant is to be of solid concrete and will average 75 feet in height. Its total length will be 1,340 feet, 1,000 feet on the spillway, abutments on south side 120 feet, and wheel gate section on north side 220 feet; it will be on a curve over 500 feet radius. To construct this will require 180,000 cubic yards of concrete, of which there will be 180,000 tons of broken stone, 90,000 tons of sand, 200,000 barrels of cement and a large amount of steel for reinforcement.

The power house will be 230 feet long by 104 feet wide and 75 feet high, this height being that of an ordinary six-story business block. The building will be absolutely fire proof and will be of pleasing architectural design.

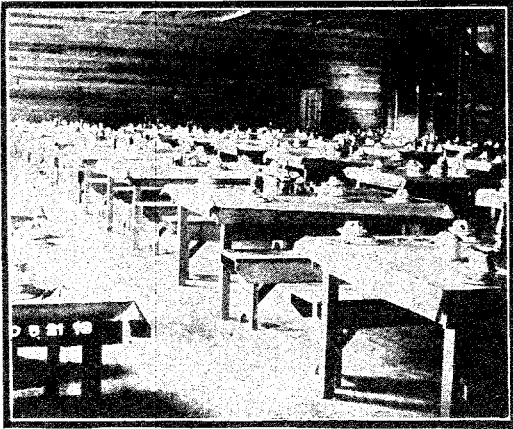
The hydraulic equipment will consist

of six 14,500 h. p. vertical turbines directly connected to the generators and two exciter turbines of 800 h. p., making the total installation 88,600 h. p. There will be two traveling electric cranes of sufficient capacity to handle any portion of the machinery, and the usual switchboards, transformers and other necessary equipment for the proper handling of the plant. When this plant is completed the total capacity of the old and new development will be approximately 275,000 h. p.

Work on this plant was commenced early last spring, with a big construction bridge across the river at the head of the falls, for the use of construction work on the dam, and a big coffer dam running from a point near the bridge down over the falls and past the site



Coffer Dam and De-Watered River Bed.



A Model Camp Dining Hall.

of the power house. This dam is designed to "de-water" one half of the river at a time, so as to afford opportunity to build the big dam on bed rock.

The construction camps here are models of their kind and are intended for the accommodation of 900 to 1,000 men. There is a big dining hall with a seating capacity of 600, containing the innovation of many small tables, seating six each, instead of the customary long rows accommodating as many as can crowd into the length of the room. The kitchen and dining room equipment is the most modern and sanitary, operating in connection, a bakery, an ice-making and refrigerating plant, steam tables, electric coffee urns, electric potato peelers, electric meat-choppers and dishwashing and drying machines.

The bunk-houses are designed to accommodate 32 men, and each one has three rooms, the center being used as a sitting-room. Steel bunks are provided and each man has his own locker under his own lock and key. A central wash-room and lavatory is provided in a separate building, with plenty of hot and cold water; also a barber shop and shower bath. There will be a gymnasium, reading room and moving picture theater.

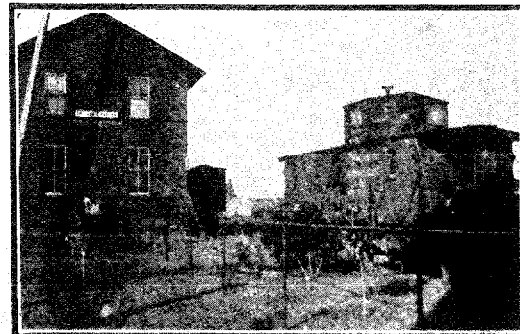
A complete water system, taking water from a large spring on the bank of the river, supplies the camp by means of an electric turbine pump. The entire camp is heated and lighted by electricity. This, with office buildings of modern and substantial construction completes a model camp in every particular, and when its work is done, it will vanish and the de-

serted river bank will again echo only to the roar of the furious waters and the deep accompaniment of the changeless rumble of the big dynamos.

The transmission lines from the Great Falls power are distributed over a wide area, and along our railroad in central Montana, for many miles the steel towers and poles that carry the efficient little copper wires may be seen rising and falling with the rise and dip of the hills and valleys, coming out of space on one side and disappearing into space or behind the hills on the other, every pole and every wire of mighty import, each one a messenger from the mighty force that races swiftly down from the mountains, to the big river and turns the wheels of progress day in and day out, year in and year out, resistless as it always has been and ever will be.

Progress in St. Paul Electrification.

The Chicago, Milwaukee & St. Paul has decided to proceed with a part of its elaborate electrification project. It will electrify one engine district, Deer Lodge, Mont., to Three Forks in the Rocky Mountains, 113 miles of line. With sidings and yards there will be a total of 168 miles of track. Direct current will be used, 2,400 volts, with overhead trolley construction. Wooden poles and mast arms to be used on tangents, and span wires over curves. In yards steel poles and overhead bridge trolley supports will be used. The power will be received from the Great Falls Power Company, to be transmitted at 100,000 volts and transformed to the trolley voltage in five substations ranging in capacity from 3,000 to 4,500 kilowatts, depending on the grade of the section to be served. The locomotives are to be of the same type as those used on the Butte, Anaconda & Pacific, with modifications to meet the Milwaukee's conditions.—*Railway Age Gazette*.



Station Park at McIntosh, S. D., Trans-Missouri Division.

The Illinois Tunnel

T. W. Proctor.

Chicago, the great central market, with thirty-two railroads running in and out, an enormous lake frontage, and miles and miles of river running through the heart of the city, is also undermined with a tunnel system that reaches out like a spider's web to the various sections of the business center of Chicago for the purpose of relieving to some extent the congestion in the city streets.

This enterprise was started several years ago for the purpose of putting underground certain telephone wires, and establishing in this city a telephone system independent of the one already in existence. The possibility, however, for handling freight was such that after the project had got under way it was decided to make the bore seven feet wide and seven feet high, and establish a freight service such as is being operated at the present time.

Electricity is used entirely, and I assure you that a man can get as many thrills in the tunnel as he can in an airship. Trains are operated on regular schedules and are darting here and there, headlights gleaming, bells ringing and wheels rumbling, and all this sixty feet below the surface of the earth.

The temperature in this underground passage varies very little in winter or summer, averaging about fifty degrees. It is perfectly dry and is ventilated with a system of blowers that keeps the air pure and wholesome.

Accidents are rare, showing that trains are run carefully and intelligently.

The motors and cars were necessarily built especially for this service and have no comparison with any equipment, this being the only freight-carrying tunnel in the world. The motors and trucks are built close to the track, in order to give the cars the greatest amount of freight carrying capacity, and the entire system is operated by an overhead trolley, the freight being lowered and raised by elevators from and to the various receiving stations and freight depots.

They have four large receiving sta-

tions, and are building a fifth, at which points any and all freight may be delivered for any railroad in the City of Chicago. This freight is lowered into the tunnel and distributed at a central distributing station to the various railroads, and handled on a schedule similar to that in operation on steam railroads.

They have 140 motors, 2,600 merchandise freight cars, 500 dump cars and 500 coal cars.

They employ in the operating department, as motormen, switchmen and elevator men 150; as freight handlers, checkers, truckers, etc. 250 men, general office employes about 25, and in their local and auditing offices about 50.

They handle about 2,500 cars a day from their public stations, commercial houses and interchange railroads. This business is distributed: Public stations about 40%, commercial houses about 30%, interchange railroad business 30%, and the average load on each merchandise car is 2,500 pounds, so that the Illinois Tunnel handles in a day an average of 6,250,000 pounds of freight that otherwise would necessarily have to be carted through the heart of the city. In addition to this freight business they have seen fit to dispose of cinders and handle coal, and in the course of their business they average about seventy-five cars of cinders from various concerns per day, 1,000 cars of coal, and about 200 to 400 cars of excavation material. These cars average about four tons per car.

They are serving with elevators or shafts thirty-five commercial houses, and are hauling coal for about thirty business houses, and also handle freight to and from the Anchor Line and the Lehigh Valley Boat Line. Their tracks reach every railroad in the City of Chicago with the exception of the Pere Marquette. The magnitude of this project cannot be conceived unless one should make a trip through the bore, and I assure you that their Mr. Gavin, traffic manager, is willing at all times to do anything in his power to make it pleasant for visitors.

Order and Cleanliness

E. Clemons.

Every one likes to see things in order, and there cannot be order unless there is a certain amount of cleanliness. Therefore, order and cleanliness go hand in hand. It is easy to have things in order, only it takes a trifle more time to have them so—but only a trifle. If you have a place for things and keep them in their place, they will always be in order, and when cleaning time comes that branch of the business can be more easily and thoroughly done. This applies to every branch of the service, from the track to the president's office, and if you ever go to the president's office, you will see one of the best examples of order and cleanliness, as his work table and desk are always in order. His correspondence is neatly sorted in piles laid straight on his table, and kept so—not scattered all over the table and on the floor, as is often seen in offices not nearly so busy as his.

When you are through with a letter or bunch of correspondence, put it in your basket for filing or for your stenographer to care for, or, if laid on the table, lay it down in such a way that it will show order instead of disorder.

Section men, carpenters and others doing work along the line can effect a great saving in material and time by being orderly. In doing their work and handling material, many dollars are lost simply because order is not used. Material is scattered around, presenting a bad appearance, and lost sight of. There should be a place for all things on a section, and as the different classes of material are laid away for future use, put each kind by itself, such as scrap, new material, second-hand material; then when you are called on for a statement, or when you make your monthly reports, you can in a few minutes get an accurate account of what you have on hand. A great many pick up material and put it away, out of sight, expecting to want to use it some time. This should not be. Anything not needed should be sent to the storekeeper to be put in his stock, where you or some one else can

get it by making requisition. This also applies to station agents and others. It is a source of much satisfaction to our general officers to pass over the road and note the appearance of sections and stations where order and cleanliness can be seen, and I believe there are as many miles of order and cleanliness on our road as on any other.

There are always chances for improvement, however, and we must all watch ourselves in order to keep in line. Don't let anything accumulate or lie around that is not needed. Newspapers, bottles, boxes, etc., that have served their purpose should be disposed of, or if needed, they should be put away where they will not be unsightly, and kept in order by being neatly piled up.

There are cabooses that are kept as neat and orderly as some offices and stations, and many more that are a disgrace to the Order of Trainmen. Any crew that shows a disposition to take care of things will get help to do so from our master car builder, and the condition of cabooses sent to the shop tells him what is needed in the way of repairs. If the car shows order and cleanliness, that car will leave the shop in such condition that the crew that gets it will appreciate and care for it, but if the car does not show it has had proper care, he will not be particular in returning it to service in the condition he would had it shown it had been properly cared for.

When anything is piled up along the track, it should be neatly piled in line with the track; in yards, with buildings; and in offices, with desks and office furniture, so as to present the best appearance. In short, have a place for things and keep things in their places. Keep nothing usable you do not want; send it to the storekeeper. Anything of no good to any one, make away with. Keep the dark corners, and the light ones, too, clean, and you will be doing a valuable service to the company that will reflect favorably to yourself. Order and Cleanliness tend to "Safety First."



For

Mr. C., M. Septem Division Ia. H at Ran stayed was th structio then pr structio years u

In 18 ter of t Hasting then tra at McC four ye the Riv twenty account chelle 8 Ill., who years.

Mr. I expects He enjo he left sends friends in the s



Forty-five Years of Service

Mr. H. A. Buel began work for the C., M. & St. P. Ky. as brakeman in September, 1868, on the old I. & M. Division between Calmar and McGregor, Ia. He then took a position as bill clerk at Ramsey Junction, Minn., where he stayed for twenty-three months. He was then appointed foreman of a construction gang for two years and was then promoted to conductor of the construction train which he ran for six years under Mr. J. B. Moll.

In 1882 he was promoted to roadmaster of the H. & D. Division and lived at Hastings, Minn., for one year. He was then transferred to the Dubuque Division at McGregor, Ia., where he stayed for four years. He was then transferred to the River Division, where he lived for twenty years. At his own request on account of ill health he went to the Rochelle & Southern Division at Mendota, Ill., where he has been for the last seven years.

Mr. Buel is still in active service and expects to be for many years to come. He enjoys much better health than when he left the River Division. He also sends his best wishes to all old-time friends and acquaintances that are still in the service of the C., M. & St. P.

A Hundred Point Man

*A. G. Lillyroot.**

A hundred-point man is true to his trust,
Keeps his word, always loyal, never unjust.
Does not listen to insults, not looking for
slights,
Avoiding the things that are leading to
fights.

Who is civil in speech and to strangers po-
lite,
Words that lead into trouble he'll never
recite.
Considerate to servants and never molest,
But looks for the things that are truest and
best.

Who is temperate in all things coming his
way,
And is willing to learn and to live day by
day;
Who is cautious, courageous and does not
despise
To begin at the bottom and slowly arise.

Men may differ in talents, but one thing is
true,
That a hundred-point man will have nothing
to rue.
He is safe in a deal, he is safe in a drive.
In whatever he does, he is sure to arrive.



Linemen at the Missouri River Bridge,
Mobridge, S. D.

Have You Made Any New Year's Resolutions?

George E. Waugh.

Surely nearly every one has. January seems to be the month in which people scrutinize their modes of living and their work, pick out the defects and bolster up the weak parts. It is a splendid idea and the results from these mental analyses when carefully made and tenaciously followed pay rich dividends.

A resolution to get the maximum amount of service out of the tools that we are furnished commends itself, in these times when railroads are bending every effort to secure legislation that will enable them to increase their earning power, the advantage and the necessity to exercise vigilant economy in the operating cost is readily apparent.

To illustrate, in the November issue of the magazine a small article appeared under the caption of "Special Commendation" about a stenographer in the advertising department who had saved the stubs of all the pencils she had used since she came with the company two years before—they totaled forty two and they were used until the average length of the stubs measured one and one-fourth inches. This was accomplished by using a metal pencil holder. Was this stenographer's rapidity in taking down notes impaired by making use of these pencil stubs? Most assuredly not. For practical use the pencil was as good when it measured two inches as it was when it was first sharpened. Was that stenographer benefited by this practice of judicious economy? Yes, because the trend of mind manifested in this instance dovetailed into the same measures of efficiency in her other work. It also had a good moral effect on the department. The pencil holder is in general use. It's right that it should be, because the company must haul a ton of freight two miles to earn the price of a new one. What is possible in getting the maximum of work out of the pencil can also be applied to other supplies coming under the list of stationery.

A track spike that works loose and is cast aside is apparently of small value, yet the road must haul a ton of freight three and a half miles to earn enough to replace it. I heard a man who has been with James J. Hill for a number of years relate an incident that has a bearing on this. Mr. Hill was out on a tour of inspection and the train stopped for some reason between stations. Mr. Hill got out of his car and walked down the track. As he returned he

stepped out to the toe of the ballast and picked up a rail spike that had either been thrown there or fallen off a construction train. The chairman of the Great Northern road toted that spike back to the conductor and told him to put it off at some division point where a track gang could use it. In this Mr. Hill clearly showed his idea of the value of a railroad spike and every track man, switch hand and conductor on the Milwaukee road has an opportunity to show that he is Mr. Hill's equal on the question of spikes and their value.

If a station breaks ten lamp chimneys a year or a third of the number they use, it means 33⅓ per cent waste and it will take the returns on the price paid for hauling a ton of freight over 105 miles to replace the ten broken chimneys.

Engineers can judiciously use oil and effect a tremendous saving. The cost of a gallon of engine oil equals the returns for hauling a ton of freight fifty miles if that gallon can be saved. Should the locomotive not be relieved of the burden of hauling fifty tons for a mile to pay for her lubrication? The fireman can also lend a hand—to fill the tender with coal so that it bulges high around the sides means that some of it is going to shake off when the engine hits curves or rattles its way over cross-overs. If she loses a ton of coal in this manner, the profits on hauling a ton of freight for 400 miles have been lost. There is also another element to consider in this; those lumps of coal frequently entice trespassers on to the right-of-way. It is a zone of danger where they should not venture, but picking coal is an alluring pursuit with a great many. "Safety First" is a term they do not heed.

These are all small things and the good that will grow out of them can only be accomplished by co-operative economy. We would not put fifty miles of rail into sidings that was good enough for main line, nor would we scrap a locomotive that was still able to haul its full quota of tonnage. Too many eyes watch the big things, but it rests largely with the rank and file to get the maximum out of the small items furnished.

If we have places where these measures can be applied, put them into execution. The theory is basically correct and you will gain followers. To eliminate waste wherever we can is good New Year's resolution material—it will increase one's worth to the company and will stimulate your capacity to manage with economic success.

The Get Together Section

New Year Resolutions.

Almost every one makes at least one good resolution at the opening of the new year, and if it is manifestly one you can live up to this is the proper thing to do. But it's better not to make any than to make a lot of them you cannot keep; so just try one or perhaps two, and don't give yourself such a task that you are sure to break over. There's an undesirable place which is said to be paved with broken resolutions, and the paving is renewed wholesale every January. Don't let yours go into the annual renewal for the reason that you have set yourselves so many and such hard tasks that you get "tired" too quickly.

As from one railroad employe to another, let me suggest that an excellent resolution, and one that should not be hard, is to resolve with yourself to be loyal, efficient and to at all times work for the company's interest. You will find that in doing so you are not in any way standing in the light of your own interests. In short, be a "booster" always. It's a lot of fun, when you get into the spirit of the game.

Here is a little idea, evolved by an agent in the interest of the traveling public, and it's an excellent one. He noticed that when trunks fall onto the trucks they usually bump a corner hard, doing no good to the trunk, and incidentally giving the truck considerable of a jolt. He, therefore, hit on the happy expedient of taking an old strip of hose, too old and worn for its original function, and nailed it securely in strips along the truck; and now when trunks fall they hit a padded surface and trunk and truck both last longer and look better.

Additions to List of Old Employes.

Geo. B. Freeman, engineer I. & D. Div.....	1873
Al Swanson, engineer I. & D. Div.....	1875
Rush E. Eddy, engineer I. & D. Div.....	1871
Frank Woodman, engineer I. & D. Div.....	1876
John F. Hughes, engineer I. & D. Div.....	1878
Chas. Beebe, engineer I. & D. Div.....	1878
John Burns, engineer I. & D. Div.....	1879
Thomas McArdle, engineer I. & D. Div.....	1880
Geo. Ferguson, engineer I. & D. Div.....	1881
Morris Evans, engineer I. & D. Div.....	1881
John O'Leary, engineer I. & D. Div.....	1881
John Dunn, engineer I. & D. Div.....	1881
John Pfahler, engineer I. & D. Div.....	1882
Peter Mottershead, engineer I. & D. Div.....	1882
Ira Cottrell, engineer I. & D. Div.....	1882
Thos. Comfort, engineer I. & D. Div.....	1882
Frank Mayo, engineer I. & D. Div.....	1882
Jacob Hanson, engineer I. & D. Div.....	1883
Frank Neelings, engineer I. & D. Div.....	1884
Joseph Farrell, engineer I. & D. Div.....	1884
Wm. Hayes, engineer I. & D. Div.....	1884

Agent H. H. Miller, Forreston, commenced his service with the company in 1880 and has the following to say of his beginning:

I commenced work for the company November 11, 1880, as night operator at Byron, Ill. The C. M. & St. P. had bought the Chicago & Pacific Railroad which ran from Chicago to Rock River just east of Byron, and were extending it west, having the rails laid to about Leaf River. Mr. A. J. Earling was the assistant superintendent and was out all day looking after the work, and the evenings he spent with me in the office. There were but three night operators on the line at that time—Elgin, Davis Jct. and Byron. There was only one train dispatcher and he slept in the office at night, to be on hand if needed.

We had no train order blanks in those days and not much of any kind of blanks. I have copied a great many train orders on the back of Western Union message blanks with a pencil, the conductor did not sign it and I kept no copy. Of the old conductors of those times only F. M. Kelly is still with us.

From La Crosse.

Conductor D. D. Goodrich writes that his earliest employment with the company was in 1861, when he began on the La Crosse Division, thence to the P. du C. He enlisted in the army, but returned in 1865, running freight and extra passenger. He went to the River Division for several years, transferring to the Dubuque, putting in twenty-seven years there. Mr. Goodrich has been in poor health since last May and has been out of actual service.

The I. & D. Division (West) presents a claim to the medal for length of service, efficiency and present physical condition in the person of Passenger Conductor Elial Hoxsie, who is nearly 75 years old. He began railroading on the I. & M. in 1865, entered the passenger service on the I. & D. in 1869 and has been running a passenger train for forty-five years. He runs a local train averaging 200 miles every day in the week. Not long ago he handled about 600 passengers between North McGregor and Sanborn, which is a pretty good day's work. During his long years of service Mr. Hoxsie has never had a serious accident to himself or his train and has never been disciplined. He always has a pleasant word and smile for every one and is popular with the traveling public. He can work his train with less apparent effort than many men who are twenty years his junior and he can board and alight from a car with the ease of a boy. Moral: Always be cheerful. It keeps you young.

Correspondents, please note. All monthly contributions of Personals, Special Commendation, Locals, etc., must be in the Editor's hands by the 20th of each month to insure publication in the following magazine.

Safety First

A. W. Smallen.

"Safety First" Launched at Mobridge.

On September 30 the first meeting of the "Safety First" movement on the Trans-Missouri division was held at Mobridge. Everything was arranged by our superintendent, Mr. F. G. Hill, to hold the meeting in the Pastime Theatre building, which was an ideal place. The meeting was called to order by Mr. Hill, who in a few well-selected words, introduced Mr. Smallen, chairman of the general safety first committee, who talked for some time on the object of the organization. This was just what we wanted him to talk about and everybody listened attentively to what he had to say, for some of us, and in fact most of us, didn't exactly understand the full meaning of "Safety First." The attendance was as large as could be expected, owing to the heavy business on the road, and much enthusiasm was manifested by every one who was present. In fact, those who were able to be present were glad to be there, for when we began to select our committeemen Mr. Smallen practically turned the meeting over to the audience, who conducted it in a very satisfactory manner, and we feel that no mistake was made in selecting our committeemen.

George Sheldon, selected for the engineers, is one of the pioneers on the P. S. and has always been an advocate for safety. Ed Ogden, for the conductors, is equally as conversant concerning the safety of all concerned. C. A. Robinson, for the trainmen, and Carl Baxter, for the firemen, and J. L. Caldwell, for the switchmen, were elected only after a hard-fought battle, which proves their eligibility on the committee. J. B. Duvall, for the agents and operators, had the most opposition, and some even said that Jimmy offered a cigar for their votes. But he has plenty of friends at Mobridge who would vote for him for governor should opportunity ever afford it.

The roundhouse men, car men and section men not being well enough represented at the meeting to make their selection, we are unable to state who their committeemen will be.

Each of our division officials gave us a short but interesting talk; also our newly-elected committeemen. This was much appreciated by all, for it brings about that good old "get together" spirit. It leads to co-operation and it is by co-operation that a railroad is built. It takes co-operation to support it after it is built, and that is one of the strongest supports of the "Safety First" movement. Most of the pictures shown upon the curtain were carelessness of employees, yet some of them showed carelessness upon the part of the company.

These were lessons to be studied, for they were of every-day occurrence. Everybody was well pleased at the way in which they had spent the afternoon. We were well pleased at seeing our division officials all together, and I want to offer a suggestion that at another meeting let's use the camera. "Safety First" is launched on the Trans-Missouri Division and it is one of the best ships afloat.

If we apply the words "safety first" to our own walks in life we might say that it means advancement, for by doing something to save our fellow man from an accident is advancement in our line of work as employees. We are all giving the company our best service we know how to give, so let's assist them along the lines of "Safety First" by co-operating with them, and let us make the Trans-Missouri division an example that will be noticeable to all.

Respectfully,

V. M. GRAYBILL.

Miles City Division.

Every sixteen seconds of every day in the year a man is injured in railroad and industrial accidents.

Every fifteen minutes a man is killed in railroad and industrial accidents. In railroad and industrial accidents last year 2,035,000 men were killed or injured. These are the appalling figures to the inauguration of the "Safety First Movement," a meeting to promote which was held at the Empress Theatre recently, which was addressed by A. W. Smallen of Chicago, general chairman of the Safety First Movement, and by local speakers. Foreman Doc Tanner and Engineer Winsor and others made brief remarks as to the means by which the Safety First Movement could be best put into practical operation. The address of Mr. Smallen and the brief talks of the local railroad men were listened to with intense interest by an audience of about 300, composed chiefly of Milwaukee employes.

After the talks had ceased, stereopticon views illustrating the causes of accidents and the means that are being used under the new system to prevent them were shown and were forcible arguments in support of the movement. Two committees, one from the employes on the road and the other from the employes at the Milwaukee shops, were organized. The list as far as completed is given below:

Road Committee—Superintendent Spencer, Trainmaster Dow, Chief Dispatcher Campbell, Roadmaster Olson, Traveling Engineer Brooks, Chief Carpenter Lorimer,

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Claim Agent Shaw, Special Maintainer Dunn, Conductor Casey, Brakeman Ellingson, Engineer Winsor, Fireman Holmes, Yardman Gordon, Agent Cochran of Forsyth, Operator Cedarstone of Roundup, Section Foreman Borden.

Shop Committee—Superintendent Spencer, District Master Mechanic Anderson, General Foreman Tanner, Assistant Engineer Murray, Roundhouse Foreman Stackey, Storekeeper Rivers, Machinist Feely, Car Repairer Lynch, blacksmith (to be elected), boilermaker (to be elected).

"The purpose of the Safety First Movement," said Mr. Smallen, "is to bring about means of co-operation between the railroad companies and the employes on the road and in the shops that will prevent injuries to life and limb of employes."

Mr. Smallen then gave the figures with which this article opened. "It was not an official but an employe who was injured or killed," he continued, "and the suffering that the movement seeks to prevent falls on the dependent wives and children of the employes. The only thing needed to make the movement a complete success is thorough harmony and co-operation between the employes."

"The Safety First Movement was adopted in August, 1912, on the Chicago, Milwaukee & St. Paul road, and the results have been very encouraging. Employes like it, are enthusiastic about its benefits to them, and urge its adoption on other lines. No movement of the kind has grown so rapidly in public favor and 275,000 miles of railroad are now operating under it. All the orders of railroad employes have endorsed the movement."

From the Platte Line, S. C. & D. Division.

Dear Editor: It is with great pleasure that I read the different articles from the employes in our Magazine, which we receive through the office of Mr. M. F. Smith, general foreman, and for which we are very thankful.

The articles on Safety First are especially interesting and give us much encouragement, opening our eyes more and more to the best interests of our company as well as to our own. If Platte roundhouse were not so far away from Sioux City, we would surely be on hand to attend the Safety First meetings. But, out here, we get our great Milwaukee Magazine, which brings us the news from all over the railroad.

The work as roundhouse foreman on the Platte line is quite varied and interesting, and my experience of six years at this end with Joe McDonald, one of the best helpers, has made me acquainted with every part of a locomotive and much side-line work.

Yours for the good success of our fine Magazine and of our company,

A. J. VANDERBOOM,
Roundhouse Foreman.

"At the initial meeting of the Safety First Movement on the Columbia Division, held in the Model Theatre at Malden on Wednesday night, November 19, 1913, the following committeemen were appointed by the superintendent or elected: Mott Sawyer, chairman; J. J. Murphy, W. J. Jordan, F. Buchanan, R. W. Gallagher, G. A. Larson, E. McGee, J. M. Dorsey, L. H. Truesdell, Harry Maughan, Henry Driscoll, Matt Leyde, W. A. Chubb, F. R. Byers, R. D. O'Connell, R. J. Bryant, E. D. Parks.

The election was prefaced by well chosen and appropriate remarks by the chairman of the local committee, who introduced the chairman of the general safety committee, Mr. A. W. Smallen, whose address set forth forcefully the object of the meeting, viz.: to organize a committee to bring about closer co-operation among employes and between employes and the company; to reduce to the minimum careless and preventable accidents, which mean so much to the wage-earner, especially to the man of family.

Mr. Smallen was well fortified with statistics on fatalities and injuries due to railroad casualties, which greatly impressed the audience with the magnitude and far-reaching effects of deaths and injuries, which occur hourly on railroads of the United States.

After naming December 20 as the date for the first committee meeting, to be held in the office of the superintendent at Malden, the meeting adjourned at about 9 p. m. to the Columbia Theatre, where interesting stereopticon views were displayed, depicting hazardous methods of working in and about trains and cars, etc., followed by views illustrating the proper way, with explanatory talks by the general chairman.

E. M. GROBEL,

Secretary Safety First Committee.
Malden, Wash.

Safety First.

Milford, Iowa.

Dear Editor: If you have room in our Magazine I would like to have you publish this letter, which pertains to safety first and is for the benefit of section foremen who are young in the service, and for all who take chances that may prove disastrous, and this should be posted in all car houses as a reminder.

Never pass around a curve in an obscure place with a loaded push car or hand car without protecting against trains, no matter whether one is due or not; you are not only endangering your own life but those on a train that may come unexpectedly upon you.

In passing over your section keep a close lookout for defects in your track, and stop and repair any place unsafe or liable to become unsafe with a train or so more passing over it. Inspect all switches at least once a day and be sure they are in safe condition. Never allow your men to use tools or hand cars that are not in safe condition.

Never drop tools across the rail or in center of track. They are liable to be forgotten and cause a wreck. Never stand close to an approaching train; a swinging door or a lump of coal may hit you or your men, killing or badly hurting them. Never lie in your warm bed on a severe stormy night and take chances on your track being safe for trains. Get out and go over your track, but first notify the train dispatcher of the severe storm and to have all trains proceed with great caution until you have had time to examine your track; often the heaviest body of water does not strike the track for some time after the storm, so it is well to keep watch where water has accumulated till the danger has passed. In case of washouts or obstruction that you can't remove, start one of your men with a message to the dispatcher, notifying him of the location; also instruct your man, who should be provided with danger signals, to stop all trains; you do likewise going in the direction you expect the first train. Do not pile material closer than a foot from the rail of any track and 10 feet is better. When trains are passing, watch out for anything wrong and signal the trainmen to stop; they are supposed to be watching you while passing. Always provide your main line switches with locks, and in case they are broken and you have none to replace, notify the dispatcher of the location and he should have all trains stop and examine same before passing over it. This especially where switch lamps are not furnished. Even with a switch lamp it is not safe, as the lever may not be in place and cause a bad wreck. The engineer has his orders and knows to a certainty where he is to meet and pass all trains on his run, but he doesn't know what conditions your track is in. When the first wheel of his fast locomotive strikes your section he has in a great measure placed his life and the lives of his human freight in your hands. A little carelessness, a little putting off of what you should have done at once may send him and all on board into eternity.

H. M. Down,

Foreman Milford Pit.

Council Bluffs, Iowa, Dec. 8, 1913.

To the Editor *Employes' Magazine*: In the line of safety first I submit you here-with a few "Don'ts" that would be well to observe in connection with car department work:

Don't place a jack under a steel sill without putting a small piece of wood between the sill and jack.

Don't use ladders that are not sound; they may carry your weight with safety, but you are sometimes carrying a heavy load.

Don't drive broken draft timber bolts up into loaded cars before examining lading; you may strike an explosive.

Don't use a torch around a leaky oil tank car.

Don't have your hands on top of wheels when rolling trucks out from under cars; you are liable to get caught on truck bolster or end sill.

Don't place your hand between center plates to steer center pin; use a pair of tongs or a wrench.

Don't place trestles on soft ground without first placing a solid board foundation.

Don't lift one end of a heavy piece of material that you are assisting others to lift until all are ready; you are liable to catch somebody's hands or toes.

Don't put your hand in to feel of journals after brass has been removed on heavily loaded cars; the oil box is liable to break; use a hook.

Don't try to release a friction draft gear that has become set by striking it with a hammer; lay it on its side and expand its casing by steam or hot water, and keep on its side.

Don't handle compressed elliptic springs until you know your clamps will not slip.

Don't leave your lever in jacks when you are not using it, but always remove it; it may be accidentally tripped or struck by moving cars or engines on an adjoining track.

Don't use an iron bar in a ratched jack; use a wooden lever.

Don't leave material or tools on walks over night.

Don't make test of air brake until you know men are not working on the brake rigging.

Don't pinch cars to where they won't clear and leave them there.

Don't take chances on running slid flat wheels, especially cast iron wheels in cold weather.

Don't take chances in running journals that are cut; they are apt to burn off and cause wrecks and loss of life.

Don't leave any jack or tools that you have found unsafe where others unknowingly would take and use them.

Don't use tools that are worn out or in any way unsafe.

Don't leave any tools or material on top of cars that are being switched.

Don't leave a car with partly fastened handholds to be switched.

Don't depend too much on jacks, and whenever possible run your truck in towards the center of car instead of running it out.

Don't run trucks out from under cars unless your jacks stand straight and on good foundation.

Don't strike a file with a hammer; many an eye has been put out by doing so.

Don't make any tool out of a file unless you have it properly annealed.

M. P. SCHMIDT.

Safety First.

At the last Safety First committee meeting I was requested by our chairman to write a piece for the Employees' Magazine, which I accepted, as the S. C. & D. division has not been represented in the magazine as much as I think it should be. I am on the committee for the brakemen and want to try and do all I can for my fellow men.

The word "safety" is the first word in general rules in the time card, so that shows it has been adopted several years by the company, but has not been lived up to by all employees. I as well as others have not lived up to safety first as strictly as I should have done, until the last two years since the safety first question has been impressed on my mind. I see what chances I had taken and feel it has done a great deal for me in my line of work.

To handle the hauling in view of avoiding all accidents is a step towards making this division the most up-to-date line on the Milwaukee system. Great responsibility rests on each employe of the road, and that is to guard against all unsafe conditions. Watch for broken brake beams, hot boxes and all defects on cars, as they are often the cause of serious derailments and other accidents. Always be alert and on the job and you are doing the greatest thing to promote the safety conditions of your train. "To eliminate all accidents" is a great motto, but by living up to the phrase we would satisfy the cry of the public.

During the past year and a half I have been on the Safety First Committee. I am trying to do all I can to remedy the defects in our operating system. Our officials have given these reports strictest consideration and have taken quick action on everything, for which I wish to thank them. Boys, there is a great field in front of us, and by working constantly together we can accomplish a great many things and in the end make a better S. C. & D. division.

EARL MURPHY.

Mitchell, Nov. 14, 1913.

To All Section Foremen on S. C. & D. Division:

At the election of members to the Safety First Committee I was elected to represent you at Safety First meetings. It is desired that you should give the Safety First Movement the heartiest co-operation. You no doubt receive the Milwaukee System Employees' Magazine. Read it carefully and note the illustrations giving the dangerous positions termed "wrong way"; also the illustrations giving the safe way to do the work.

The Magazine is open for all employees and it is desired that you should write an article for publication in the Magazine, same article treating on Safety First and co-operation in promoting the same, and confine your article to our department and be watchful and loyal to the cause, and if you see a safer method of performing a work than now in use do not be slow about letting it be known through the columns of

the Magazine, or write to me, giving details in regard to your method, and I will forward same to proper officials for consideration.

From time to time I will let you know the most important issues which come up at our meetings. Write to me and let me know of any way you can assist and cooperate with us in this, the greatest of all movements, to prevent destruction of life and property.

E. MARTINSON,
Foreman Section 30.

"Safety" by Co-operation and Education.

Mr. B. I. Salinger, District Adjuster, Sioux City, writes:

"In the United States accidents to railroad employes have been constantly decreased since the inauguration of the 'Safety First' movement. In connection with the safety measures adopted by practically all of the railroads it is strange to note that many of the serious injuries sustained are directly caused by the violation of rules established by the various companies; rules which are thoroughly understood and constantly called to attention of employes by the company. For instance, it is worthy of note in referring to the reports of the interstate commission of the past few years, the number of railroad employes permanently injured and maimed by the adjusting of knuckles and draw-bars with the feet and the attempting to ride pilots of road engines. No well-informed railroad man will for the moment doubt that every effort known to railroad operators has been adopted to prevent these acts of indiscretion—the result being the increase of accidents of this character rather than the decrease—and by force of necessity they have been compelled for the good of their own employes where rules have failed utterly to try by education and co-operation to help decrease not only accidents of this kind but all kinds.

"The average individual who works for himself or in pursuit of happiness will take more chances with his life and limb than it is necessary for him to take to perform his duties. There will be no change in this popular disregard for personal safety until there is an established public conviction, an active yet subconscious state of mind that automatically thinks of 'Safety First.'

"No employe or employe designedly exposes himself or those who help him to harm, by reason of the things which have caused the increase of accidents wholly responsible from gross violation of rules. We must by co-operation, education, and constantly bringing it to employes, create the same condition in minds with reference to accidents as exists in the minds of the public with reference to contagious diseases, and by co-operation and education along these lines hope to place a yellow placard of danger sufficiently in the minds of employes to have them stop and take that nec-

essary precaution which will avoid the loss of life and limb or the loss of their service to their families.

"To accomplish real 'Safety' the slogan must be education in order to produce in the individual mind of each employe an automatic, sub-conscious, ever-present thought to look out for himself first and the other fellow always.

"Safety committees are good things, but they do not go far enough and cannot hope to accomplish results except through the absolute co-operation of men and work along educational lines. They must educate the worker, the foreman and the official. All must be thinking of the subject, each individual a committee unto himself, working in co-operation with all other men from the standpoint of real interest in preventing accidents, stopping waste, and avoiding suffering to themselves and their families and disability to their fellow men. When all employes and officials will so regard accidents and the conditions that cause them, the problem will be solved."

Meetings of the committees are held once every month, and employes are put to no expense and suffer no loss of time in attending them. The employes serve on committees for six months and 'it is the duty of the committeemen to be on the lookout for dangerous conditions and to prevent fellow workmen from doing their work in a hazardous way.

The railroad company furnishes the employes without cost a safety first postal card, and whenever he finds a condition he believes dangerous he is to write a statement on the card and mail it to the chairman. At the next monthly meeting it is taken up for consideration and the suggestion either adopted or turned down. Men are solicited to make reports and suggestions to promote safety and may be assured that they will be given free and fair consideration by the committee. The experience on the parent line has been that the suggestions made by employes have been found good in most cases and have been adopted, with the result that there has been a substantial lessening of the number of injuries.

So. Minneapolis Shops.

Minutes of Safety First Committee Meeting, held October 3, 2 p. m.

In the absence of the chairman, Mr. Mac-Millan, his assistant, Mr. Dimmitt, called the meeting to order.

The minutes of the last meeting were read and approved as read.

Mr. Wandberg urged more careful observance of rule in regard to picking up tools and material and keeping shop in neat and safe condition.

Mr. Wandberg also reported that the fly wheel guard had not been applied to flue machine in boiler shop. This guard had been completed some time ago and had not been applied owing to the machine being constantly in service. He also reported

that the guard was ready to apply to the six-spindle press in the boiler shop. Mr. Dimmitt appointed Mr. Turney to see that these guards were applied at once.

Mr. Steenberg reported that nearly all set screws with exposed head had been removed and that pulleys on line shaft had all been guarded. Mr. Wandberg reported having corrected one of the dangerous practices since the last meeting as follows: It had been customary to hook cable from transfer table to shop engines before the men working on or under shop engine had finished their work. This practice Mr. Wandberg ordered discontinued to prevent any possibility of injuries to men working on said engines due to the possibility of engine being accidentally moved without warning.

Mr. Turnbull reported dangerous condition behind flue pile in the boiler shop and stated that he did not know of any remedy for this condition until the completion of the new boiler shop, which will allow more room to properly care for the flues. The chair asked Mr. Turney to investigate as to whether or not it would be practicable to have gondola car set near boiler shop to be used for storing flues and material.

Mr. Hoiem reported that the men from the machine shop bringing in springs for repairs throw them on the floor in his way so as to block up the passage way. He suggested that these springs be properly piled, as they would then take up less room and there would not be the possibility of injury from any one falling over them. Mr. Turney advised that he has this matter up with Mr. Erickson and will see that the men bringing in these springs for repairs are properly instructed.

Mr. Hoiem also reported a leak in pipe to second steam hammer in blacksmith shop. The chair referred this to J. B. Neese for action.

Mr. Marchesault reported that the picking up of tools and material in machine shop was being carried out. He reported that the tee stacks, which should be removed from the benches when not in use, have occasionally been found in the benches in the morning, presumably having been left there by men using them at night. He reported that the space around the shears was properly cleaned up daily.

Mr. Anderson advised that no dangerous condition had been brought to his notice since the forming of this committee.

Mr. Mullady had no further suggestions to offer, as the conditions in the blacksmith shop had been covered by Mr. Hoiem.

Mr. Erickson had nothing further to report except that when the new machinery is completely installed he will be able to keep the shop in better condition.

Mr. Erickson requested that shafting (2½ inches in diameter) for new machinery in blacksmith shop should be hurried by store department.

Mr. Turney suggested that the next meeting be held in the general foreman's office

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on account of too much noise hammering near place where meetings have been held, on storeroom, upper floor.

Mr. Steenberg reported careless chipping and cutting off of rivets and nuts on ash pans, cylinders, grates, etc. He insisted on the use of screen or broom as necessary to prevent injury by flying pieces of metal.

Mr. Dimmitt reported that the screen provided for protection of employes working near where the babbitt is chipped from driving boxes has been painted in jest, presumably by some apprentice boy or other person given to frivolity. Mr. Dimmitt said that such practices should be discouraged, as Safety First is a serious matter concerning the lives and safety of employes, and guards installed to protect workmen should not be made objects of ridicule.

Mr. Neese advises that he stops other work and repairs leaks in steam pipes in roundhouse and shops promptly on general foreman's order, and that when he can so arrange his work he repairs any leaks not reported by the general foreman.

Mr. Myers reported that various men from Mr. Jones' gang in roundhouse had interviewed him three times since the last meeting, asking that some sort of partition be provided to keep out the smoke and gas from the stalls in roundhouse use, and to assist in keeping warm the stalls in shop use under Mr. Jones. He reported that an engine in the roundhouse had been fired up while not set with stack beneath smoke jack, filling the roundhouse with smoke and gases to such an extent that it was impossible for the men to remain at their work.

Mr. Dimmitt suggested that a letter be written to Mr. John Larson, foreman B. & B. department, to have smoke stacks applied and put in proper condition.

Mr. Turney said that he was in favor of the partition above mentioned, and Mr. Wratten, while district master mechanic, had suggested that the partition be installed.

Mr. Steenberg made a motion, which was seconded by Mr. Wandberg, that a resolution be adopted favoring the building of the partition above mentioned. This petition is to be signed by the members of the Safety First Committee and forwarded to Mr. Smallen.

Mr. Steenberg reported that the nuts on large screws for drop pit in the machine shop are stripping and unsafe. Three engines were dropped due to the breaking of these nuts during the past six weeks. It has been suggested that the nuts be made of bronze or other metal of greater tensile strength than the cast iron nuts now in use. Mr. Steenberg further reported that the general condition of the drop pit is dangerous and dilapidated. The I beams beneath the table are bent. The foundation where the old table used to be is insecure. The back end of pits lack proper foundation, making it dangerous to shop heavy

engines on such pits. The transfer tracks in some places have settled six to eight inches. Mr. Steenberg moved and Mr. Carr seconded it that a request be made to have the drop table inspected and put in first-class condition, and that a more suitable material be used for the large nuts or the lowering screws as suggested above.

Mr. Bradbury referred to the congested condition between pits in machine shop where two engines on adjoining pits are stripped for boiler shop. He advised that at Tacoma shops pits for pipe, etc., are built in between the engine pits proper and that when the engines are stripped all pipe and trimmings are placed in these auxiliary pits, leaving the floor space between the engines clear. Steel trap doors are provided for the auxiliary pits. These doors are flush with the floor. It was resolved that the committee members go into committee of the whole to investigate as to the advisability of recommending installation of auxiliary pits in the machine shop, report to be made at next regular meeting.

Mr. Bradbury also referred to the fact that only one ladder was available for use of the gang in which he is employed, rendering it necessary for the men to get to the top of the engines in an unsafe manner. Mr. Steenberg advised that some ladders were being made in the wood shop and that ample provision would be made in the future.

Mr. Myers reported the crowded condition in the air brake shops and the necessity of enlarging his shop to take care of electric headlight repair work. This item was to be referred to Mr. Rogers by Mr. Dimmitt.

Mr. Myers also suggested that some improvement be made in the location of doors and runways between roundhouse and air brake shop.

Mr. Bradbury reported that in some cases old pipes and scrap material from engines was not promptly removed from between the pits when the engines left the shop.

Mr. Wandberg related at length several things in regard to safety first which had been brought to his attention while on a trip over the Santa Fe railway. He referred to "Danger" signs placed conspicuously in roundhouses, which are not to be moved on account of men working on them or under them. He advised that both at Kansas City and Topeka the yards and shop grounds were kept absolutely free from rubbish and litter of all kinds.

Mr. Myers suggested that some one be delegated to remove torpedoes from seat boxes of engine coming in to shop for repairs. Mr. Turney agreed to have the tank repair man attend to this.

Mr. Myers also called attention to the large timbers with up-turned spikes carelessly left near the new boiler shop by the bridge and building department under F. E. Rice. It was suggested that a letter be written Mr. Rice informing him of this

condition and requesting a discontinuance of any such practice.

Mr. Neese referred to the spikes remaining in the ties near the pool. The track having been previously removed, the spikes were liable to trip persons passing over this part of the ground. This matter was referred to Mr. Neese to see that the spikes were removed or driven flush.

Mr. Turney reported bad walls and bottom in pits in stalls Nos. 23, 4 and 10. The pits in Mr. Jones' gang will not hold the engines safely. Mr. Dimmitt suggested that a work order be placed on B. & B. department to have the pits in roundhouse repaired and put in proper condition.

The election of officers for the new committee then took place.

Mr. MacMillan will be chairman by virtue of his office.

Mr. Turney was unanimously elected first vice president.

Mr. Steenberg was unanimously elected second vice president.

Mr. Carr was unanimously re-elected secretary.

Mr. Steenberg moved and Mr. Myers seconded it that the meeting be adjourned. The motion was carried.

Respectfully,

GEO. CARR,
Secretary.

Safety on the English Railways.

The "wireless" control of railway traffic is now the subject of experiment on two English railways, as already stated in *The Standard*. Two distinct systems are under test, neither being the invention of an Englishman. These facts in themselves show the breadth of mind of English railway engineers and the genuine anxiety which exists to render impossible such unfortunate accidents as have recently shocked the public. It remains, however, to be seen whether "wireless" control can possibly fulfill the requirements of our complex systems, and also whether, in the event of their passing all the tests, the necessary alterations and installations can be accomplished without the imposition of higher fares.

Speaking generally, the railway authorities of Great Britain are by no means agreed that "wireless" control offers the simplest means for securing absolute safety in travel. It has to be remembered that for every scheme which sees daylight, dozens are cast aside whilst in model or paper form. The engineering and traffic departments of all our main lines are metaphorically littered with control schemes which have received consideration.

Some railways, conscious of the fact that "wireless" is still in its infancy, and, therefore, a medium to be handled very charily, have concentrated their attention upon

"audible cab signaling." Judging from the progress which is being made—and it is necessarily slow, as with all matters of such grave importance—the cab signaling enjoys the greatest favor. How cab signaling differs from more modern schemes involving "wireless" will be explained later.

The demands of railway systems of the United Kingdom are very exacting. Any system of control which is brought to their notice must meet the requirements of high speed long distance traffic, frequent services of short distance traffic, and the prevailing custom of diverting trains from main to relief lines, and vice versa, in order to permit the interlacing of these two kinds of traffic. If the systems are electrical in principle they have to withstand the humidity of our atmosphere and be capable of instant repair by such men as are generally employed in signal work.

What the British railways require is a means of signaling which will render collisions with other trains impossible, and yet at the same time keep the driver sufficiently alert that he may notice any obstructions of a foreign nature which may tend to wreck his train. There is a strong feeling that absolutely automatic working is undesirable, inasmuch as it may lead to carelessness.

The "wireless" schemes of train control now under test have been fully described in *The Standard*. That now engaging the attention of the Midland Railway was described on June 29, 1912, on the occasion of trials on the Stratford-on-Avon and Midland Junction. The scheme, which is highly ingenious and capable of performing feats even beyond the present-day requirements of the companies, is based upon the electrical principle of induction—the ability of an electric current to create another current in a wire brought temporarily within its radius of influence. In practice one current is made to circulate through wires fixed beneath the footboard of the carriage; the other is induced in a wire placed parallel with one of the rails alongside the track.

The trials at Stratford-on-Avon showed that it was possible by this system not only for a train to bring itself automatically to a standstill when within a danger zone, but for a signalman to check a train obviously running to danger. Two trains, each equipped with the necessary apparatus, checked each other's progress when within the same section, and one train replaced at danger a signal inadvertently left clear by the signalman. Demonstrations were also given to show that messages could be sent between a train and a signal cabin while a train was traveling at full speed.

The wireless system under trial by the London and South-Western Railway at Hampton Court was described in *The*

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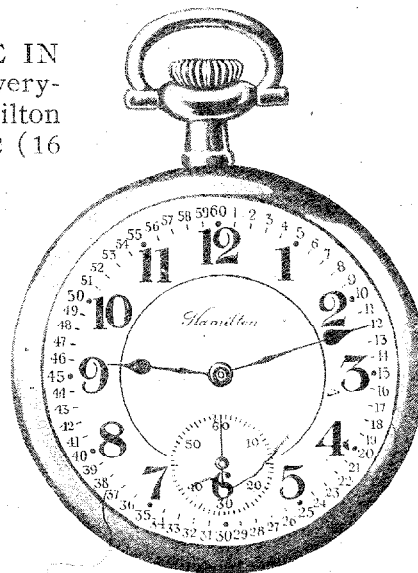
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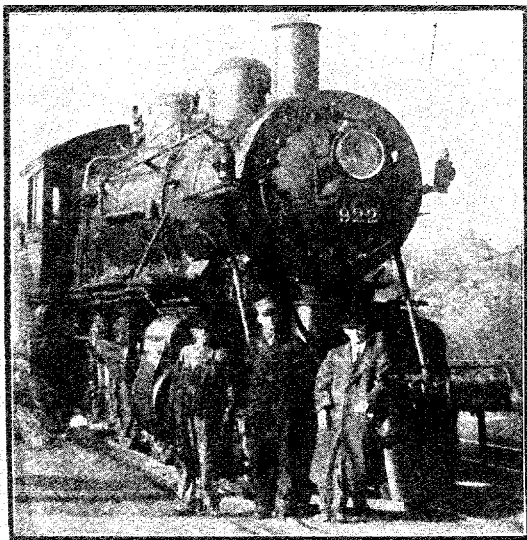
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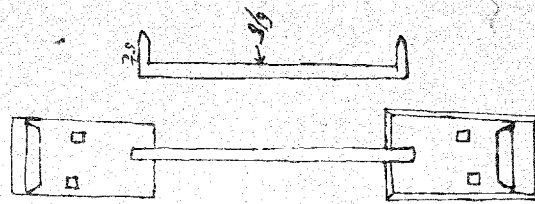
Lancaster, Pennsylvania

Standard on August 27 last. This was less pretentious in its claims, but was more truly "wireless" in the customary use of the word. Here a "following" train was brought to a standstill by the "short circuiting" action of the wheels of an engine on the rails in a section immediately ahead. The trials fulfilled all claims. Both of these wireless systems, it will be seen, automatically check a train which is in danger of running into another train, but they tend to relieve the driver of responsibility by shutting off steam and performing such operations as otherwise require him to be always at his post.

Cab-signaling is now in operation on the Great Western and North-Eastern railways. By this system of signaling the condition of the line as known to the signalman is indicated to the driver of the train by means of a whistle and bell placed before him on the cab of the engine. No control, however, is exercised upon the steam or brakes, the promptitude of the driver being relied upon for this purpose. The driver has always to be on his mettle, but in times of fog and bad weather he has this local confirmation of the position of the signals. This system is also electrically operated, the current being "picked up" by the engine through a plunger which strikes a metal ramp placed at intervals along the track. A representative of The Standard, who traveled on an engine equipped with this audible signal when the system was under trial on the Fairford line, was yesterday informed that the system has been since applied to the main line between Paddington and Reading, and that many engines are now equipped with the necessary apparatus. The North-Eastern Railway, which is experimenting with a similar system, is stated to be making similar progress.



I. & M. Division Crew, Kenyon, Minn.



Milford Gravel Pit.

Dear Editor:

I am a foreman of many years' experience in track work and I believe we should use our knowledge gained by experience for better and safer roads. We should also study ways to save material and invent new ways for strengthening track without extravagant outlay of money. We all know that the tie question is a serious one; that ties are getting so scarce that we are forced to use the softest of woods, and these of course do not hold spikes well. Tie plates of various kinds are used with more or less success. I have found in my own experience that tie plates do not in all cases hold the track to gauge on cedar and pine ties, and I am sending you a rough sketch of a tie plate that I believe will be an improvement and greatly strengthen the track, holding true gauge at little additional cost.

It consists of a tie plate 6" wide, 10" long and $\frac{3}{4}$ " thick, with holes punched for two sizes of rail and a hole near the inside end of rail to engage the tie bar, which is $\frac{5}{8}$ " square iron, made the same as a spike on both ends, and is driven through the end holes as shown in the sketch. The outside of the rail is held by a projection on the plate, which extends $\frac{3}{4}$ " over the base of the rail, and no spike is necessary. The inside spike holds the rail snugly under the projection on the plate and a toe spike may be driven at the outside end of the plate where necessary. Many wrecks are caused by spread track, and the cost of one big wreck would buy rods enough for a whole division.

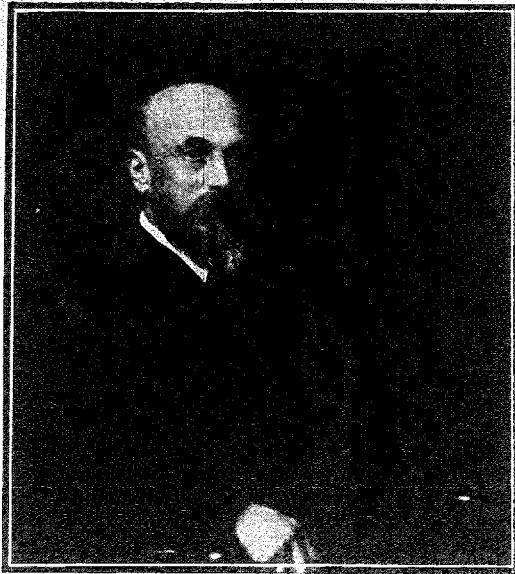
H. M. DROWN,
Foreman Milford Pit.

Safety First Committee Meetings.

The following committee meetings were held during the month of December: Mitchell on December 1, Dubuque Shops December 2, and at Miles City, Mont., December 6, and Milwaukee Terminals December 8. A complete committee attendance was present. All suggestions brought up at these meetings were acted on.

An initial meeting of the Safety First Movement on the Columbia Division was held in the Model Theatre at Malden on Wednesday night, November 19, 1913, and committeemen were appointed.

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Mitchell D. Rhame, for many years connected with the Engineering Department of the Chicago, Milwaukee & St. Paul Railway, died at his home in Minneapolis on December 9, 1913.

Mr. Rhame was born October 12, 1846, at East Rockaway, N. Y.

He graduated from Yale in 1869 and then took a one-year post-graduate course at Sheffield Scientific School.

Upon leaving school Mr. Rhame entered the service of the United States government as assistant engineer and was assigned to a survey of the Illinois River, with headquarters at Peoria.

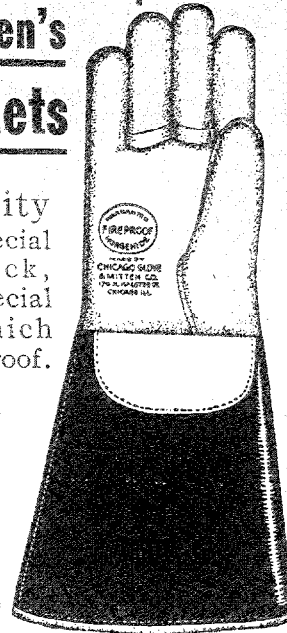
Mr. Rhame entered the service of the Chicago, Milwaukee & St. Paul Railway Company as assistant engineer on March 4, 1881, afterwards holding the titles of division engineer from 1891 to 1905; engineer of construction, 1905 to 1908; district engineer from 1908 to September, 1913, when he resigned on account of ill health.

Among the more important works handled by him during his connection with the Chicago, Milwaukee & St. Paul Railway Company were the building of the South Minneapolis shops and terminal facilities, the construction of the various new lines, viz., Farmington to Mankato, Faribault to Zumbrota, Woonsocket to Wessington Spring, Bowdle, S. D., to the Missouri River; the revision and double tracking of the River Division from St. Paul to La Crosse, and finally the construction of 200 miles of Puget Sound Line.

Early in November, the wife of Section Foreman Wm. Machas, Truesdell, heard a train passing about 2 a. m. and noticed a peculiar sound, which she at once took to be a broken rail. She awakened her husband, who went out and found eight inches of the rail broken off. He roused the section men and had the rail replaced before daybreak. Mrs. Machas is entitled to the thanks of the company.

Firemen's, Engineers' and Cranemen's Gauntlets

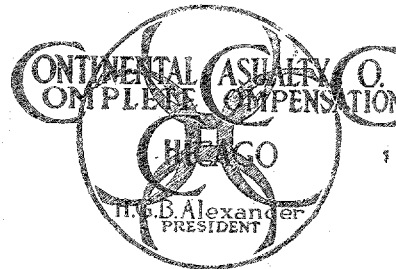
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Mechanical Department

Talks With Engineers.

G. T. Spaulding, Traveling Engineer.

First Engineer—While running at a speed of twenty to sixty miles per hour, and when approaching places where you have to stop or slow down, do you close the throttle and leave the reverse lever in the running notch, or in other words, hooked up near the center?

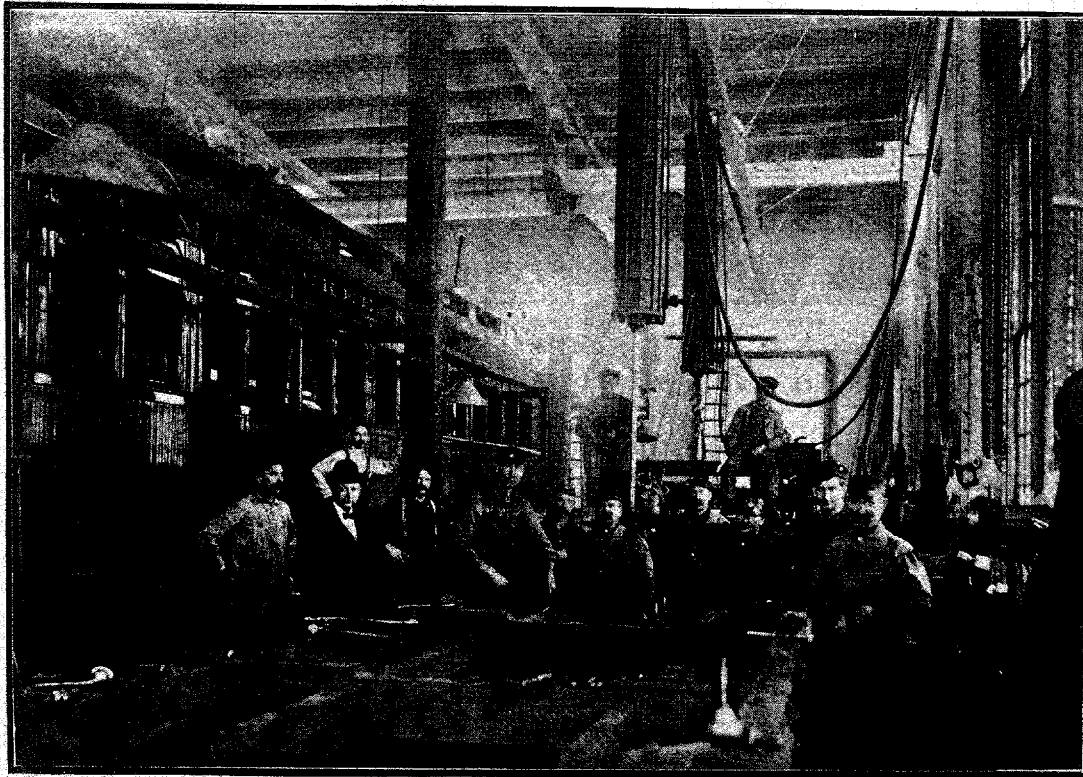
Second Engineer—It would not do to unlatch and let down the reverse lever running at high rates of speed, so I wait until I slow down to about twenty or twenty-five miles per hour, then I let the lever down.

Third Engineer—I let the lever down a few notches when I first close the throttle and continue to notch it down gradually as I slow down.

First Engineer—Did you ever stop to think what takes place when you close throttle while running along and leave reverse lever up near the center? All lubrication that may have been in the cylinders and valve chests at the time you closed the throttle is actually burned up, and the parts contained therein are left dry and hot and the efficiency of the engine is reduced perhaps 20 per cent until more lubrication comes down.

Second Engineer—How is it burned up?

First Engineer—At the time we closed the throttle we were working steam expansively, in other words, short valve travel, short period of admission of steam at the beginning of the piston's travel, the valve lapping the port early in the stroke, the steam just admitted being trapped in the cylinder, expands and follows up the moving piston, filling the space until the valve is moved so far as to exhaust the steam from the cylinder. Now, when throttle is closed no steam is admitted, to expand and fill the space made by the moving piston. As a result a partial vacuum is found in this space, which continues to increase until valve has moved to exhaust position, but in this case it will not be exhaust position, but will be admission for hot smoke-box gases to enter the cylinder, to fill the vacuum, passing through the valve chamber in doing so; we find the temperature in smoke box and cylinders to be about equal after about twenty revolutions of the drivers, after having closed the throttle with reverse lever in "hooked up" position. Is it any wonder we lose our lubrication, shorten the life of our cylinder and valve rings, and find our engine "logy" when we start after having stopped as outlined. In-



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stead of closing the throttle we should leave it a notch or two open (experience will teach us how much) until we slow down to twenty or twenty-five miles per hour, then gradually notch lever down and close throttle; in this manner we avoid cylinder vacuum, and a gradual cooling of cylinders takes place and we retain all our lubrication for starting, just the time we need it most.

Third Engineer—The method as outlined by you is only necessary with superheater engines, is it not?

First Engineer—No, sir, with all engines under all circumstances, and if you will take notice this is a very common fault with the average engineer.

A Letter from Tacoma.

Dear Editor:—I have just received and read the Magazine for November and I want to say what pleasure it is to me to hear of my old friends back along the line. There, however, seems to be far too great a shortage of news from the far West, and I want to remind the boys out here that our friends back East are waiting to hear what is doing out here, and it's up to us to keep our end up.

There are many interesting scenes and many things of which our friends would like to know. Here in Tacoma we have one of the most delightful cities in the United States and surrounding it are the Cascade and Olympic mountains and our wonderful harbor. The Oriental Dock, of

which Mr. Alleman has told you, is always a busy place. Twice a month the large ships of the Osaka Shoshen Kaisha come in, discharge and take on a cargo. The harbor is always full of shipping and now and then a battleship pays us a visit. Many industries are located around the shore, among them being some of the largest sawmills in the world.

We have, also, what few other cities can boast of, a magnificent snow-covered mountain almost in our dooryard. The Mountain That Was God overlooks the city and the Sound, and while it is sixty-odd miles away, it seems only a step, as if one could walk to its base and back before breakfast.

I noticed in the November number an article about The End of the Line, down at Gray's Harbor, but you will all have to see that picture of the sun going down across the water from Hoquiam to appreciate its beauty, and then, if you should be fortunate enough to see from this same wye the moon shining across the sea, you will agree that it is a sight never to be forgotten.

Now, there are, you see, a lot of things to write about, and many employes are there who can write if they would only try. I am a poor hand at expressing myself, so let's hear from someone who can do it better. Our Magazine is a great addition to our numerous blessings and it should be appreciated by every employe. Yours very respectfully,
MENZO RUSSELL,



Tell Your Passengers

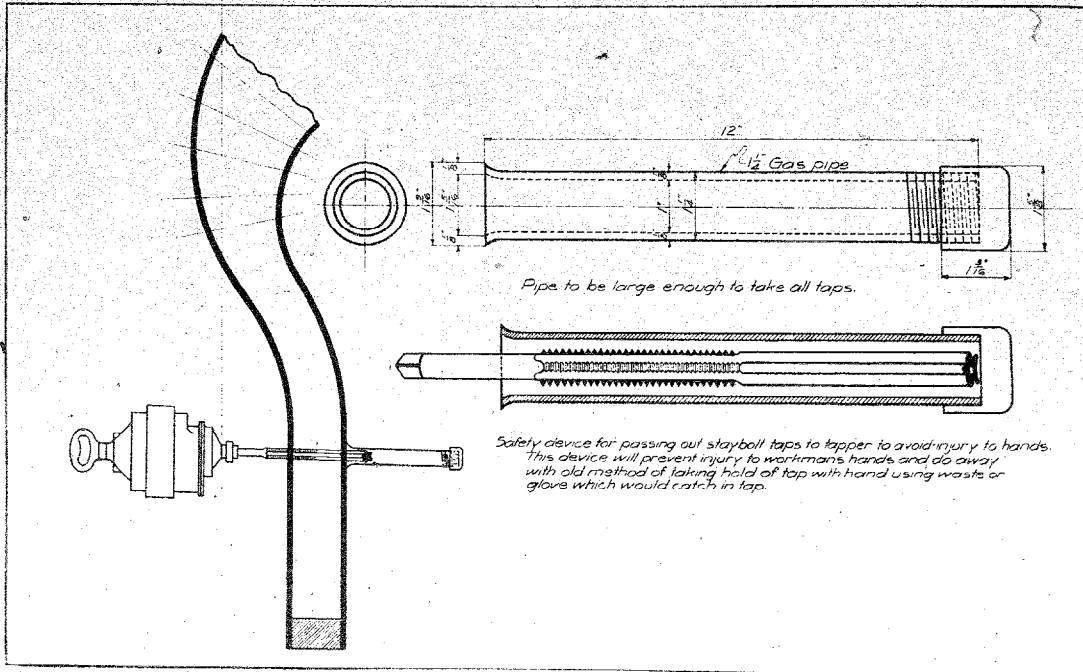
that the prices at Hotel Sherman average one dollar per day less than those of any other hotel on the same plane of excellence in all America.

Hotel Sherman City Hall Square Chicago

offers every luxury and convenience that the equipment of a three million dollar hotel can provide. 750 rooms—every room with bath. Service organized through years of experience. The unsurpassed cuisine of America's most famous restaurant, the College Inn.

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At Hotel Sherman	
Single with bath	Double with bath
\$2.00	\$3.50
2.50	4.00
3.00	5.00
3.50	6.00
4.00	Suites \$5 to \$15



Herewith is a drawing which shows a simple device that is strictly in line with the "Safety First" movement. There have been cases where boiler shop helpers have had their hands badly torn or injured otherwise when passing taps from inside of fire-box. This is due to using waste or glove in handling tap, and taking hold of same before motor had stopped spinning or before tap was out of the sheet. The tap taking hold of the waste in such a manner that it would not let go, winding the helper's hand around the tap or turning him upside down, and on several occasions has caused much more serious injury by just tearing out the palm of the hand.

This trouble we have overcome entirely by using a piece of old pipe about ten or twelve inches long with a cap screwed on one end. The other end belled out as shown on print so same would go over tap readily and have no opportunity to catch in thread. This you will also note does away with the waste or glove, as it is not necessary for the helper to touch tap at all, simply passing out same as it comes through the sheet, with the guard or holder.

Trusting you will find place in the magazine for same, I am,

Yours truly,

A. N. LUCAS,
General Foreman Boiler Work Milwaukee Shops.

Notes from Montevideo Roundhouse.

Robert Fisher.

Mr. J. C. Opie is the proud father of a fine twelve pound boy, who arrived in his home in time to be present at the family Christmas celebration.

Eugene Kurtz, day call boy, is back "on the job," after an operation for "enlarged gland." He is coming along fine now.

Francis Waldron, who suffered a serious accident to his foot while helping Engineer T. M. Bay hook up engine 8036 on November 23, is quite recovered and back at work.

The new heating plant at the foundhouse here has been installed and is certainly a great success. The filtering plant has also been completed and is working O. K.

Assistant M. M. Dimmitt was a visitor here recently.

Mr. T. S. Manchester, G. R. H. F., was a visitor here on December 10, and attended the meeting at the Auditorium on that date.

Superintendent F. M. Melin called at the roundhouse here recently and seemed well pleased with everything.

Henry Westgate, an "old-timer," has gone away on a vacation, the first in many years. We all hope he enjoys himself. He has been in the service for the past thirty years.

The roundhouse yard at Montevideo has been cleaned up considerably since Mr. Opie took hold, and he promises us more along this line.

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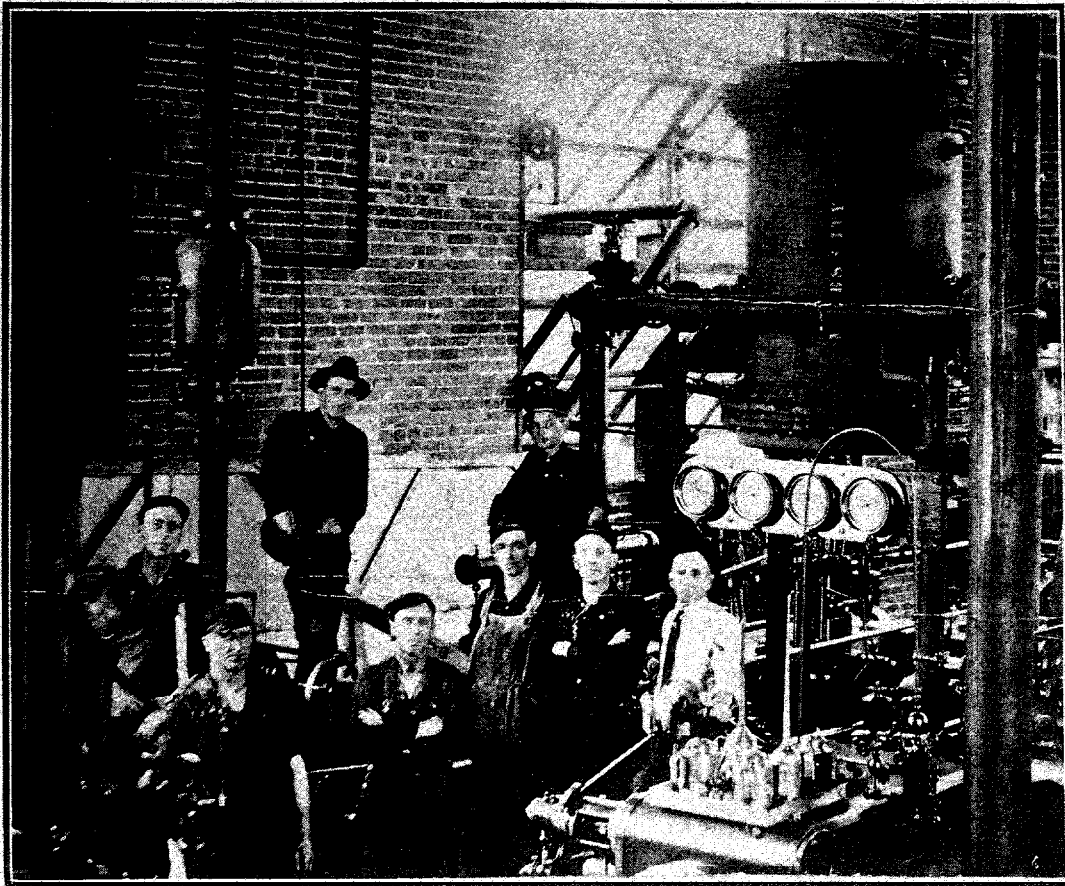
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Air Compressor, Miles City Shops.

To the Editor:—This picture shows part of the 1,200-foot air compressor recently installed in Miles City power house, and the steamfitters and steamfitters' helpers who equipped the plant with extra heavy pipe and fittings, in order to carry 150 pounds of steam, the plant having at present five standard firebox boilers, two Westinghouse engines, two Watertown engines, two air compressors, four pumps and numerous other connections, the work being accomplished in good order and satisfactory to the State boiler inspectors, and I wish to add, good accommodations by the foremen in general in doing work that was necessary and cutting the big threads on pipe, which was done very well, all helping to make the big job a complete success. Although the weather was very hot and in a hot place, no prostrations took place.

The entire change from low pressure to high pressure took place without delaying any part of the plant whatever, and I wish here to express my thanks to all those interested in this work. Mr. Eppert, steamfitter foreman, is most heartily satisfied with the work, although the steam heat system will have to be changed to suit the conditions, plans for same being already made. Yours truly,

A. VAN HALTERER,
Steamfitter.

Foundry News Milwaukee Shops.

Old Joe Yundt, who has been at the general foundry since May 1883, is now back at work after a severe attack of la grippe. Joe is 74 years old and we are glad to have him back on the job.

Burt Streeter, our electrician, is now convalescing at the Trinity Hospital, after an operation for appendicitis. He is in ward 3, third floor, and will be glad to see any of the boys.

A. W. Bair, foundry superintendent, takes this opportunity to thank his many friends who called on him while recovering from his operation. He reports himself as feeling fine and is back at his desk among the regulars. Mr. Bair has been in charge of the foundry since March, 1883.

The wheel foundry's new breaker, known as No. 3, is now at work breaking up all the large scrap on the road. This is a great time saver for the department.

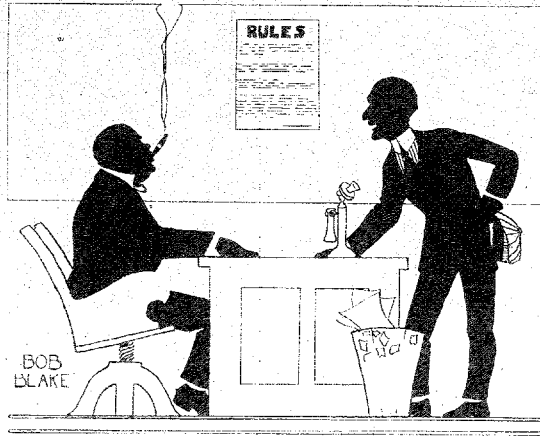
Stony Adamski, helper in the wheel foundry, has married a south side girl.

Joe Bura, one of our old helpers, found a belle and has now joined the benedicts.

Gus Totsky, one of our wheel moulders, is back on the job, after a month of sickness.

Reinhold Gundt is now out of the hospital and reports himself as feeling fine. He also had the "millionaire's" sickness—appendicitis.

Smiles



"Train Late Again, Eh?"

Cheese.

By James J. Montague.

Don't hanker for pork chops or beef steaks,
Says the government, eager to please,
If you can't raise the price, take official
advice,

And live upon crackers and cheese.
The tariff we've passed has put sirloin
Beyond you, but why should you care?
Go get in the habit of eating Welsh rabbit
Or succulent, soft Camembert.

Some good Gorgonzola for breakfast,
A half pound of Roquefort for lunch,
And some fromage de brie for your dinner
or tea

Will fill you with vigor and punch.
A big slab of Edam at midnight
Will drive sluggard sleep from your eyes,
And a Parmesan stew at about half past
two
Will prove a diverting surprise.

You'll soon lose your liking for mutton,
Fried liver you never will miss,
If for three meals a day you will just put
away

Large portions of pale porous Swiss.
And if by some chance you are weakly,
And feel that you can't hold your own,
Eat as much as you please of rich Lim-
burger cheese,
And people will leave you alone.

This diet that we've recommended
Is suited to old and to young;
It's made a great hit, and we're free to admit
It's the greatest idea we've sprung.
You say it's more costly than meat is,
That cheese costs a whale of a price?
Well, well! We should care! That's quite
your affair,

We merely supply the advice!

—Chicago American.

"Waterloo Avenged."

Lord Charles Beresford, when a young lieutenant in the navy, was what we call in the old country—a warm un.

When on leave of absence from the fleet, he invariably took his vacation in "La Belle France," always accompanied by a big ferocious looking bull-dog. Having to go to Lille one day, and seeing the train standing in the depot, he opened a compartment door, and took a seat inside, the dog of course perching himself on the seat alongside his master. By and by the would-be passengers began to assemble outside the compartment, but seeing the dog inside they hesitated to take their seats, as on the slightest encroachment on to their sacred domain the dog would arch up his back, and show two rows of formidable teeth. The station-master was appealed to. In vain that worthy expostulated—condemned Beresford and the dog to the land of Hades, but to no purpose. "If you want the dog out," says he, "then take him out." Being an Irishman, Lord Charles immensely enjoyed the joke. Silently creeping behind the car they uncoupled it, and away went the train.

Shortly afterward, the platform being deserted and everything quiet, he opened the compartment door and looked out, and realized that for at least once in his life he had been done brown. "Waterloo had been Avenged."

Contributed by George Holmes, Dubuque.



A Modern Weed Burner.

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It covers
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We offer, subject to prior sale or change in price, in amounts to suit purchaser, the FOLLOWING INVESTMENT BONDS:

<p>\$25,000 Omaha & Council Bluffs Street Ry. Co. First Consolidated 5s; interest January and July; principal due January 1, 1928. Price, 97 and Interest.</p>	<p>\$25,000 Chicago, Milwaukee & St. Paul Ry. Co. 25-year, 4% debenture; interest January and July; principal due Jan. 1, 1934. Price, 89½ and Interest.</p>
<p>\$25,000 Milwaukee Electric Railway & Light Co. First Consolidated 5s; interest February and August; principal due Feb. 1, 1926. Price, 102½ and Interest.</p>	<p>\$25,000 Chicago, Milwaukee & Puget Sound Ry. Co. First Mortgage Guaranteed 4s; int. Jan. and July; principal due Jan. 1, 1949. Price, 89½ and Interest.</p>
<p>\$25,000 Minneapolis General Electric Co. First Consolidated 5s; interest June and December; principal due Dec. 1, 1934. Price, 100 and Interest.</p>	<p>\$25,000 Milwaukee & Northern Railroad Co. First Mortgage Extended 4½s; int. June and December; prin. due June 1, 1934. Price, 100½ and Interest.</p>
<p>\$25,000 Chicago, Milwaukee & St. Paul Ry. Co. General 4½s, Series "C"; interest January and July; principal due May 1, 1929. Price, 101½ and Interest.</p>	<p>\$25,000 Chicago, Milwaukee & St. Paul Ry. Co. Convertible 4½s; interest June and December; principal due June 1, 1932. Price, 101½ and Interest.</p>

We invite inquiry regarding full particulars on the above bonds.

JOHN C. FINNEY

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THE Q & C CO.

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And most everybody knows that the Policy issued to Railroad men by us has made famous the

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—OF SAGINAW, MICHIGAN—

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At the Railroad Eating House.

A timid-looking little man took a seat at the counter of a railroad eating house and ordered ham and eggs. He looked bewildered, says The Railroad Man's Magazine, when the waiter turned his face toward the kitchen and yelled vociferously:

"A mogul with two headlights!"

A second later the little man said:

"Beg pardon, sir, but I'd like to have those eggs turned over."

"Blanket the headlights!" yelled the waiter.

An engineer next took his seat at the counter.

"Wheat cakes and coffee for mine," he said.

"Running orders!" yelled the waiter briskly, and turned to confront the next one.

"A beefsteak, well done," said the last arrival.

"A hot-box, and have it smoking!" was the information given to the cook.

"Some scrambled eggs, please," piped an old lady with trepidation.

The waiter turned around and yelled:

"Wreck 'em on the main line!"

A boomer brakeman noisily set down his lamp and mounted one of the stools.

"Let's see yer switch list," he commanded.

"Gimme a couple of battleships and a pan of Murphys on the main line and a string of flats on the siding," he ordered.

It was the waiter's turn to look mystified.

"Cut the cowcar off the Java train," continued the boomer, "and switch me a couple of life-preservers for a consolidation, and as it's a long drag to the next feed-tank, you better fill the auxiliary to its full capacity."

"Say," interrupted the biscuit-shooter, "I've only been here a week; you left me behind at the first stop."

"Excuse me," apologized the boomer, "I thought you were an old head. Gimme a couple of pork chops and some fried potatoes, and a side order of wheat cakes. Then, for the second course, you can bring me a cup of black coffee and some doughnuts. Fill up the lunch-basket, too, because it's a long drag to the next hash factory. Put the coffee in the bottom and fill the upper deck with sandwiches and pie."

"I got you, Steve," replied the waiter.—
The Railway Record.

A Section Foreman's Letter to the Roadmaster.

A section foreman on a railroad was ordering a list of supplies. He had completed his letter when he found he was in need of a "frog" for a switch. So his letter ran as follows:

Mr. Roadmaster:

Dear Sir:—You will please ship me some pick handles, spike mauls, spikes and wrenches.

Yours truly,

PAT HOGAN and a frog.

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The Claim Agent.*C. K. B.*

Here's to the claim agent, who always has work.

His labors and troubles he never does shirk.
From early at morn till late at night
He's trying so hard to do everything right.
First it's a wreck, then an accident or two—
Golly, it's tough on a man to do.
Ones' in Harper, the other in Sharp,
Only a couple hundred miles or so apart.
A wire to get busy, investigate quick—
Settle 'em up, don't stop and get sick.
It's got to be done and you might as well do it.

A puzzled brain, all flurried you sit—
Which will it be, Harper or Sharp?
For they're only a couple hundred miles apart.

You hurry and flurry—releases and blanks,
A thousand or two drafts on a dozen or so banks.

You hand out the money every which way you turn.

Count out the graft—how easy you learn.
Of all the soft money some people do get.
You see it, and know it, and then you regret.

Why did I do it? It's half thrown away.
A lot of explaining—that's all you can say.
You feel puzzled and worried, for you haven't a friend,

And right away quick for the doctor you send.

The office is full—and your desk piled high;
A dozen to see you, and you'll wonder why.
If you only had been a preacher, a lawyer or clerk

How much longer you'd live, with half as much work.

Talk about grief and work as you may,
The claim agent's always in quite a bad way,

With employes, lawyers, patrons and such,
To treat them all fair and not give them too much.

You figure it out, and of all your high aims
You're only a claim agent, so plug on and settle your claims.

“What is the difference between the quick and the dead?” a visiting catechist asked of a Sunday school class in a rural parish through which runs a famous motor road.

“Them that gets out of the way of the automobiles is the quick, an' them that doesn't is the dead,” came the astounding reply.

The “American attitude toward parents” may be said to lie at the base of this story. A caller at a certain house asked the little boy who answered his ring at the doorbell if he might see Mr. Budd.

“I'm Mr. Budd,” was the grave answer. “Unless,” the solemn shaver innocently added, “you want to see old Mr. Budd. He's my father, and he isn't in.”

6%

That is the dividend we have paid on savings for twelve years.

This is a mutual savings society operating under strict state supervision.

All of our net earnings are divided equitably among our shareholders.

Dividends are declared July 1 and January 1 each year.

Write for a booklet explaining our plan

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Seattle, Washington

At Home

Anna M. Scott, Editor

The New Year.

Child of Eternity, child of silence,
Fair New Year.
Wise with wisdom sages have left thee,
Bend thine ear;
Lift up the veil that covers thy features,
Strange New Year,
Rainbow a promise over the darkness
Lest we fear;
Bury our yesterdays, foolish and empty,
Fathoms deep;
Leaving the mound unmarked, untended
Where they sleep.
Then shall the morrows find us valiant,
Scorning fear—
Meeting thy glance with glance undaunted,
Glad New Year!

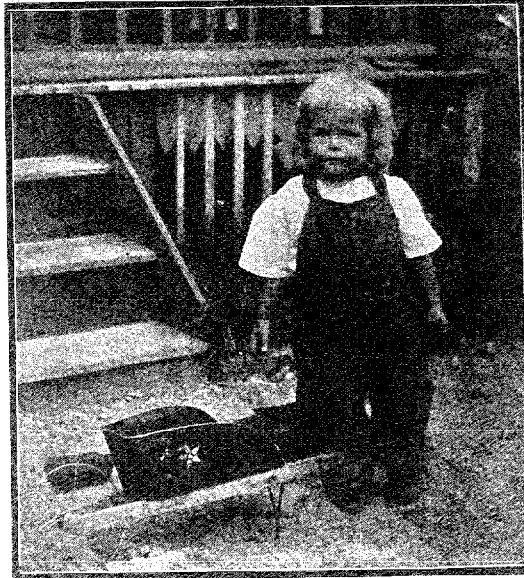
This charming welcome to the New Year was written some time ago by Ellen Burns Sherman:

"May we all meet 1914 with courage and confidence, forgetting all the sadness and sorrow, remembering only the joy and gladness in the days that are past. May the New Year bring health, happiness, joy and peace to all."

Monograms for Household Embroideries.

The latest novelties in fancy work are shown in the stores at the present time—designs for bags, baskets, cushions, laundry bags, etc.—and as each one suggests simple work and materials, they come easy to all and may be easily copied. There is a very pretty fancy work bag which can be made of flowered cretonne and torchon lace. If a daintier bag is desired it could be made of fancy silk, trimmed with either valenciennes or shadow lace. Another very attractive design for needlework is the combining letters to form monograms for marking linens. Script and Old English are the standard types used, but a simple little design can be added in most cases in the way of flowers or fancy stitches. Well-padded, solid embroidery is the simplest and most popular method used, and is suitable for working all styles of monograms.

One of the simplest and most effective kinds of embroidery is made with French knots, and it is surprising how quickly the work progresses. It is pretty for table scarfs, sofa pillows and bath towels and instead of using white floss substitute a color. The French knots are made by bringing thread up through goods, twisted around needle once—or if a larger knot is required, twice—then put down through the goods at a very short distance from where it was brought up. These knots should be made very close together, so that when finished, the initial or flower will look solid.



Stanley E. Adams.

Dear Editor: We all like your Magazine very much and look forward to its coming each month. There are so many children along the C., M. & St. P., it would be nice if we could have a children's page also. I am sure there are many who know of most interesting things they would gladly contribute.

The picture enclosed is of Stanley Adams, son of Engineer Adams, Missoula Division, Alberton, Mont., and is, we think, a fair sample of the railroad juniors.

Mrs. W. M. Adams.

Teaching Neatness.

By Gertrude Gunzburg.

If a mother begins to teach her baby to pick up his little shoes and stockings and the rest of the clothes when he is ready for bed and to always put them in the same place, he will soon have the habit so formed that he will never leave them in a huddled heap on the floor.

Even if your boy is a big boy, going to school, begin to teach him to pick up his clothes, to fold his waists and to hang up the rest of his clothes after changing.

But you will say, "It is easier and quicker to put them away myself." Certainly it is, but are you doing your duty by your child to allow him to form such habits? We mothers must teach our children as well as care for them.

Of course, if you have allowed your boy to form such an untidy habit, it will not be so much trouble to pick up after him as it will be to get him to pick up after himself at first. But keep right at it. Do not get discouraged

if it takes willingly a clothes, for yourself, an gravating t do you sup if she and pick up at that by tea will be savi the years t I have n girls, becau for their c are neglect should be t

Cut in h grapes aft three oran removing one cup c spoons sh Let stand

Two cup der, one-h sugar, one as for bak inch thick apples, co rows on t into it, sp mixed wit in a hot b

Wash pound figs rind one- root and c make syr half as m add one t serve col

Trim a Cut into on one s two kind lay them a napkin When rea lay in be with olive

Set the the night cup milk, fourth te one-half like war mixture stiff dough let rise down unt out one-t following one cup

if it takes weeks or months before he will willingly and cheerfully take care of his clothes, for you have no one to blame but yourself, and if you find it tiresome and aggravating to always clean up after him, how do you suppose his wife will feel, especially if she and her brothers have been taught to pick up after themselves? The chances are that by teaching him this one tidy habit, you will be saving him many an unpleasant hour in the years to come.

I have not said anything about teaching the girls, because they as a rule are taught to care for their clothes, but it seems to me the boys are neglected, and I fail to see why, for boys should be taught tidy habits as well as girls.

Good Things to Eat.

Chilled Fruit.

Cut in half and seed one-half pound white grapes after washing. Cut in small pieces three oranges and one grape fruit, carefully removing all seeds; two bananas, and may use one cup cherries. Pour over all four tablespoons sherry and two cups powdered sugar. Let stand two hours and serve ice cold.

Dutch Apple Cake.

Two cups flour, three teaspoons baking powder, one-half teaspoon salt, two tablespoons sugar, one beaten egg, one scant cup milk. Mix as for baking powder biscuit. Spread one-half inch thick in a buttered baking pan. Pare five apples, core, and cut into eighths. Lay in rows on the dough, sharp edge pressed down into it, sprinkle with one-quarter cup sugar, mixed with one-half teaspoon cinnamon. Bake in a hot oven twenty-five to thirty minutes.

Gingered Figs.

Wash and look over carefully one-half pound figs, add cold water to cover; juice and rind one-half lemon, one small piece ginger root and cook slowly until soft. Remove figs; make syrup up to one cup or more, and add half as much sugar. Simmer until thick, and add one teaspoon sherry. Pour over figs and serve cold with whipped cream. Delicious.

Novelty Sandwiches.

Trim all crusts from a large loaf of bread. Cut into thin slices and always butter two on one side and three on both sides. Spread two kinds of filling between alternate slices, lay them together, and wrap each section in a napkin and weight down with a heavy plate. When ready to serve, cut into thin slices and lay in overlapping rows on plates garnished with olives and celery.

Cinnamon Buns.

Set the sponge of the following ingredients the night before or early in the morning: One cup milk, three-eighths cup sugar, one egg, one-fourth teaspoon salt, one-fourth yeast cake (or one-half if in the morning), one-fourth cup luke warm water, two cups flour. When this mixture is very light add flour to make a stiff dough; knead until it becomes elastic and let rise until very light again; then work down until all gas bubbles are broken. Roll out one-fourth inch thick and spread with the following: One-half cup butter (softened), one cup cleaned currants, two tablespoons cin-

KIRKMAN'S

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Locomotive and Motive Power Department
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Electricity Applied to Railways
Air Brake—Construction and Working
Operating Trains
Portfolio of Locomotives
Portfolio of Air Brake—Westinghouse
Portfolio of Air Brake—New York

For Shopmen

GROUP F—Locomotive Shops

Locomotive Appliances
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TACOMA, WASH.

namon, one cup brown sugar. Roll up as in jelly roll; cut in slices one inch thick, and place in greased muffin pans, with cut ends up and down. When very light bake in moderate oven forty-five minutes. Very good.

Layer Cake.

One and one-half cups of granulated sugar, creamed with three-fourths cup butter; three eggs, yolks and whites beaten separately. Add yolks to butter and sugar and beat until smooth. Add one and one-half teaspoons of flavoring extract; sift two and one-half cups of flour with three teaspoonfuls of baking powder. Add the flour, little by little, beating each portion into the mixture thoroughly, and adding the whites of eggs well beaten along with flour. This is very good.

Some Little Hints in Housekeeping.

A good way to remove old wall paper is to use the following solution: A thick paste should be made by mixing flour and a few ounces of acetic acid. This pasty solution should be applied with a brush to the old wall paper in quantities. After a few minutes the paper can be removed in great strips very easily and with very little dust or dirt.

Rust on a stove may be removed with kerosene, wash well with a woolen cloth wet with kerosene. Use an old brush on the grooves and ornamental parts. Let the stove stand a day and repeat the washing. Finally rub dry with woolen cloth then polish with stove blacking.

A good place for a rolling pin may be made by screwing two curtain-pole brackets to the inner side of the kitchen closet door just far enough apart to hold each handle of the pin.

A belt for stove cover holders is a convenient article that may be provided as follows: Make a belt of firm tape long enough to button easily around the waist over the kitchen apron. On each side of the belt, about five inches from the center, attach a piece of tape the length of the arm. To the end of these tapes fasten a holder. The woman who wears such a belt when at work about the stove will not burn her fingers, or waste time looking for a holder.

Plain Plum Pudding.

Four cups of flour, one pound currants, two cups sugar, one pound raisins, one-half pound candied lemon peel chopped fine, one pound suet chopped fine, teaspoon baking powder, nutmeg and cinnamon to taste. Sift flour, baking powder, spices, and salt, add other ingredients. When well mixed, add sufficient cold water or milk to make a batter just thick enough to spoon into the mold. Leave room for it to rise. Cover and let boil six hours. Delicious.

A Few Suggestions for the Housekeeper.

Tomatoes with the skins removed and hollowed out, then filled with minced fish or chicken and a little mayonnaise, make a delicious dish.

For savory baked potatoes, wash and scrub the potatoes until thoroughly clean, then wipe dry. Bake one hour in a steady oven. Break open and dress with salt, pepper and cream. Serve in the jackets, in a napkin.

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Special Commendation

Special commendation is due to E. G. Ambli, ticket clerk at Decorah, Ia., for finding a package of valuable papers and jewelry in the passenger station, on the evening of November 6. The package was the property of Mr. Jos. Dborkin, who received it intact from Mr. Ambli. Promptness, courtesy and honesty are three of the best qualities in a railroad man, and such acts as Mr. Ambli's make friends for the road as well as reflecting honor upon the one who performs it.

On October 27 Lee Benjamin, day switch-tender at Lost Nation, Ia., found a broken rail four and one-half miles west of Delmar Junction and by notifying the roadmaster undoubtedly prevented serious damage.

Brakeman F. Bowes, Kansas City Division, received a letter of commendation from Trainmaster Druen for finding broken truck hangers on St. Paul car 35730 at Amana, train 65, December 9. His careful inspection of cars in this instance no doubt prevented a serious wreck. Due credit has been given in the roster.

Conductor M. Myers, Kansas City Division, has received a letter of commendation from Trainmaster Druen, for finding broken truck frame on N. Y. C. 91382 at Richland, train 72, December 9. His careful inspection unquestionably prevented serious damage and perhaps saved a train wreck. Due credit has been given in the roster.

Extra Conductor C. C. Dickinson, Kansas City Division, has been commended for finding sandboard down on St. Paul car 18452, train 74, at Gladwin, December 5. This careful attention to duty no doubt prevented an accident. Due credit has been given in the roster.

Special commendation is due Section Foreman John Krelberg, Frontenac, Minn., for stopping east bound freight train on December 14, account of dragging brakebeam. His watchfulness and prompt action in this matter are commendable and Superintendent Thiele has written him a letter of thanks for his efficient service. Due credit has been given in the roster.

The wives of our employes are alert, too.

On December 20, when Conductor Garden was taking a train of cars to the I. H. Belt Railway, Franklin Park, a switch chain got loose and got in between the point of the switch and main line rail on the west cross-over switch about 500 feet west of River Grove station. The wife of Company's Officer Owen McNerney, who was at her front door, heard the noise of the wheels going over the chain and went out to see what was wrong. She saw the chain and knew there was another train coming from Galewood, following Garden's train. Mrs. McNerney at once notified the agent at River Grove station to stop the following train, which was done, thereby preventing a serious wreck. Officer McNerney

heard, very soon, there was something wrong at River Grove and upon arrival there spiked the switch to the main track, notifying the agent at Franklin to have the section foreman come down at once and fix the switch, which was done.

Brakeman W. F. Fisher, Coast Division, has received a letter of commendation from Trainmaster Campbell for his promptness in discovering derailed car in train 92, near La Grande, Wash. The derailment was caused by a broken flange, and the fact that the car ran but five or six lengths before it was stopped indicated strict attention on the part of Mr. Fisher.

Brakeman John Lewis, Coast Division, on November 21 discovered a sandboard down on P. S. car 100935, between North Puyallup and Sumner. Trainmaster Campbell, in a letter of commendation, says:

"Your care in watching your train is worthy of special commendation. Had the condition of this car not been discovered promptly, no doubt great damage would have resulted. Notation has been made on your personal record in accordance with the above."

Fireman Dan Hagan, arriving at Madison, S. D., on an extra at 10:50 p. m., October 25, by his electric headlight noticed a team driving away from grain car on tracks in yard at Madison. As it looked suspicious, as soon as Hagan was relieved from duty he looked up the night watchman and notified him of what he had seen. The night watchman went to the place and captured the man and had him arrested. There were about fifty bushels of wheat in the wagon.

Fireman Hagan deserves a great deal of credit for the interest he took in the company's welfare, which shows that he has his eyes open in the interest of the company.

R. & S. W. Brakeman R. Hixon, while switching at Rockton, December 8, discovered eight inches of flange broken off of wheel in St. P. car 86352, a car which they were to pick up. This probably saved an accident.

On November 2, Engineer W. Edwards, C. & M. Division, while switching at Lake, when train 55 went by, noticed fire flying from rear car. He called Lake operator on phone and 55 was stopped and it was found that storage car on rear of 55 had a blazing hot box, which was given attention and train proceeded. Engineer Edwards received credit mark.

On November 2, Engineer A. L. Morgan, C. & C. B. Iowa Division, discovered broken rail in Perry yard and credit mark was given him.

On November 11, Engineer M. J. Brophy, Dubuque Division, discovered and made repairs to defective track about three miles east of Reno. He was given credit mark.

Engineer P. Burns on the I. & M. Division, while going down Faribault Hill on train 65, December 15, noticed fire flying from under

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one of the cars. He brought the train to a standstill and found a broken truck. Mr. Burns' watchfulness and prompt action doubtless saved a serious accident and a possible loss of life, and his meritorious act has been placed on the roster to his credit.

Operator H. M. Van Pelt, Hoinick, Ia., saw a blazing hot box on rear end of fast passenger No. 6, December 26. He promptly notified dispatcher at Sioux City, who had train stopped at Grant Center and damaged box repaired, possibly saving a wreck or fire damage.

Superintendent J. A. MacDonald sent the following letter to the boys who discovered a broken rail near Camp Douglas, Wis., and ran at once to flag the fast mail, which was nearly due:

"Master Vilas Jacobs, Milwaukee, Dec. 23.
"Camp Douglas, Wis.

"Master Herbert Jacobs,
"Camp Douglas, Wis.

"Dear Friends—

"I understand that, on Thursday morning, November 20, on your way to school you discovered a broken rail and that when you saw train No. 55 coming, you ran down the track and flagged them.

"We appreciate your action in this case, and thank you for your alertness and thoughtfulness.

"Mr. Phelps, our agent at Camp Douglas, will receive about Christmas time a small check to deliver to you, which is sent as a token of good will rather than as a reward.

"I wish you a Merry Christmas.

"Yours truly,

(Signed) "J. A. MACDONALD."

Columbian No. 17 arriving at Aberdeen the morning of December 18, Car Inspector Walter Bauman discovered a broken steel tire on a wheel under baggage car 3025. The train was held at Aberdeen and a new pair of wheels put under the car with a delay of 43 minutes, 25 minutes being required to apply the wheels, the balance of the time in switching the car to and from the repair tracks. We believe this a pretty good record in changing a pair of wheels under a passenger car.

Train 4th 76, November 26, Conductor P. E. Trueman when pulling out of Glencoe discovered car 50298 wheat from Regent, N. D., to Minneapolis leaking grain. Conductor Trueman stopped the train, got into the car and stopped the leak with a possible loss of 8 or 10 bushels of grain. If the leak had not been stopped there would have been a considerable loss on the car.

Life is made up of small deeds and the world little knows of the things being done that seem to be of small moment and yet mean so much. An incident came to our notice a few days since which is worthy of special mention. For some weeks the question of water supply at several of our water stations has been a serious one. Engineer George Mason on extra east while taking water at Postville, had a board or piece of wood get

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under the tank valve. The pump at Monona was out of commission and no water there. George took the situation in hand, got down into the tank, removed the obstruction and saved the water from going to waste, and while no particular attention was given to it, the fact remains that his train reached its destination in good time and without further accident.

Here is another incident of the "helping hand." This time it comes from the bridge and building department, and deserves special mention. Switchman Harry Stull was hanging on the end of ladder switching at North McGregor; while reaching to open knuckle of car when cars came together, draft irons passed each other, catching him. Bridge Foreman Henry Kruse, with presence of mind and heroism, pulled him out from underneath the moving cars and saved him from being instantly killed. The world needs more such men as these, and we are glad to make special mention of them.

The following letter is from D. M. M. Anderson:

"Miles City, Mont., Nov. 5, 1913.

"Mr. Jacob Keller, Car Inspector, Mobridge.

"Mr. Harry Feeley, Car Inspector, Mobridge.

"Dear Sirs—I wish to commend you on the good work of inspecting you are doing at Mobridge. Forms 608 report made by Car Foreman Lintelmann shows some cracked wheels discovered by you on St. Paul stock cars 2913, 1243, 739, P. S. stock car 100003 and F. F. E. refrigerator car 9887.

"Especially do I wish to give you credit for the discovering of the defect in the wheel of St. Paul car 2913. I am giving a copy of this letter to the Magazine for publication under the special commendation department, as a nine-inch cracked plate on the inside I consider a very good find on the part of the inspector, and it also goes to show that we have men in our employ at Mobridge that are alive to good inspection and make good members of the Safety First organization.

"Yours truly,

"R. W. ANDERSON,

"District Master Mechanic."

The following letter was written by F. E. Willard, superintendent Missoula Division, to Tony Lombardi, section foreman, Falcon, Idaho:

"I wish to thank you for prompt action on your part in reporting finding of piece of flange broken from wheel under P. S. 302339 in No. 63, November 2; this piece of flange having been found by you short distance east of station at Falcon and fact reported to operator at Falcon, who notified conductor of No. 65 at Stetson, where car was set out.

"Prompt action on your part probably prevented a serious derailment."

Mr. and Mrs. E. H. Foster of Deer Lodge are the proud parents of a fine baby boy who arrived at their home on Tuesday, December 16. Almost a Christmas present.

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On The Steel Trail

Spokane News.

J. E. W.

The "boys" at the city ticket office are making things hum on long distance passengers. Several leave daily on the Olympian for all parts of the world.

Work on the new depot is progressing rapidly. It will be one of the finest in the Northwest when completed.

Gravel trains on the Spokane line have been pulled off. Roadmaster Larson has the Spokane-Plummer line in fairly good shape for winter service.

"The Baby Olympian" is the local name given to trains No. 215 and No. 216 running between Spokane and Plummer Junction, making one round trip daily, connecting with main line trains No. 15 and No. 16. This train has made a tremendous hit with Spokane people and is growing in favor daily. It is a solid vestibule, combination baggage and smoker, day coach and parlor car, with steam heat and electric lights throughout. "The Baby Olympian" is in charge of Conductor Harry Adams and Engineer Wm. E. Jones. Parlor car "Wyocena," in charge of Porter "Jimmy" Jones, who has already won international fame for the excellence of his coffee and his politeness to passengers.

Genial Harry Adams, through his interest in the comfort and welfare of his passengers, has won the confidence and esteem of the traveling public, and is voted the most popular conductor in local service.

Engineer "Casey" Jones is known personally by all the local travelers and his good na-

tured face framed in the cab window would drive away the blues from even a chronic grouch.

Fireman Loyd Luce, Brakeman Elmer Brooks and Baggage man Ed Minshall complete the most popular crew of the most popular train of the most popular railroad in the Pacific Northwest.

Notes from the I. & D. Division.

Rush A. Eddy.

With the passing of the old year, the I. & D. has lost one of its best friends, W. W. Collins. He leaves with the regret of all, and his name will always bring thoughts of pleasant relations. His place has been taken by one who is not a stranger to us, and who, we feel, will guide well the machinery of this division as well as be a good adviser to us—B. F. Van Vliet.

We have been up against a water famine for some time, but through the efforts of our officials things were kept moving, and the stress is now removed.

Geo. B. Freeman, one of the oldest engineers on this division, after being confined to the hospital for some weeks, was taken to his home the day before Christmas. He sustained an injury on November 22, in which the shin bone was badly injured, necessitating an operation. At this writing he is not so well, some complications having set in.

The wife of Engineer John Strayer has been confined to her bed for many months with a serious illness.

Train Dispatcher E. A. Myers and wife are spending the holidays in the East.



First Yellow Cars Into Spokane, Sept. 28, 1913.



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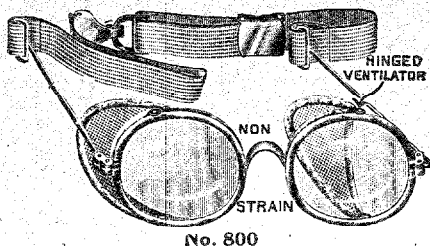
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Trick man Frank Smith is taking the place of Mr. Myers during his absence.

Engineer Jno. Pfahler and wife recently returned from Prairie du Chien, where they were called by the death of Brother Pfahler's mother.

Engineer A. Swanson and wife are spending the holidays in Oklahoma.

Roundhouse Foreman Casey has been laid up since Christmas spent in New Hampton. A case of too much turkey.

Engineer Wm. Beach has just received the papers on a patent safety gauge cock, which stands in line of Safety First. It is considered by all who have examined it a great safety appliance and worthy of investigation.

Safety First is not dead on the I. & D., but seems to be peacefully sleeping. We have had no meetings, but hope to see more enthusiasm manifested in the coming year. Safety First is the slogan of all the men, but they need something to awaken them, something to encourage them.

We hope in the early part of the coming year to have Mr. Smallen, our general chairman, with us, and have an open meeting to see if we cannot create more interest in the movement.

A Real Railroad Get Together at Wabasha, Minn.

Three Old-Timers.

On the afternoon of December 7 Mr. Morris Wheeler and Wm. James Dolan met at the home of G. W. Rawson on the west side, to talk over olden times of railroad life. "Morris," "Jimmie" and "George" are the only old-timers left of all the railroad men that came here when the railroad was first built here.

Mr. Wheeler came November 22, 1877, when the Wabasha Division was built as far as Midland Junction and then known as the Minnesota Midland.

Mr. Dolan came here in May, 1871, when the River Division was being graded through.

Mr. Rawson came here April 1, 1869, when the Wabasha Division was built as far as "Carny's Hill." All helped in the building of the old narrow gauge, now known as the Wabasha Division.

At five o'clock dinner was served, which the three ate together.



Night Switch Crew, Marmarth, N. D.

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Obituary.

The passing of Mr. G. H. Burroughs, assistant agent at Winona, leaves a gap in the ranks of the old-timers. Mr. Burroughs has long been a prominent figure in railroad circles on the River Division. He entered the employ of the Milwaukee in 1866, working in the freight department at La Crosse. He occupied various positions in that department until 1886, when he was appointed postmaster at La Crosse by President Cleveland. He held that position for four years and then returned to the Milwaukee. He was sent, temporarily to Aberdeen, S. D., as agent there, returning to Winona to take up the rather arduous work of station agent at that busy place. He served in that capacity with a record of long and efficient service. A number of years ago he fell a victim to chronic rheumatism, necessitating a material lightening of his labors, and he took the position of assistant agent, which he occupied until his death. Mr. Burroughs was prominent in local politics both in La Crosse and Winona. His son, Frank D. Burroughs, is general freight agent at Seattle.

Henry A. Schumacher, a veteran in the service, died October 8th, in Sioux City, in his seventieth year. Mr. Schumacher was born in Germany, coming to this country when 25 years old. He entered the Milwaukee service in 1875 as bridge carpenter at Mason City. He remained on the I. & D. Division five years, going thence to the S. C. & D. Division, where he served continuously until 1912, when he retired on account of ill health. Mr. Schumacher's service on the I. & D. and S. C. & D. Divisions was under Superintendents George Sanborn, John Jackson, W. J. Underwood and Mr. Beardsley. Mr. Schumacher was buried at Elk Point and his funeral was attended by many of his old friends in the railroad service, who were his warm friends and admirers. He was a man of sterling qualities and strict integrity, and he leaves behind a long record of loyal and faithful service.

The sudden death of Samuel T. Collins, one of our oldest and best-known conductors, at his home, 1902 Fourth avenue, Minneapolis, on December 3, was a shock to his old associates and friends. Mr. Collins was born at Menona, Iowa, 51 years ago and he had been in railroad service for 35 years. His wife and family have the sincere sympathy of the employes in their irreparable sorrow, and the company feels the loss of a loyal, efficient employe.

The home of Engineer Frank Neelings has recently been saddened by the death of his wife. She leaves to mourn her death besides the husband, two sons, both engineers, and two daughters. Mrs. Neeling had been a great sufferer for over twenty years.

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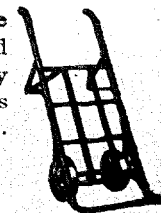
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Frank E. Otis.

Frank E. Otis, who was appointed assistant general freight agent at Minneapolis, has been with the Milwaukee for twenty-four years, his services always being with the freight department. Starting with the company in 1890 as a clerk under E. D. Sewall, who was at that time commercial agent at St. Paul, with the exception of two years from 1900 to 1902 when Mr. Otis was commercial agent at Duluth, he has been a resident of the Twin Cities. His long period of service in this section makes him one of the best posted and well known freight men in the Northwest. His legion of friends among the employes and shippers are pleased with the Milwaukee's fine recognition of the worth of so able and loyal an employe.

The General Office Mail Room.

George E. Waugh.

It is doubtful if there is an office in the Railway Exchange Building employing but three people that turns out each day a greater volume of work than that which is carefully and accurately executed in our mail room. It is a little 18x20 room on the thirteenth floor, with furnishings unlike any other office in the building. There are no rows of desks and elaborate file cases. Instead the walls are lined with large, wooden frames, divided into many large and small compartments. In the center of the room there is a large sorting table and a metal frame rack holding fifteen or twenty mail sacks. Into the pouch in the far corner they put the mail for Seattle and Tacoma.

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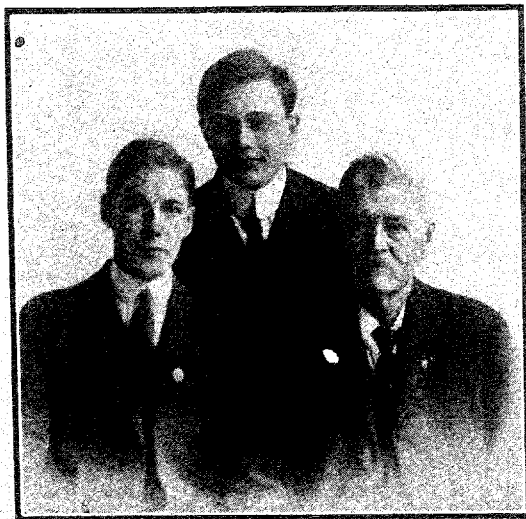


The speed and accuracy of the distributing clerk in handling his job is amazing. Ed. Walsh or Walter Johnson would be mighty proud of such control. The pouch next to it may contain mail for the C. & C. B. Iowa division, so it is of vital importance that each letter reaches its proper sack; if it doesn't, some important business will be neglected because the instructions were not received in time. These mail clerks must know the road where each station is located, and whether No. 1 or No. 15 makes connection with 631 at Wabasha when they have mail for Zumbrota or Faribault. If they get it in the wrong sack it means a delay of one hour and a half at Wabasha dead time, when that letter is not "on its way." But this little force of busy workers doesn't let that happen. The mail is routed so that it will travel from the sender to the receiver in the shortest possible time.

We said it was a busy little office. Does this statement not prove the fact? Our mail room handles between 12,000 and 15,000 letters and packages a day; each piece is handled twice; it must be sorted and transferred either to or from the depot, for these figures represent both the incoming and outgoing mail.

Gus Woodworth, chief mail clerk, presides over the mail room. He has two bright young assistants in Graydon Cunningham and Edmund Kunz. Gus is one of the oldest employees with the company. For a number of years he ran baggage, but that was before he took charge of the mail room. About twenty years ago Mr. Earling, then general manager, wanted a good trustworthy man as mail clerk, and Gus was selected. He is mighty proud of the fact that it was President Earling who gave him his present job. It is estimated that during Gus Woodworth's term of twenty years as chief mail clerk his little department has handled 187,800,000 pieces of mail for the company.

Handle everything with accuracy and dispatch is the motto of the mail room.



Gus and His Assistants.

DEPOSITING REGULARLY

in a Savings Account in the Merchants National Bank is a convenient way to save for the future.

It has the added advantage of being both safe and always available when needed.

Any small amount will start you on the straight path of Savings which leads to Success.

MERCHANTS NATIONAL BANK

Capital, Surplus & Profits \$4,000,000

ST. PAUL, MINN.

YOU CAN BANK BY MAIL

Pacific Mutual Life Insurance Company

Assets \$26,243,005.92

If you are interested, please complete this coupon and mail to Company

The Pacific Mutual Life Insurance Co.

RAILROAD DEPARTMENT
725 Peoples Gas Building, Chicago, Illinois

My occupation is _____

at _____

Please send information regarding
Accident and Health Insurance

Name _____

Address _____

We Insure the Employes
of the
C. M. & St. P. Ry.

Every Man —
Who rides on a passenger train or on any other train or in a street car or any other public or private conveyance.

Every Living Man —
Who leaves his home in the morning in good health may be brought home at night dead, or at least injured or maimed, and knows he is constantly in danger and should be fully protected by accident insurance.

THE BEST ACCIDENT AND HEALTH POLICIES
are issued by the
Midland Casualty Co.
903 Insurance Exchange Building
CHICAGO

EUROPEAN PLAN Rates: \$1.00 to \$3.00 per day

Sherman Hotel
Sherman Hotel Co.
J. R. HUBBART, Secretary and Manager

Aberdeen, South Dakota

Providing Every Up-To-Date Convenience

If you want clean hands—
use
VANCO

If your grocer does not handle VANCO, write us for sample and agents terms and we will make you an attractive offer to earn some extra money. It is the only paste soap that will not injure the skin.

The Robertson Vanco Co.
103 Park Avenue, New York.

Elsie Little, stenographer in the advertising department, spent Christmas with her mother at Minneapolis.

The Chicago, Milwaukee and St. Paul Railway's surgical association's 20th annual meeting was called by Dr. B. F. Lounsbury, assistant secretary of the organization, at the LaSalle Hotel, December 18 and 19.

Dr. A. I. Bouffleur, chief surgeon for the company, who has been unable to be present at the two preceding meetings, attended the 20th annual convention and called the meeting to order. The attendance was large and the meeting proved to be one of the greatest in the history of the organization. Many topics on surgery and scientific methods of handling railroad accident cases were discussed. Dr. Harold Moyer of Chicago read a very interesting paper. The others on the program were Dr. Geo. Kessel, Cresco, Iowa; Dr. Frank Skinner, Marion, Iowa; Dr. Fred Bailey, Cedar Rapids, Iowa; Dr. A. R. Metz, Chicago; Dr. M. J. Kenefick, Algona, Iowa; Dr. M. L. Allen, Tama, Iowa; Dr. H. S. Gillespie, Mapleton, Iowa; Dr. C. L. Wendt, Canton, Iowa; Dr. B. C. Murdy, Aberdeen, S. D.; Dr. J. F. Pember, Janesville, Wis., and Dr. S. A. Spilman, Ottumwa, Iowa.

On December 18 there was held in Chicago a meeting of the clerks of the engineering department. About thirty of the clerks of the District Engineers, District Carpenters and Chief Carpenters met for the purpose of discussing their work and exchanging ideas. The object of the meeting was to bring about more uniformity in methods and reports.

Much interest was shown in the discussions and all took an active part. The afternoon session was attended by Messrs Bunting, Welsh, Harvey and Butler of the accounting department. Mr. Bunting gave a very interesting talk on the subject of AFEs. Through this meeting the clerks became personally acquainted, and the exchange of ideas will bring about a better co-operation.

Milwaukee Shop News.

F. S. Peck.

Mr. Curtis McCollum, a locomotive engineer of the "60's," has been paying us regular visits since the Magazine was gotten out and we are glad to see that it results in inducing some of the old timers to call on us. He recently called at Mr. Alexander's office for a copy of the October issue and remarked that he awaits each number with anticipated pleasure and reads it from cover to cover.

In directing a squad of shop fire fighters recently who were putting out a blaze in a box car, Mr. DeVoy got too close to the burning car and a large volume of water first struck the car and then him, drenching him thoroughly. He showed his fire fighting ability by staying on the job until the fire was put out and then went home and changed his clothes.

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Chemist Prentiss has been laid up sick at home account of pneumonia. He is getting along well as can be expected under the conditions.

Correspondents from the Coast are continually enthusing about the weather there. Nothing wrong with the brand which has been dealt out to us in the past six weeks.

Mr. Alexander recently came in from Madison and left his overcoat in the smoking car and went to ride in the engine. When he returned to get his overcoat it was gone, and he has not as yet recovered it. Fortunately, he had a real good overcoat at home, so that the coming cold days hold no hardship for him.

P. J. Morrissey, a locomotive engineer on the Coast Division, Puget Sound Lines, is in Milwaukee. Up to this writing he has not called on your correspondent, but we know he is here, as he lost his transportation on train 18, and the station master found it and requested us to locate him. Pat always manages to let his presence be known in some such manner. We hope he will see his way clear now to take the girl back with him and save the expense and loss of time that results from his periodical trips to the east. He has been making these for the past four or five years and it's near time he took a tumble to himself. The loss of his passes may lead one to believe that he possibly had his mind on the heavy question.

Since writing the above I had the pleasure of meeting Pat. He had a peculiar air about him and I believe one can deduce "there is something doing."

Items from Tacoma Shops.

The American Red Cross car No. 2, in charge of Dr. W. N. Lipscomb, after making a trip over the St. Paul lines and giving lectures at the principal roundhouse points along the road, arrived at Tacoma shops on the morning of December 18. The first lecture was given by Dr. Lipscomb on "First Aid to the Injured" in the machine shop at 12:20 p. m. At 2:30 p. m. another lecture was given in the Red Cross car and another lecture was given at 4:30 p. m.

There was a great amount of interest shown by all the men at these shops in these lectures, and the work of Dr. Lipscomb and the manner in which he handled his subjects are worthy of the highest commendation. While the car was at the shops over five hundred men of all departments attended the lectures.

Dr. Lipscomb did not overlook putting strong emphasis on the value of Safety First, and therefore we consider that two interests were served at the same time.

We are hoping that some way will be found for the officials to arrange for a further trip over the line of Dr. Lipscomb. The Doctor is a man of strong personality, and there is something about him that makes us feel he is one of us. If we are to judge from the compliments the Doctor paid us, his lectures were a success in every way.

A Friend of the Workingman

—IS THE—

National City Bank

—OF—

Seattle, Washington

We pay 4% interest on saving accounts.
We also offer our services in making investments which bear a higher rate of interest.

JOHN S. TUCKER, Pres. ISAAC HAZLETT, Vice Pres.
G. W. LA LONE, Cashier. O. L. CULBRO, Asst. Cashier

Minnehaha State Bank

2626 East Twenty-fifth Street
Minneapolis, Minn.

Special accommodations furnished
on pay-days.
Savings deposit of \$1.00 or more receive
interest compounded quarterly
at 4 per cent.
Insurance of all kinds in first class companies.
Safe deposit boxes \$1.50 per year.
We keep open Saturday evenings.

Spokane & Eastern Trust Company

SPOKANE, WASHINGTON

THE RAILWAY MEN'S BANK

Depository for the
Chicago, Milwaukee & St. Paul
Northern Pacific Great Northern
Idaho & Washington Northern
Chicago, Burlington & Quincy Trains
Washington Water Power Co.

We Pay 4 Per Cent on Savings Deposits

The State National Bank

Miles City, Montana

U. S. Depository

Capital \$100,000 Surplus \$250,000

Interests: 4% in Savings Department
5% on Time Certificates

Shirley President Suspenders


Set your shoulders *absolutely* free

50¢

"Satisfaction or money back"

Be sure "Shirley President" is on buckles

The C. A. Edgarton Mfg. Co., Shirley, Mass.



The Milk and Cream used on the Dining cars of this company comes from this Sanitary Creamery, Woodstock, Ill.

A. J. OLSON CO.

Chicago Office, 227 West Chicago Avenue

Hacks, Taxi Cabs, Auto Livery and Baggage Wagons.

Tally-Hos, Band Wagons, Buckboards.

Mattison Omnibus and Transfer Co.

Theatrical Transferring a Specialty

Agents Meet All Trains at Depots

Both Phones 78

Office: 237 Hennepin Ave.

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CHEAP prairie land in central Washington, U. S. A. Known as the "Milwaukee" tract, along main line of C. M. & St. P. Ry. \$18.00 and \$20.00 an acre on ten years' time. For additional information, maps, etc., clip and send in this coupon.

----- COUPON -----

CALHOUN, DENNY & EWING, Seattle, Wash.
Send free maps and folders, "Milwaukee" lands.

Name

Address

[m. m.]

As a result of the visit of the American Red Cross car, we are arranging to organize a "First Aid Corps" at Tacoma shops. The work of the corps will not be confined to the shops alone, and the men who compose it will be willing to answer a call in case their services are needed at wrecks or other disasters.

Frank Buchanan, traveling engineer of the Coast Division, has been sent into the Cascade Mountains and will camp there during the entire snow-fighting season to assist in the work of keeping the road open. At the time of writing we understand Mr. Buchanan is getting somewhat restless. Contrary to usual expectations and in spite of all predictions, the snow refuses to come down. However, there is still time enough left for Mr. Buchanan to have all the snow-fighting he wants before spring opens up.

We have just been treated to a visit from our old friend, "Bill" Rusch. "Bill" is the son of General Master Mechanic Frank Rusch, and never fails, when home from college, to visit the scenes where he formerly worked as helper in the shops and later as a clerk in the district master mechanic's office.

Mr. A. J. Kroha, general storekeeper, left for Milwaukee last week to spend Christmas with his parents. There will be much handshaking when "Tony" gets back to Milwaukee shops.

Chief Electrician R. A. Noike and his wife left for Milwaukee for the Christmas holidays.

The writer is just in receipt of a handsome little token in the way of a leather card case. This remembrance was sent by the Editor-in-Chief, and needless to state the remembrance is appreciated.

Presume by the time the January edition of the Milwaukee Magazine will have reached us, the question as to whether we will have a street car line to these shops will have been settled. There is a hot campaign on to ascertain whether the people of Tacoma wish the city to own the line or whether inducements should be given to the Stone-Webster people to build to the Tide Flats. The writer is in hopes that both sides will win, so that we will be sure to get a street car line.

General Master Mechanic Frank Rusch has just returned from an extensive trip. On his journey he took in Portland, San Francisco, Los Angeles, El Paso, New Orleans, Memphis, Chicago, Milwaukee, Omaha and Salt Lake City. Mrs. Rusch accompanied Mr. Rusch as far as Los Angeles.

District Master Mechanic T. J. Hamilton made a trip over the line last week and visited the new Spokane terminals.

THOMAS HUGHES.
Correspondent.

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Southern Minnesota Items.*T. P. Horton.*

Merry Christmas and a Happy New Year to one and all.

Corn is king for the time being. We are hauling it by the train loads as fast as we can buy, beg, borrow or steal empty box cars to load it in. We are fortunate that so far we have escaped any weather that would hinder us from hauling good trains.

Operator Wilson at Houston who resigned to run a moving picture show has been working a few days account relief operator having tarried too long at the cup that cheers and was totally unfit for the duties of lightning dispenser when he returned.

Operator Bloom has been assigned to Houston. He was forced to bid in something else account Fulda second operator's position being abolished.

R. H. Solberg, relieved at Dexter by regular agent Burke from Lily, S. D., has taken up his duties at Fairmont as operator for six months.

Operator Flynn, regular man at Fairmont, off on six months' leave of absence, returned to the old reliable account conditions out west not very favorable just at present, and is now holding down the fort at Hayward as relief man while Severson is off for his health.

Operator Hayes, from the River Division, is working on third at Jackson and Stevens on second, while Dispatcher Malone is working trick at Madison on account of the illness of Chief Dispatcher Moore.

Mr. Moore underwent an operation in the Lutheran Hospital at La Crosse, but at present writing is getting along finely.

During his absence C. A. Berg, first trick man, is acting chief at Madison, trying to make one box car cover about three calls during the corn rush.

B. D. Cornell worked a few nights at Jackson and has now taken Wentworth on permanent bulletin.

F. E. Burdett, who bid in Wentworth, has returned to his old stamping ground at Chandler.

L. A. Schendel, formerly operator at Fairmont, worked a few days there until regular man arrived.

If the train and enginemen would slip me a few notes I might be able to give them a word of recognition once in a while, but as it is now the most I ever hear from them is when they "holler for help" or

"What shall we do?
She's burst a flue."

Kansas City Division.*B. F. Crawford.*

The Bidwell Coal Company, with headquarters at Albia, Iowa, have opened a new mine at Bidwell, Iowa. The H. N. Taylor Coal Company has also reopened their mine at Jerome, Iowa.

The orange crop is moving at an early date this year, fifty trains having passed over the Kansas City Division up to December

Josiah Quincy

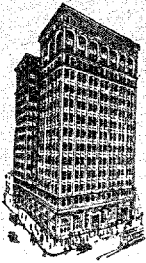
10c Cigar 10c

For Sale on all Trains, and at all Restaurants along the line
of the Chicago, Milwaukee & St. Paul
Railway

*Send 75c by postal or express order
for a trial box of 10—\$3.25 for 50*

M. L. Page

432 Fourth Avenue New York City



Your Bank

YOUR CHOICE OF A bank is a matter for your most careful consideration.

Your savings can not be too carefully guarded.

In ten years, the deposits of this bank have grown from \$1,500,000 to \$10,000,000—evidence of confidence on the part of an increasing number of depositors.

On its record of satisfactory service, it solicits your account.

The Old National Bank

Of Spokane

Capital, \$1,000,000

Careful attention paid to out-of-town accounts. Interest paid on saving accounts.

First National Bank

OF LEWISTOWN, MONTANA

RESOURCES
\$2,000,000.00

The Big Bank of the Judith Basin Territory

15, destined to various points in the east and north.

On account of crop failure in the Southwest, we are handling an immense tonnage of corn for Kansas, Oklahoma and Texas.

Miss Mary McCarthy, our valued agent at Sturges, is taking an extended vacation in the northeastern part of Iowa for the benefit of her health. Her position is being filled by Miss Nellie McCarthy.

Mr. C. E. Cross, formerly ticket clerk and operator at Ottumwa, Iowa, has been appointed agent at Excelsior Springs, Mo., succeeding Mr. H. F. Owen, who has accepted a position as traveling auditor.

L. W. Knight, agent at Hayesville, Iowa, has left for Phoenix, Ariz., where he will spend the winter.

Conductor Milton Myers has been given a letter of commendation for careful inspection of his train December 9, 1913, which resulted in the discovery of a broken truck frame under a car at Richland.

Brakeman Frank Bowes has received a letter of commendation for finding broken truck hangers on StP 35730 at Amana December 9.

J. W. Sowder, superintendent's chief clerk, is absent on a hunting trip.

H. & D. Division Notes.

J. M. Colter.

Fireman James Tiller has taken a lay-off and gone to his home in Waring, Kan., to spend the winter.

Assistant District Master Mechanic H. G. Dimmitt, in company with General Foreman J. Opie of the S. M. Division and General Foreman T. S. Manchester, visited the Milbank roundhouse one day recently.

Fireman Albert E. Hawes, with his wife and children, is spending the winter in Willow Creek, Mont., trapping and hunting.

Mr. Carroll's men are renewing the steam heat pipes in the Milbank roundhouse.

The B. & B. Department have been installing a new stationary boiler in the roundhouse here, which greatly improves the heating facilities.

The freight depot and coal shed have recently been wired for electricity by Mr. Gilman's men.

Car Inspector Lawrence Keller discovered a badly broken wheel on train 65, on its arrival at Milbank on the morning of December 4.

We now have a K1 engine switching in the yards in place of a J2.

Pebbles from the Musselshell.

M. F. Maughan.

Agent G. W. Hailing is the proud possessor of a 320-acre ranch near Melstone. George made a good move.

Switchman J. Martin has returned to work after a two weeks' layoff nursing a sprained ankle.

Conductor Winne of the H. & D. Division passed through one day recently. He had been up in the mountains looking for bear.

Conductor Ed Conklin has gone to New York City to spend the holidays.

Conductor Division is to Milwaukee, returning.

Mr. and Mrs. a visit with train service.

Ward Nic Harlowton, department. Ward.

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Fireman bound train Florida before smile and something is

Mrs. J. M roundhouse visit in St. her holiday to bake cake

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C. H. Arr made a business last week.

Conductor and visiting

Conductor also taking his run.

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Lewis and a pro was signing of the engineers. h McGovern vice chairman to accept executive with the should be placed by Engineer the organ fice of h accepted. Engineer sented or

Conductor M. Murphy of the Musselshell Division is taking a layoff, and will visit in Milwaukee, Chicago and New York before returning.

Mr. and Mrs. A. F. Parsonal is enjoying a visit with their son Charles. He is in the train service on the N. P.

Ward Nichols, recently car foreman at Harlowton, has resigned and entered the train department. The car boys all wish you luck, Ward.

Switchman C. Vandevort, wife and children have returned from their trip to Wisconsin and Michigan.

Fireman George Williams took the east bound train one day this week. He may visit Florida before returning. He had a pleasant smile and his good clothes on. Wonder if something is going to happen.

Mrs. J. M. Anderson, wife of the assistant roundhouse foreman, has returned from her visit in St. Paul and Chicago, where she did her holiday shopping. Jim says he won't have to bake cakes any more.

Tom Flynn, section foreman, is getting the ice house ready to fill. It holds twelve hundred tons.

Yardmaster Galvin's wife, formerly Miss Hazel Doud of Mitchell, is out on their ranch near Ryegate until their new bungalow is completed.

The little son of C. A. Anderson, section foreman at Bascom, had the misfortune to fall off a coal shed and break one of his arms. He will be in shape to try it again in a few days.

C. H. Arnold, roundhouse foreman, and wife made a business trip to Miles City one day last week.

Conductor Frank Drovel is taking a layoff and visiting friends in the East.

Conductor "Dad" Cain of the West local is also taking a layoff, Conductor Freese taking his run.

Brakeman Billie Bartlett is now on the West local, with Sunday layovers in Melstone.

Fellow employees, let's help make our magazine the cleanest, most interesting and best that goes into our homes the coming year. Give it a pusher to the top of the grade.

Lewis McGovern, one of our engineers and a prominent citizen of Freeport, Ill., was signally honored at the biennial meeting of the Brotherhood of Locomotive Engineers, held at Springfield last month. Mr. McGovern had served the organization as vice chairman and he was strongly urged to accept the office for another term on the executive board. He declined the office with the statement that he thought others should be given an opportunity. The value placed by the Brotherhood of Locomotive Engineers on Mr. McGovern's counsel led the organization to create for him the office of honorary vice chairman, which he accepted. Freeport is proud of Alderman-Engineer McGovern, as he has also represented one of the wards in the city council.

Dakota National Bank

United States Depository

ABERDEEN, S. DAK.

GEO. G. MASON, President
S. H. COLLINS, Cashier
R. P. ROBERTS, Asst. Cash.

Responsibility of Stockholders
\$15,000,000.00

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Transacts a General Banking Business. Accounts of Banks, Corporations and Firms will receive best terms consistent with good banking methods. Individual accounts, subject to check, solicited. Boxes in Safety Deposit Vault.

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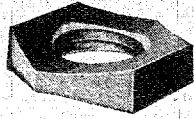
Hoge Building Seattle, Washington

Capital and Surplus - \$ 800,000

Total Assets over - \$4,900,000

JAMES D. HOGE **N. B. SOLNER**
President Cashier

We solicit your Northwest business
We pay 4 per cent on saving accounts



STEAM RAILWAYS,
Electric Railways, Private
Car Lines and Industrial
Corporations, operating in excess
of one million cars, are using

BOSS NUTS

for repairs and on new equipment



BossNutCompany

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CHICAGO

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Wholesale and Retail

GROCER

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Minn.

**The Varnish that
lasts longest.**



Made by
Murphy Varnish Company

*The
National Bank
of Tacoma*

Tacoma's Oldest and Largest Bank

Capital . . . \$ 1,000,000.00
Assets over \$ 10,000,000.00

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**Dearborn Feed Water
Treatment**

Right in Principle Economical in Application

Made to meet actual water conditions shown
by analysts—prevents foaming, corrosion, pitting,
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boxes and flues, reduces repair expense, increases
mileage and hauling capacity and improves traffic
conditions generally.

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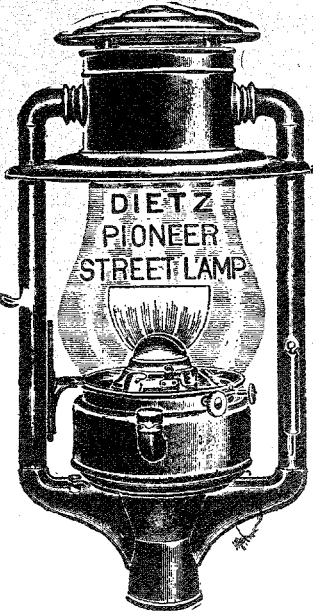
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Cold Blast -- For Post or Bracket

THIS Popular Street and Platform Lamp has been on the market for more than 34 years. It is the original of all globe tubular street lamps and while it has been imitated it has never been equalled. It requires no chimney and gives a steady light double that of an ordinary gas street lamp at much less cost. The "Pioneer" may be filled, lighted and regulated without removing the globe. Has a self-extinguishing device that may be set to burn for a certain number of hours. For years it has been the standard of the U. S. Government and many railway systems.



**R. E. DIETZ
COMPANY**

LARGEST MAKERS OF
LANTERNS IN THE WORLD

Founded 1840

New York City

Requires No Chimney
24½ inches high—1½ inch Wick.
22 Candle Power



Over 25,000

Pyle National Electric Headlights

In Service

Pyle National Electric Headlight Co.
900 S. Michigan Avenue CHICAGO

Galena Oils

Have No Equal in

Quality, Efficiency and Economy

Sole Manufacturers of

Celebrated Galena Coach, Engine and Car Oils

Lubrication on a Guaranteed Basis

Electric Railway Lubrication a Specialty

Perfection Valve and Signal Oils

Galena Railway Safety Oil, made especially for use in headlights, marker and classification lamps.

Galena Long-Time Burner Oil, for use in switch and semaphore lamps, and all lamps for long-time burning, avoiding smoked and cracked chimneys and crusted wicks.

Tests and Correspondence Solicited

Galena-Signal Oil Co.

Franklin, Pennsylvania

The FLINT Varnish Works

of

FLINT, MICHIGAN

Make everything the
Railroad needs for
its Coach, Cab and
Engine Work

*Varnishes Colors
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Black Engine Finishes
Front End Paints, etc.

"The Flint Line Means Quality"

Hirsch Uniforms

Are now being worn by the majority of trainmen on seventy-seven railroads in the United States.

Made by Union Tailors

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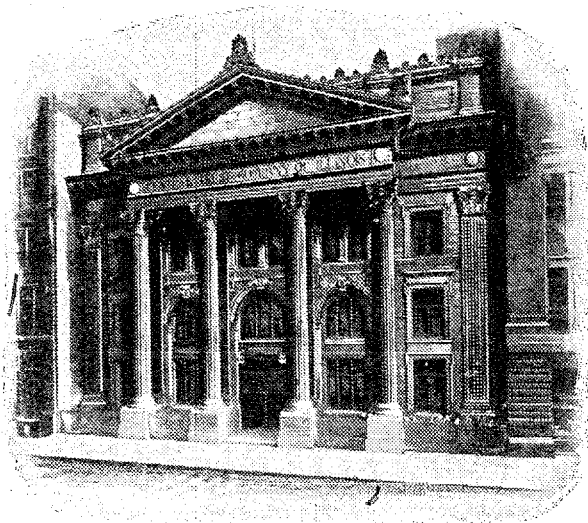
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