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Vol. VII, No. 9

SAINT LOUIS, MO.

September, 1913

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## Extracts from Paper Read Before the St. Louis Railway Club, May, 1913

By MR. R. COLLETT, Superintendent Locomotive Fuel Service.

Statistics are not generally interesting, but it may be of interest to those who have not given the subject particular thought or study to know that for the year ending 1912 there were 236,444 miles of railroads in the United States; the cost of fuel for operating trains over them \$230,555,544.00, or 11.85% of the total operating cost, 8.22% of the gross earnings, a cost of about \$4,000.00 per year for each locomotive in service. In the past two years there has been considerable increase in the unit cost of fuel, and this has further increased the ratio of fuel expense to the gross earnings.

The fuel bill on the 17 largest railroads entering St. Louis and East St. Louis for the fiscal year ending June 30, 1912, was \$51,432,545.00. We can readily understand, therefore, that railroad managers are very much interested in keeping the cost to the lowest possible figure; and when purchasing new locomotives or overhauling engines in service, consideration is given to equipping them for the greatest economy in the use of fuel. Appliances of whatever nature, however, unless properly looked after, do not produce results, and it, therefore, resolves itself largely into the matter of the human element that is securing proper methods of caring for the locomotives, and its devices at the terminal and on line of road. It is hardly to be expected that an engineer and fireman would take charge of a \$20,000.00 locomotive with \$30.00 or \$40.00 worth of coal in the tank, and access to that much more on the trip, without feeling a personal responsibility in the engine and its supplies, and there should be some way to determine whether or not proper efficiency is obtained, and the crew given credit for what they are able to do.

At the close of the year 1910, a plan was originated by Mr. W. C. Nixon, in charge of operation of the Frisco Lines, to look into the matter of locomotive fuel economy. Briefly, the plan was to undertake to find out what we

were doing in the use of locomotive fuel, and what we might reasonably expect to do and how to do it. Some of the items given special emphasis by Mr. Nixon were:

Waste of fuel by reason of engines delayed on road.

Engines kept under steam unnecessarily at roundhouse.

Proper handling of engines by engineers and firemen.

Condition of engines,—as well as a number of other items.

The result of the effort made in the direction of fuel economy at the close of the year 1911 and each subsequent year has shown a very gratifying saving in all classes of service.

Item three, proper handling of engines.—In the management of engines, there are not a dozen different correct ways to run and fire an engine, and it is remarkable how nearly alike the most skillful engineers and firemen do their work. The engineer who makes the best fuel performance pays particular attention to a number of things. He knows what the condition of the fire is when he pulls away from the terminal and handles engine accordingly. He does not slip the drivers if it can be avoided, or tear holes in the fire. He opens the cylinder cocks as soon as circumstances admit, and relieves the condensation, avoiding damage to pistons or cylinders or washing lubricants off the cylinder walls and valve seats. He starts the lubricants early enough to have the cylinders and valves well oiled before starting train and feeds both sides alike and regularly. He does not change reverse lever from full stroke to cut-off in one or two movements, but shortens the cut-off gradually as the speed increases and handles both the reverse lever and throttle, so that, especially on slide valve engines, steam chest pressure does not back up into the oil pipes and retard lubrication. He works steam as expansively as consistent with good lubrication, schedule and general condition of valve gear, and this, without particular reference to the perpendicular position or angle of reverse lever. The injector is handled so as to not over-supply the water to the boiler requiring that the injector be shut off on account of too much water, nor does he allow the fireman to do so when pumping the engine. He understands the language of the locomotive and can feel its pulse without the necessity of a certain amount of noise at the stack, provided the engine will do its work without such noise. The running time is used between stations, and the movement kept as continuous as possible. The result of his observations and opinions are responsible for the engines having been equipped with the present modern type of quadrant and reverse lever and throttle, as well as other devices that will permit of the engine being operated skillfully, and he utilizes them to the best possible advantage and at the completion of his trip reports the items that are needed to be done to maintain or improve the engine's efficiency. A careful crew, working together, can do more to establish a proper fuel performance than all the devices known.

Proper firing of engines.—The first thing, of course, is to start firemen out right when employing them. Formerly, in putting on new firemen, we gave them a student letter, to be endorsed by three engineers with whom they had ridden. There was a tendency for them to ride with the en-



gineers they thought would endorse their letter, or firemen with whom they were acquainted. We now tell the student firemen who to ride with, and before accepting service they are interviewed by the assistant superintendent of locomotive fuel service, who either approves or rejects their application. We try to anticipate the need of firemen and to have desirable men in view for these positions. For the men already in service, we have a first, second and third year's progressive examination. The knowledge gained through discussion and study is reflected in the work of the firemen. It is natural that a fireman, having told the instructor the proper way to fire an engine, will endeavor to carry out this practice.

We want, if possible, to have the engines so that the work will be comfortable for the firemen. We want them to do their work in the easiest way, which is by carefully preparing the fire at the terminals before starting, firing light and often, and keeping fire clean as possible. The instructions to the fireman should be made so the engineer will be agreeable to them and assist in carrying them out when we are not on the engine. At best, we can be with one crew only a small per cent of the time, and it is largely the personal pride they take in their work that counts. If one crew can handle a seven-car, all-steel passenger train over a division of 119 miles and not take water over the entire division; another crew handle a local passenger train of seven cars over a 286-mile division and only take water twice, with a tank of 7,000 gallons capacity; or another engineer and fireman with a freight engine handle 90% of the engine's potential rating and run 97 miles between water tank stops, it indicates that a first-class fuel performance is being made, and that the engine is in first-class condition and well handled; that the work is less arduous for the fireman than if the opposite were true, and it further indicates that we should try to bring the other engines and crews as nearly as possible up to this standard of efficiency. I do not mean by this that they should necessarily make the same run between water tanks, but such performance shows that neither fuel nor water has been wasted.

Engines not in good condition.—One of the most important factors in fuel economy is the condition of the engine. It is not possible, of course, to have an engine 100% all the time. It is essential that draft appliances be maintained to standard, that is as nearly as possible to what is found to be correct dimensions, for the different classes of engines, and if engine does not steam freely, the trouble should be looked for elsewhere. If the engine burns a level fire, and the proper location of petticoat pipe and draft sheet has been determined for this class of engine, there is very little gained by moving the petticoat pipe up or down, or change draft sheet; there is more likely to be a leak in steam pipes or exhaust joints. The first thing to ascertain is, whether the flues are thoroughly clean, and whether there are any holes in grates, around the grate bearing bars or dump grates, and if there is plenty of air opening in the ash pan. If these items are found to be correct, a water test should be put on the steam and exhaust pipes. A very prevalent cause for waste of fuel is that of reducing the nozzles. Engineer may report on the work book, "Reduce nozzle; engine is not hard

### **Frisco Club Plan**

The open season of the Frisco Railroad Club of St. Louis begins September 18, with every prospect of a banner year.

It has been decided, in place of dinners once a month, that the entertainment shall be diversified and only on alternate months will evening entertainments be given. These entertainments, though, will be exceptionally good. In order that this may be accomplished the entertainment of the odd months shall consist of a luncheon where each member pays for his lunch and is assessed the usual monthly dues. By doing this the club is enabled to have two month's dues for each evening's entertainment, and it has been decided that at those entertainments the appropriation for foodstuffs shall be held down in order that all available cash can be expended in securing some high-class performance or performer, well worth seeing or hearing.

At the opening meeting at noon, September 18, all the members are requested to bring at least one other person eligible to membership, and it is hoped to make the luncheon meeting so enjoyable that a large majority of them will announce themselves applicants for membership.

The entertainment and program committees are at work even at this early date getting ideas and plans for the October meeting and the members of these committees promise what might be termed a gala occasion.

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### **The Value of a Postage Stamp**

If you wish to write a letter to an American railroad official, his corpora-

tion will have to haul a ton of freight—two thousand pounds of average freight—coal, ore, silks, ostrich feathers and everything, for more than two and one-half miles to get money enough to buy a postage stamp to send you an answer. Out of that kind of service the corporation must pay its employes, buy its materials, pay its rents and taxes, interest on its debt and make its living.—Frank Trumbull, Address March 14, 1911, Canadian Club of New York.

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### **Our New Department**

Beginning with this issue THE FRISCO-MAN is opening up a Woman's Department, which will be edited by Mrs. E. G. Newland, Augusta, Kans.

A section of the magazine will be devoted each month to communications from Frisco women, containing suggestions which may be helpful in promoting Safety First, or gossipy articles pertinent to the Frisco and its employes.

Frisco women are urged to aid in making this department the most interesting section of the magazine, and this can be done by the co-operation of all. Keep posted on what you believe will make good reading matter for the department and let us have your ideas. Many of the new and modern methods adopted by the Frisco have originated from suggestions made by some of our associates.

Send your letters, giving your name and address, to Mrs. E. G. Newland, Augusta, Kans. She will incorporate them in the Woman's Department matter and forward same to us each month. Letters can be sent R. R. B., thus avoiding postage cost.



An unusually large crop of oats has been produced in the territory around Madill, Okla., this season, the number of cars of this product being shipped from that point is greatly in excess of last year's number. It is

expected, before the season is over, that between 500 and 600 cars will be shipped out of Madill.

The above reproduction shows a train of forty cars of oats leaving Madill, Okla., bound for Birmingham, Ala., July 19, 1913.

### What Safety Means

On a busy line a stoppage of traffic for sixty seconds means a loss of \$250. In an hour this loss may reach \$25,000. It is more than trebled the second hour, and goes on increasing until in the third hour the blocked railroad is losing a thousand, two thousand, five thousand dollars a minute—no one can calculate how much.

The railroads appreciate better than the public that Safety is cheaper than wrecks and do not hesitate at the expenditure of great sums for block-signal systems. These investments have saved many times their cost, but they do not put an end to wrecks. They have increased the human element in railway operation, which is the weakest spot, but there is still a huge margin left for further improvement.—Thaddeus S. Dayton, The Wreckless Railroad, Harper's Weekly, February 22, 1913.

### A Future Conductor

THE FRISCO-MAN is pleased to introduce herewith W. C. Tharp, Jr., a future Frisco conductor. The baby is



the son of W. C. Tharp, Sr., conductor on the River and Cape Division. Queen, the baby's bodyguard, may also be seen in the reproduction.

### Old Reliable

Joe Newlin, machinist at the New Shops, Springfield, Mo., has christened his Flying Merkel "Old Reliable," for the reason that it brought him to



work through six inches of snow last winter and is still on the job.

The picture herewith, showing Joe ready to mount "Old Reliable," was snapped in front of the New Shops.

### Chums

Frank Jay Linthicum, the baby shown herewith, is the six months old



son of Fireman Claude Linthicum of Monett, Mo.

Conductor Hal Kirk, a neighbor of Fireman Linthicum's, is the owner of the collie shown in the reproduction.

### No. 2681

Engine 2681 waiting to go out on train 869, July 4, 1913. Left to right,



W. C. Donnell and W. Jeff, brakemen; M. O. Luedtke, fireman; (on left steam chest) W. W. Butler, engineer.

### 1044's Performance

The performance of engine 1044, train 106, between Springfield and Kansas City, Mo., May 7, is another example of what is being accomplished in the interest in fuel economy.

Engine 1044, in charge of Engineer Goodrich and Fireman Dunham between Springfield and Fort Scott, and Engineer Gibbs and Fireman Canfield between Fort Scott and Kansas City, ran through from Springfield to Kansas City without taking coal; did not open bottom coal grates, consumed  $6\frac{1}{2}$  tons of coal, ran from Fort Scott to Kansas City without taking water, and had ten inches of water on arrival at Kansas City. Seven cars were handled in the train, and 9.14 pounds of coal per car mile were consumed.



Many and ingenious are the methods employed by the railroads to impress the importance of Safety First upon their employes, and, though the movement is directed primarily to employes, it has been expanded to include those of the public who through their own carelessness are liable to injury.

The major portion of this class are trespassers either on the railroad's right-of-way or equipment. Statistics prove that a large percentage of the persons killed on the railroads in the United States are those who are obtaining free rides on cars or who are struck by trains while on the railroad's right-of-way.

Every effort has been made to discourage trespassing, particularly among the small boys who are in the habit of hopping trains, but perhaps the most original scheme yet evolved for breaking up this practice was that put into effect by Superintendent C. H. Baltzell of the Ozark Division.

When Mr. Baltzell took charge at Thayer some time ago he found the boys in that vicinity addicted to the habit of hopping trains and the number of boys injured by reason of hopping trains and playing in the yards had reached alarming proportions.

Police regulations and force had but little effect, in fact, only served to make the risk more inviting.

After giving the matter considerable thought, Mr. Baltzell finally struck upon the idea of the "Ole Swimm'n' Hole." Without saying anything to anyone he had logs and stones removed and a place dredged out in a creek not far from the yards. After having several loads of gravel dumped into the creek, a spring board built on the bank, and the place fitted up generally, Mr. Baltzell called the boys in the vicinity together. He told them that the swimming hole was at their disposal, and that he would teach them how to swim, if they would promise to stop hopping trains, but that any

boy caught stealing rides or trespassing in the yards would be barred from the pool.

As result of this scheme the boys at Thayer have given both the right-of-way and the yards wide berth.

The school board at Monett, Mo., is cooperating with the railroad in its campaign against trespassing, and is making vigorous efforts to impress upon the children the dangers of hopping trains, trespassing on the railroad's right-of-way, as well as playing in the yards.

At the opening of the school ses-

sion, September 2, three of the members of the board, including its president, Mr. George J. C. Wilhelm, secretary of the Railroad Y. M. C. A., visited thirteen rooms. Mr. Wilhelm made eleven talks on "train hopping," emphasizing that it was a violation of the law, and impressing upon the boys the sorrow brought into homes by accidents resulting from this practice.

In every room the boys pledged themselves to stay away from the railroad, when they had no business there and the members of the board were greatly pleased with their day's work and the interest manifested among the children.

### The Vickers' Gang

The section gang of Vickers, Okla., Chickasha Sub-Division, in charge of Section Foreman John Baker, are shown in the accompanying reproduc-



tion. Those who may be seen in the picture are, reading from left to right (standing on car), Section Foreman John Baker and J. E. Hall, laborer. (Standing on track), Charley Griggsby and Paul Leta, laborers.

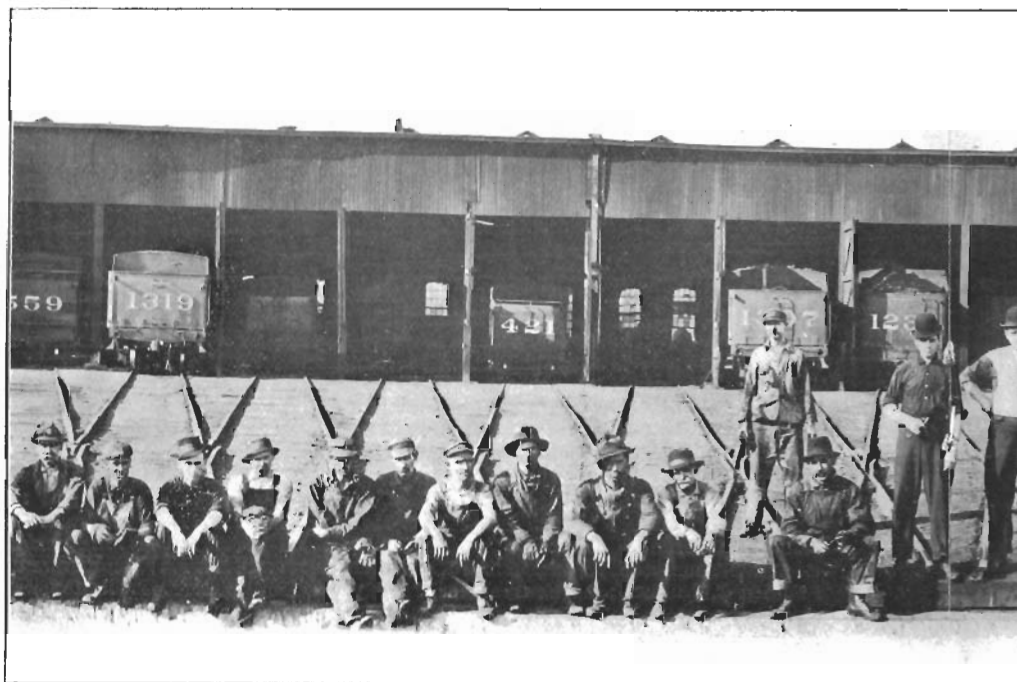
### Eleven Thousand a Year

Nobody was ever struck by a railway engine except upon a railway track, or, at any rate, so near to it that he was poaching on its preserve. Between the rails of a railroad there are, ordinarily, just four feet eight inches and a half, and the balance of the unsafe space does not exceed three feet; yet with all the rest of the world to stand and walk on, some eleven thousand people every year find it necessary to their employment to end their days, or their health, on this narrow strip of land. It is not, as I before intimated, that I am so much worried about these curious people as I am annoyed that they should be the means of giving my friend such a bad reputation. It is rather to protect his reputation against their assaults that I would make it, as near as possible, impossible for them to get within a destructive distance of him.—George A. Rankin, An American Transportation System.

## Our Pension List

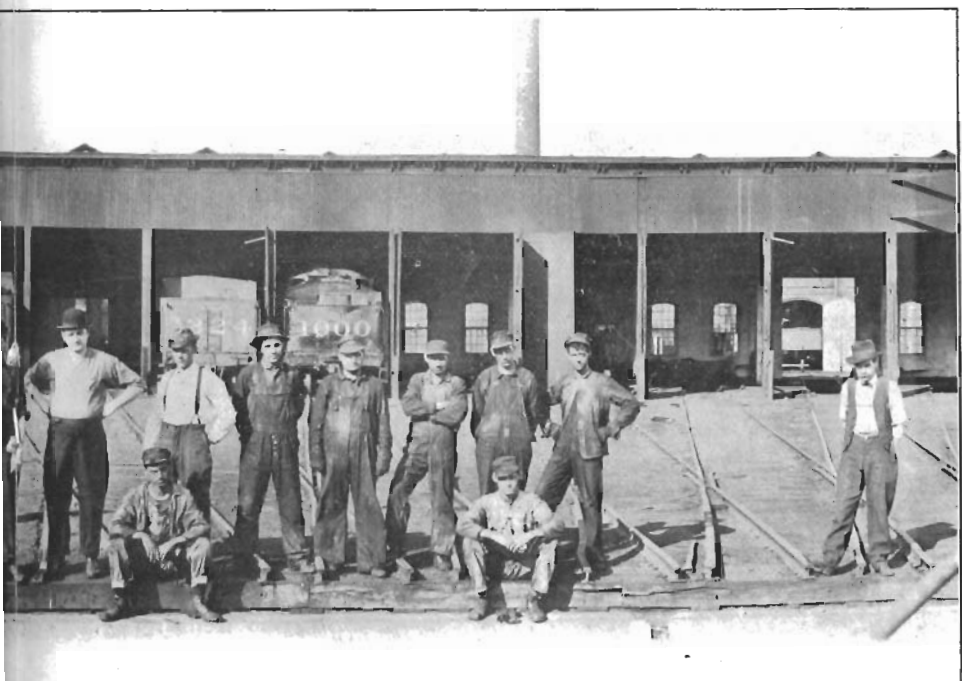
The Pension Department of the Frisco has been on the job several months and the "old timers" who have been retired on a pension are as follows:

Name.	Position.	Entered Service
Henry D. Taylor....	Mechanical Dept., Springfield, Mo.....	May 10, 1864
Granville W. Turner....	General Foreman B. & B., Springfield, Mo.....	July 10, 1865
George F. Sumner....	Bridge Inspector, Springfield, Mo.....	May 5, 1867
Daniel Hogan.....	Crossing Watchman, Springfield, Mo.....	March, 1870
Elliott H. Ball.....	Pumper, Monett, Mo.....	May, 1870
Michael Kearney....	General Foreman, Springfield, Mo.....	Oct. 1, 1870
William G. Buckley....	Pumper, West Plains, Mo.....	1871
John Clark.....	Crossing Watchman, Kansas City, Mo.....	1871
Albert Wagner.....	Engineer, Hospital, St. Louis, Mo.....	April 12, 1870
Churchill B. Wilson....	Drill Press Operator, Springfield, Mo.....	March 10, 1875
Thomas G. Scott....	Pumper, Rolla, Mo.....	May, 1877
William H. Warren....	Transfer Table Operator, Springfield, Mo.....	May, 1878
Nels A. Taudvig.....	Truckman, Kansas City, Mo.....	May 15, 1878
Frank D. Russell....	Special Agent, St. Louis, Mo.....	June 1, 1878
Dennis McCarthy....	Crossing Watchman, Joplin, Mo.....	1879
William H. House....	Scale Foreman, Springfield, Mo.....	September 16, 1879
Archibald Dodson....	Machinist Helper, Springfield, Mo.....	April 1, 1881
Reinhard Weis.....	Machinist, Springfield, Mo.....	June 9, 1881
Frederick B. Day....	Timekeeper, Kansas City, Mo.....	February 1, 1881
Giles F. Wing.....	Gang Foreman, Kansas City, Mo.....	1882
Henry Arthur.....	Crossing Watchman, Kansas City, Mo.....	October, 1882
Edwin B. Messick....	Crossing Watchman, Kansas City, Mo.....	November, 1882
Thomas A. Lambert....	Engineer, Enid, Okla.....	July 12, 1883
James Bissett.....	General Foreman, Springfield, Mo.....	September 16, 1883
James C. Nash.....	Special Examiner, Springfield, Mo.....	October 1, 1883
James H. Wheeler....	Clerk, Kansas City, Mo.....	February, 1884
Joseph LeCompte....	Engineer, Willow Springs, Mo.....	January 18, 1885
William M. Box....	Machinist, Springfield, Mo.....	April 23, 1885
Joseph Lewis.....	Laborer, Kansas City, Mo.....	March, 1886
Isaac Hines.....	Stationary Engineer, Kansas City, Mo.....	October, 1886
John D. Culbertson....	Watchman, Ash Grove, Mo.....	1887
Thomas Schofield....	Carpenter, Springfield, Mo.....	April 4, 1888
Wiley P. Q. Sexton....	Janitor, Fort Scott, Kans.....	June 1, 1887
Richard H. Briggs....	Master Mechanic, Memphis, Tenn.....	February 1, 1888
Joseph Gaskin.....	Crossing Watchman, Kansas City, Mo.....	August, 1888
John W. Nichols.....	Laborer, Springfield, Mo.....	April 14, 1889
Henry Miller.....	Wiper, Springfield, Mo.....	August 14, 1889
William Wresch.....	Laborer, Springfield, Mo.....	August 2, 1889
Geo. W. Thompson....	Clerk, Monte Ne, Ark.....	September 1, 1889
Stephen C. Hughes....	Lathe Operator, Springfield, Mo.....	October 2, 1889
William L. Holt.....	Machinist Helper, Springfield, Mo.....	February 3, 1890
Alexander M. Taylor....	Clerk, Springfield, Mo.....	March, 1890
John W. Hoover.....	Boilermaker Foreman, Springfield, Mo.....	October 1, 1890
Charles Matthews....	Porter, St. Louis, Mo.....	January 1, 1898



North Side Round House and Employees, Springfield, Mo. Picture taken July 30, 191





30, 1913. At extreme right in lower picture is General Foreman J. E. Burke.

### 14 Years' Service

Section Foreman James Frost of Arkansas City, Kans., has a record of fourteen years' continuous service. He



may be seen in the accompanying reproduction at the extreme left, just starting off for a day's work. Fred Carter, in center, and Mac Carter, at the right, are the other employees shown.

### Frisco Men

If all the railroads could realize how much ill feeling and opposition on the part of patrons, especially among the farmers, was caused by the actions and attitude of their officials and employees toward the public they would follow the example of the Frisco, which has in recent years

adopted a policy of uniform courtesy and consideration towards every traveler and shipper. Such gentlemen as Messrs. Alex Hilton, E. D. Levey, J. E. Hutchinson, S. A. Hughes, C. H. Baltzell, and our own agent, C. M. Wayland, are making the road popular with the people and are among its chief assets.—West Plains (Mo.) Journal.

### Quite a Catch

A week's fishing on the Gasconade River was recently enjoyed by a party of Springfield employes, including Engineer Castleman and wife, Fireman



Nibbler and wife, and W. W. Aton, foreman North Side Roundhouse, and wife.

The accompanying picture shows some of the members who made up the party and the result of two hours' catch.

# Woman's Department

MRS. E. G. NEWLAND,

Augusta, Kansas, Editress



We, the women of the Frisco, are making our little bow to you this month, and asking you "How do you like our new dress?" I think it is fine of the editor to give the women a special department, and I want to ask the cooperation of the Frisco women, that we may make it a success.

Let us make our corner the most interesting part of THE FRISCO-MAN. When you think of something that will be helpful to Safety First, or have a suggestion or word of cheer for the Frisco Family, write to me, giving your name and address, and we will put it in our own department.

First of all, I want to say, our own department is to be a cheerful place, for in the battles of life there is not time for pessimism, and the cheery man or woman is the one that wins out every time.

"Smile, and the world smiles with you,  
Knock, and you go alone;  
For the cheerful grin  
Will let you in,  
Where the kicker is never known.

Growl, and the way looks dreary,  
Laugh, and the path is bright,  
For the welcome smile  
Brings sunshine, while  
A frown shuts out the light.

Sing, and the world's harmonious,  
Grumble, and things go wrong;  
Yet all the time  
You are out of rhyme  
With the busy, bustling throng.

Kick, and there's trouble brewing;  
Whistle, and life is gay,  
And the world's in tune  
Like a day in June,  
And sorrow will melt away."

So, even though we may be like the little boy going through the woods, whistling to keep up our courage, let's keep on whistling, and when things happen, as they did a short time ago, when an engineer and brakeman were injured and a fireman had both legs broken and was injured internally, in a wreck, let us not stop whistling, but redouble our efforts for Safety First.

Of what worth are a few minutes of time gained or the little extra thought and effort which it would have required to have been safe, when our loved one is dead!

Let us continue to remind our men folks to be careful, knowing that somewhere some other woman is cautioning her husband, thus perhaps protecting our husband, father or brother from injury through his carelessness.

We are bound together by a common tie, and are all, in a measure, responsible for someone else. So let us not be half-hearted but determine to make the Frisco the Gold Medal road.

You read in the August issue of THE FRISCO-MAN of the gold medal offered by Mrs. Harriman to the road making the best record in Safety First. I am sure the outlook for us

is hopeful. Don't say there is nothing you can do. If nothing more, you can send out "thought waves" of Safety First and create a safety atmosphere. We do not know what we can do until we try, like the girl in this limerick—

There was a young girl who said,  
"Why

Can't I look in my ear with my eye?  
I'm sure I can do it,

If I set my mind to it;  
You never can tell till you try."

The editor says he would like gossip articles of local Frisco persons and things, so write me of the happenings of the month, as well as your thoughts.

Do not be afraid to get after the "bosses," for they need reminders as much and often as the men. The more responsible their position, the more lives depend on their care.

Remember, this department is open to Frisco women and the editor of THE FRISCO-MAN, as well as the editress of this department, earnestly desire your help and support.

Let me hear from you in time to get your letters in for the next issue of THE FRISCO-MAN.

Address all communications to  
MRS. E. G. NEWLAND,  
Augusta, Kans.

### Joseph Shea

Joseph Shea, superintendent of water service, died at the Employees' Hospital, Springfield, Mo., at 5:05 P. M., August 29, after a lingering illness.

Mr. Shea had been in ill health for about two years. In January, 1912, he was stricken with an attack of gall stones and was ill at the St. Louis Hospital for about nine months. He improved and returned to his duties at Springfield, but was again forced

to his bed by a second and more severe attack.

Mr. Shea was fifty-five years old and had been in the employ of the Frisco for about six years. Prior to his connection with the Frisco he was with the Santa Fe at Topeka, Kans., and with the Rock Island at Chicago.

The body was shipped to Philadelphia, Penna., for burial. Mr. Shea is survived by his wife and one son, Joseph, Jr.



Frisco Roundhouse, Neodesha, Kans.

### No. 2107

Motor car 2107, train 1281, was snapped at Chadwick, Mo., as shown



in the accompanying reproduction, August 7. Those shown in the picture are Conductor Laney, Engineer Caddle and Porter Coker.



## Along the Line



### Central Division

A. S. Kaplan resigned his position in the mechanical department to assume similar position in superintendent's office. He is succeeded by C. E. Wainwright, formerly clerk to G. R. Berger.

Operator E. F. Brittain is promoted to train dispatcher.

Transportation Clerk Beimfohr is enjoying a vacation at Corpus Christi, Texas.

Work on the new passenger station at Rogers, Ark., is nearing completion.

Trainmaster's Clerk A. P. Chidester is rejoicing over the arrival of a ten pound boy. So are the boys in the office.

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### Ozark Division

Chief Dispatcher C. B. Callahan very proudly announced the arrival of a nine pound baby girl, September 1.

Superintendent C. H. Baltzell and family have just returned from a ten days' vacation, spent in Chicago and other Illinois points, where Mr. Baltzell put in his childhood days. They report a most enjoyable time.

Mrs. W. H. Williams, wife of assistant superintendent, is spending a month's vacation in the east. She will stop off at many points of interest.

Miss Lelia Coleman, stenographer to Chief Clerk James J. Joslin, has just returned from a ten days' vacation spent at Little Rock, New Orleans and other points in the south.

A. A. Frieburger, train dispatcher, Willow Springs Sub-division, is enjoying a two weeks' vacation.

### Pittsburg

C. E. Bissell, coal inspector, spent Labor Day with home folks at Mountain Grove, Mo.

J. L. Headt, extra conductor, who has been ill for some time, is again able to resume duties.

G. R. Gracey, second trick operator, is enjoying his annual vacation.

The coal business at Pittsburg continues a record breaker for this time of the year and several extra switch crews are working out of this point.

G. W. Ferguson, roadmaster's clerk, visited home folks at Granby, Mo., Sunday, August 31.

Roadmaster Peters made a trip to Kansas City to obtain laborers for the new extra gangs he has been authorized to put to work, to get the mine tracks in good condition for the coming winter.

E. Casterman, stenographer at the freight office, will leave October 1, for his annual vacation.

Cashier Miller has just returned from his two weeks' vacation.

---

### Cherryvale

Mr. and Mrs. George Vance returned August 24, from a two weeks' vacation in Michigan. Mr. Vance is employed as cashier at this point.

Agent George Taaffee was called to Peoria, Ills., by the death of his brother, August 17.

Charles Coleman, switchman, was in charge of the Cherryvale switcher in the absence of R. Jones, who, with his family, visited in Colorado.

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## J. L. STIFEL & SONS



Fireman J. J. Bishop and wife attended the re-union at Cherryvale, held August 18 to 22.

Cecil Taylor, warehouse man, is laying off resting up. George Kendall is holding down the warehouse job during Mr. Taylor's absence.

### Chester

Operator Whaley relieved Operator Pense for thirty days recently.

Operator Kelton is busy looking after his bee farm. He has sold about 2,000 pounds of honey this season.

A. O. Furlow has returned from the Fort Smith Hospital and will be ready to resume work at an early date.

The pile driver has been busy in this vicinity lately driving new piling between Chester and Rudy. H. Poe is overseeing the work.

Walt Friddle is assigned to the extra, firing out of here, and has moved his family "home."

George Kirk has marketed his peach crop and has relieved Bob Murdick on the hill. Bob was anxious to get back to his tomato patch.

### Pocahontas

Warehouse Man Edwards is off on a sixty days' vacation. Lupus, Jefferson City and Kansas City, Mo., are among the points he will take in before his return.

Conductor Reedy is back on his regular run, after a thirty days' vacation.

Brakeman W. P. Bispham was off his run for a few days recently because of the illness of his wife.

### Springfield

Engine 3606, known as "Little Billy," used in yard switching service since the erection of the New Shops, has been scrapped. Engine 3636 takes the place of "Little Billy."

J. A. Endicott, night switch foreman, Joplin, Mo., accompanied by his wife and their son-in-law, motored from Joplin to Springfield, in their Ford car, August 24. They made the trip, a distance of ninety-nine miles, in seven hours and twenty minutes. While at Springfield the party were the guests of Mr. and Mrs. F. P. Wilmarth, Jr. They returned to Joplin Monday, August 25, making the round trip without a mishap of any kind.

George James, a foreman in the storeroom department at the New Shops, has moved into his new home on Warren Avenue near Lynn Street, just recently completed.

Walter Gardner, who for some time has been assistant to foreman in the cab department, New Shops, resigned August 21, and departed for Kingsville, Texas. Walter left many friends at the New Shops, who wish him the best of luck in his new field. Marion Thomas succeeds Mr. Gardner.

Lee D. James, boilermaker at the New Shops, accompanied by his wife, spent ten days at Colorado Springs during the month of August. Mr. and Mrs. James greatly enjoyed the trip.

J. B. Murphy, day watchman at the New Frisco Shops, is stepping high these days, because of the arrival of a nine pound baby boy August 30.

James DeBuque, who served his time as machinist with the Frisco at Springfield, Mo., died at the Rock Island Hospital, McAlester, Okla., following an operation, August 9.

Mr. DeBuque was twenty-four years old and was employed at the Rock

Island Shops at Halleyville, Okla., when he was taken ill.

The body was brought to Springfield, Mo., for burial and 200 machinists from the three shops at Springfield attended the funeral in a body.

### Beaumont

At present cattle are being shipped almost daily from Beaumont over the Frisco to Wichita, Kansas City, St. Louis and other eastern points.

J. G. Axtell, car carpenter, has returned to work after a thirty days' absence.

J. W. Wasson, clerk, made a trip to Wichita, Kans., August 30, to visit his sister, who just recently underwent an operation at the St. Francis Hospital there.

Miss Mable Hutton, daughter of Division Foreman Hutton, who made a trip to California some weeks ago for the benefit of her health, writes from Los Angeles that she is rapidly recovering and expects to return home the latter part of September.

William Riddle, car repairer, has moved to South Main Street, which is some nearer his work.

With the extra help recently put to work on the repair track, the back orders are being held down to normal. Car records show that during the month of August there were 112 Frisco cars repaired, 157 foreign cars, and 10 passenger cars.

David R. Drake, boilermaker, and William Hutton, division foreman, attended the Brownlow picnic, August 31.

A. L. Milliken, agent, handled some very fine peaches from points along the Frisco lines in Arkansas recently.

G. D. Schooler, car repairer, is contemplating a trip to the Northwest. He expects to visit Billings and Roundup, Mont., the latter part of September.

A. Sherman and Leo Smith have just completed the work of laying a new water main to the roundhouse from the water crane.

W. L. Ford, car repairer, entertained

out-of-town relatives the latter part of August.

C. H. Woodward of Hoisington, Kans., visited the shop boys recently. Mr. Woodward was formerly hostler assistant at this point, but is now employed as hostler for the Missouri Pacific.

A large number of cars of wheat are being handled over the Western Division into Beaumont.

W. F. Ludwick is appointed coal chute foreman at this point, effective August 11.

Will Allen, Western Division section foreman, is busy getting his section in good shape for the winter season.

William Robinson, extra section foreman, was in charge of the section at Augusta, Kans., the latter part of August.

The marriage of William A. Hutton, train inspector, and Miss Pearl Brewer of Latham, Kans., took place at Winfield, Kans., August 10. Mr. and Mrs. Hutton will be at home to their friends on North Main Street after August 18. Congratulations are extended.

W. J. Hutton, hostler, is counted with the "Beaumont fans." Get Wilber to tell how many games they won.

Herb. Rowe, handyman, made a business trip to Severy, Kans., August 31.

C. F. Allen, engineer, and A. F. Ogle, fireman, are assigned to one of the local runs, Beaumont to Enid, with engine 325.

C. G. Miller, engineer, and J. Robinson, fireman, also have one of the local runs, Enid to Beaumont, with engine 305.

R. O. Boyce has resigned his position with the Standard Oil Company at Neodesha, to take position with the Frisco at Beaumont.

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### Kansas City

M. C. Whelan, blacksmith foreman, and his family, have just returned from a trip to Leadville, Colo., and Salt Lake City.

Mrs. Mark Duer, wife of assistant boiler shop foreman, has just returned from an extended trip through the northwest.

The foremen of the shops at Kansas City, together with their wives, enjoyed a most delightful moonlight outing at Orchard View recently, as guests of Mr and Mrs. Grenninger, the occasion being the opening up of their new home. Refreshments were served on the lawn, which was beautifully decorated, and music and games were enjoyed. Mr. Grenninger is foreman of the tin shops.

Fred Williams, clerk, car department, is spending his vacation with his family in Northern Missouri.

J. H. Wheeler, formerly clerk in mechanical office, made us a short call August 23. Mr. Wheeler was retired July 1 under the pension system.

G. J. Williams, shop timekeeper, took a flying trip to Garland, Kans., August 24.

H. Smith, B. & B. foreman, and his gang, are building an emergency treatment room at this point for the purpose of giving first aid to the injured.

Joe Swartz, erecting foreman, has returned from a visit to Cincinnati. He reports a fine time.

William Westerman, formerly clerk in the mechanical office at this point, who was transferred to Fort Scott, has returned to his old desk.

George R. Steele returned Monday, August 25, from an extended visit to his old home in Virginia.

M. C. Whelan, blacksmith foreman, left August 16, for an extended trip through the west and northwest. F. L. Russell is acting as foreman during Mr. Whelan's absence.

Aaron Gregg is still on the sick list, but reports are that he is improving.

Fred and Emil Klutke, blacksmith helpers, are on the sick list.

Miss Kathryn McNamara and Miss Margaret Wilson, stenographers, Kansas City Terminals, spent Sunday, August 3, at Memphis, Tenn.

Severn Christianson, machinist in the roundhouse, has just returned from a 90 days' leave of absence. Mr. Christianson made a trip abroad, touring the following countries, Norway, Sweden, England, Ireland and France.

A. Defries, chief clerk to storekeeper, and E. M. Mohler, chief clerk to superintendent at this point, together with their families, have just returned from a vacation. They visited Denver, Colorado Springs, Salt Lake City, and other western points. Mr. and Mrs. Mohler claim they walked up Pike's Peak in nine hours.

### Bill and Don

Bill Higgins, shown herewith with his thoroughbred Scotch collie "Don," is the twenty-two months old son of



F. L. Higgins, local chairman of the B. of L. F. & E., Monett Mo.

Bill and "Don" are great friends and if anyone or anything attempts to molest Bill, "Don" is to the rescue at once.

(Continued from Page 7.)

enough on fire." This is sometimes done at the suggestion of the fireman after the fire has become clinkered. There may be several causes entirely apart from the nozzle, such as flues leaking or stopped up, netting stopped up, leak in fire box or smoke arch, improper running or firing, or a number of other causes, and with the defect remedied, there would be no necessity for reducing the nozzle. But if nozzles are allowed to be reduced indiscriminately, it is probable that some other defects at least may not be corrected. The contracting of the nozzle calls for a heavier fire to be carried on this engine than on other engines of the same class, and may result in fireman firing engines that have not had nozzle reduced, heavier than is required, with the result that another fire is spoiled and another engine is reported not steaming. We record the size of nozzles on the monthly engine condition report. It is first determined what size nozzle the engine will steam with freely, after having made allowance for varying conditions, and with standards established for each type of engine slightly smaller than our tests show engine will steam freely with, we maintain same. In the roundhouse we keep a board slotted so as to straddle the bridge and we put this down in the nozzle without opening the front end and thus check actual measurements with the measurements reported.

Some very valuable tests conducted by the Santa Fe Railroad show that engines equipped with a nozzle as large as is used on the average railroad, shows the back pressure in cylinders, at times, to be equal to the pull at draw-bar, which means that as much of the power of the locomotive is used in creating draft under these conditions as is used in pulling the train. From this the premium that is paid for contracting nozzles unnecessarily, or neglecting to clean them out, is readily seen, and this feature should not be left to the discretion of someone in the roundhouse that would prefer to contract the nozzles rather than go after the real cause of the trouble. With us, nozzles are not reduced without the consent of the Master Mechanic, and Assistant Superintendent Locomotive Fuel Service.

Another cause for waste of fuel lies in valves so set that engines cannot be worked in the most economical cut off. We found this was especially apt to occur on large freight engines equipped with slide valves. Unless this is specialized on and tests are made to show the difference in fuel consumption of an engine working at long stroke or in close cut-off, the shops may not be particular to set valves so that engines can be worked properly. On one division it was found by marking the cut-off on the quadrant, that the minimum point at which engine could be worked was frequently not closer than 11 or 12 inches on slide valve engines having 22x30 inch cylinders. Valves were then squared up to work at any point in cut-off and it was found that the five-inch notch was the most desirable minimum cut-off for this class engine. Quadrants have been similarly stenciled on one or two engines of nearly every class.

With reference to engine conditions.—Our mechanical officers try to make things as convenient as they can on the engines and are very appreciative of suggestions. Enginemen themselves are continually making sug-

gestions that help the fuel performance, and we try to carry them out whenever practical. It is very important that engineers familiarize themselves with the amount of fuel required to fill tank and make out tickets for the exact amount ordered, for in the event of taking coal from connecting lines or mine tipples on line, the engineers are, in a way, the purchasing agents of the company they represent.

Sufficient draft through the ash pan is very important. It takes a great deal of air to burn coal properly. It is estimated that 20 pounds or 260 cubic feet of air is required for the proper combustion of one pound of coal, or 3,900 cubic feet for each shovelful.

One thing that is frequently lost sight of is the relative cost of lubricants and fuel. I have in mind one division where the approximate cost of fuel was \$83.00 and the cost of lubrication 45 cents for a round trip of about 500 miles. The lubrication should be watched very closely by the engineer, and those having supervision over the crews should keep this feature in mind. But an engine should not be run with dry valves or cylinders. The engineers should carry extra oil with them and keep the engine well lubricated at all times. If careless in the use of oil, that can be handled on its merits, but it is just as reasonable, in my opinion, to say that we could have just so much coal to make the trip with as to start the engineers out without an emergency supply of oil, to use in case something should happen on the line.

Attention to detail is highly essential to locomotive operation. Things that are seemingly unimportant may have a decided effect on the final results. It can be safely left to the general officers to furnish new appliances. It is for us who are held responsible for the result, to keep posted and determine the best possible methods of handling such appliances to secure the maximum efficiency.

Keeping engines of a certain class in one working district is essential to proper fuel performance. Neither enginemen or shopmen can learn the proper care of an engine in one trip. The argument that an engine is an engine and a man that knows his business ought to do as well with one as with another, is wrong and is based on false premises. Circumstances require, sometimes, that engines be shifted around considerably, but this is invariably done at the expense of the fuel bill.

The whole problem resolves itself into a question of hearty co-operation on the part of all concerned. Anything that will help to establish a proper fuel performance on the railroad will help every other item of train operation. The work cannot possibly be departmentized. Every department on our line tries to help out in every way they can. The shop people gladly accept suggestions that make engines more economical in fuel and as comfortable for the enginemen as possible. They are very generous in inviting criticism in this respect. The same is true of the fuel department. Any changes that can be brought about in the handling or purchase of fuel that are practical are worked out.

Securing as nearly as possible a maximum tonnage rating for each

locomotive is highly important for a proper fuel performance also. Of course, for obvious reasons, all of these things cannot be done at once. All of the engines are not right all of the time, neither are they all wrong all of the time, and this is also true of the men, and statements of this character should not be taken too seriously. When things go wrong, a good getting-together is the best way to remedy them. We derive a great deal of benefit from the educational meetings held at the different points, and also from the different staff meetings held at the different points, and also from the different staff meetings, held by the division officials. With the best system or method that can possibly be maintained, human error will always furnish the need of a very close supervision. Any device placed on the locomotive tends to make it more complicated and requires that the men who are handling it be taught its proper use, and this emphasizes the need for greater education. Great good can be done in reducing the fuel bill of railroads by exercising proper care in the selection of our firemen, who will later become engineers and who will have under their supervision in the course of their career probably 50 to 100 other firemen, all of whom will profit more or less by the engineer's training. The need of firemen should be anticipated. These men, once employed, should be properly educated to perform their duties skillfully, and if they do not show aptitude, should not be allowed to remain in a vocation that they are not adapted to. A constant effort should be made to familiarize not only the enginemen but engine handling forces and mechanics the right way to handle and care for locomotives, and their work should be checked up often enough to know that it is done in the right way. It is highly essential that the work of fuel economy have the unqualified support of the general officers from the President down, and on the lines which I represent we have this support.

In conclusion, I wish to say that the one thing that has done more to reduce the fuel bill on the Frisco Lines than anything else is the interest and loyalty displayed by our engineers and firemen, and it is only to be regretted that we cannot carry out all of the suggestions made by them as rapidly as we would like to.

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### Pencil Economy

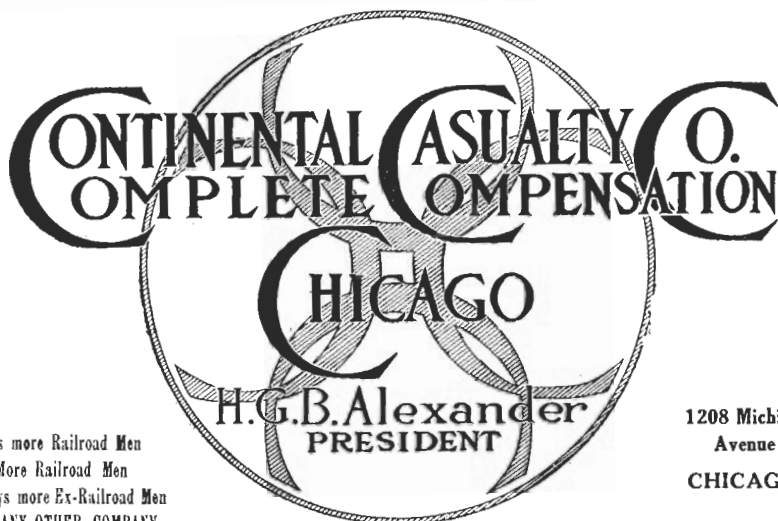
Much rivalry, engendered from an article which appeared in THE FRISCO-MAN recently regarding economy in the use of lead pencils, is apparent, particularly among the agents along the line, who seem to vie with each other in their efforts to wear pencils down to the lowest possible measurement.

Agent Ira Towne, of Breckenridge, Okla., has forwarded to General Sta-

tioner Windsor the end of a pencil which measures, including the point, less than one-half inch. This pencil was in constant use for two months.

Agent F. O. Mason, of Monmouth, Kans., has even broken that record, as the end of the pencil which he sent in measures just three-eighths of an inch in length.

These are evidences of what can be accomplished by the use of the new pencil holders recently furnished employees.

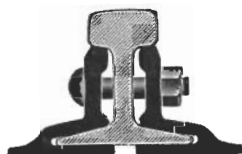


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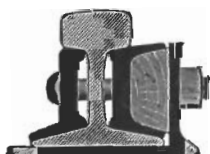
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tell me how little  
Income Insurance  
costs.

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Address.....  
Age ..... Occupation .....



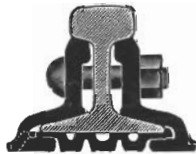
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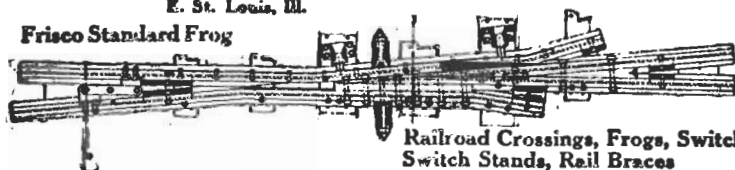
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