Ghe Frisco-Man

-E.S. /



EIGHTH AND WALNUT STREETS ST. LOUIS. MO. Kinloch, Central 991

PHONES

Bell, Main 5191



ONE MOMENT -PLEASE!

MANY of your friends and associates have followed our suggestion to buy Accident and Health Insurance from us and those who have suffered disability have congratulated themselves many times upon the benefits received from having "THE TRAVELERS" protection.

When you buy from us you get The Best. There is no time like the present. Make your application now.

The Travelers Insurance Company HARTFORD, CONNECTICUT



FRISCO EMPLOYES' HOSPITAL ASSOCIATION.

Receipts and Disbursements, October 1, 1916, to December 30, 1916, inclusive.

Balance brought forward from September 30th, 1916..... \$20,517.28

RECEIPTS:

From	assessments on members	39,371.95	
""	interest on daily balances	92.71	
66	interest on securities in treasury	1,898.73	
"'	donation by Frisco Receivers	41.66	
"	donation by St. LS. F. Ry. Co.	83.32	
"	sundry accounts collectible	362.19	41,850.56

DISBURSEMENTS:

For	pay rolls	\$12,028.10		
"	salaries of dispensary physicians	4,830.00		
"	professional and emergency services.	3,429.80		
"	labor, material and supplies	2,509.17		
"	provisions			
"	drugs			
	light, water, gas and fuel			
"	surgical instruments	139.75		
	sprinkling tax (St. Louis, Mo.)			
	all other expenses		\$38,101.82	
Balance, December 30, 1916, p. m.,				
	At Third National Bank, St. Louis		24,266.02	

\$62,367.84

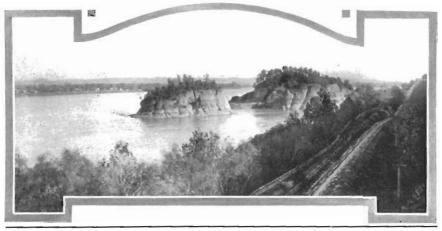
\$62,367.84

The Association owns \$12,750, face amount of Prior Lien, Series "A", 4% bonds, and \$4,250, face amount of Adjustment Mortgage, Series "A", 6% bonds of the St. Louis-San Francisco Railway Co.

St. Louis, January 4, 1917.

F. H. HAMILTON,

Treasurer.



VOL. XI.

FEBRUARY, 1917

No. 2

THE FRISCO-MAN Published Monthly by the St Louis-San Francisco Railway Company 742 FRISCO BLDG. ST. LOUIS, MO.

MORE THAN A BOUQUET.

The Frisco-Man calls attention to the following letter from Agent Billingsly which no doubt expresses the opinion of a majority of the Frisco employes, as to the kind of matter that should make up our magazine.



HE LAST edition of the Frisco-Man is 100% efficient, bottled in bond, XXX grade, and AA1 all around.

We don't care to get in the limelight with any suggestions, but seems several more first class photographs, short and to the point, items of general interest to all concerned, would help some. What do you think?

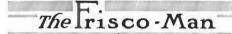
I like to read all the articles on Safety First, Freight Claim Prevention, courtesy, and the many other things, but seems to me if there is a Frisco employe who has not been waked up to the full meaning of these important and should be, co-operative duties, by this time, he must be almost hopeless. However, nothing like good reminders to keep from going to "sleep at the switch."

Photographs of people and places leave a very clear impression on our memory as to their general appearance, etc., long after we have forgotten what they have said, written, or described, but photographs and short sketches about each make a mighty fine combination.

Yours for continued success,

Aberdeen, Miss.

C. A. BILLINGSLY.



Watson Promoted.

Charles Watson, Demurrage Clerk and Frisco-Man Correspondent at the Birmingham offices, has been promoted to the position of Traveling Demurrage Supervisor. His territory will be between St. Louis and Birmingham, with headquarters at Kennett, Mo., where he and his wife will make their home.

The Frisco-Man is mighty glad to see Charley get this promotion, but regrets losing his services as Correspondent. However, we hope he will let us hear from him regularly.

This leaves a vacancy on our "staff", and applications are in order from anyone at Birmingham to fill Charley's shoes. Now don't all rush in at one time for this "job."



The accompanying photo shows Section Foreman 1. C. McCord and gang, taken just east of Fall River on the Northern Division, 27 miles west of Neodesha. Foreman McCord is man in year.

Department Change.

All matters relating to traffic heretofore handled by Mr. McAuliffe who resigned February I, should be addressed to C. H. Morrill, first assistant general freight agent, St. Louis, and matters other than the above will be handled by J. M. Johnston, general fuel agent, St. Louis.

Dictaphone Girls Banquet.

The Dictaphone Operators of the Freight Traffic Department (St. Louis) entertained the entire traffic department with an informal luncheon, February 2, in room 1024 Frisco Building. The following operators served: Misses Waller, Chief Operator, McGrath, Resnick, Kubatzky, Elder, Koenig, Steinmann, and Liebheit. Mr. Giessow acted as Toastmaster.

The luncheon, which consisted of hot chocolate, many kinds of sandwiches, cakes, pies, fruit, etc., was followed by a short entertainment, which was a great success, especially since those taking part had been rchearsing regularly for some time.

Larry (Gertrude) Hofman and H. P. (Lillian) Dollard opened with a "duet." These accomplished young artists(?) undoubtedly have a bright future, but not in the art of entertaining.

The Castle Walk by Miss McGrath and Miss Kubatzky was indeed a pleasing number, and after they become thoroughly inured will unquestionably "get by."

The Bead Dance (performer unknown) narrowly escaped the censor.

Trapeze performing by Miss Elder was nothing short of professional.

Red "kicked in" but didn't eat.

Yellow was there with his boots on. Allen ate heartily.

At 12:30 noon the party was attacked from the rear by Chief Clerk Giessow and retreated in orderly fashion.

Lack of space prohibits publishing a poem "A Unique Party" by "Heck," which refers to the above entertainment. However, we will say that as a Poet, "Heck" is one of the best little railroaders on the system. The Frisco-Man



The above photograph is that of the Current River Local Crew at Mountain View, who are, reading from left, I. Frommel, engineer; C. F. Adams, fireman; C. E. Baldridge, brakeman; J. J. Campbell, conductor and W. H. Campbell, brakeman. This run is better known as "Campbell Brothers Circus Train."

M

Some "Coach."

"Butch" Ammons of the Auditing Department, St. Louis, and, in the opinion of his many friends, the best Soccer Football player in that city, has accepted a position as "Coach in Chief" of the Wagner Electric Soccer Team in the St. Louis Municipal League. He now spends Tuesday and Friday of each week showing the youngsters just how to kick a shin. "Butch" takes a bunch of "Naval Cadets" and "Innisfailures" with him in the hope that they may be able to carry Wagner's new athletic field home some night when Mr. Wagner isn't looking.

Safety First.

A drawing by Fred C. Alsop of the New Shops, Springfield, brings out very clearly the effects of an extensive Safety First campaign. It shows Peter Dailey, who has been in the employ of the Company for about 25 years, riding home in the back end of a carriage of a friend. Peter believes in Safety First, and ties himself to the back of the seat, so there is no chance of an accident. As the drawing is with pencil, it is impossible to reproduce it here.

Caboose 260.

A letter recently received by the Frisco-Man from "Employe Frisco" of Monett, calls attention to Caboose 260 on Local 440-441, Conductor C. E. Rice, between Monett and Afton.

The letter says in part, "this caboose is the only one on the Southwestern Division that I know of, that has always clean and shiny windows. It is always kept neat, and I think should be advertised."



LeRoy Roach, son of Brakeman T. P. Roach, Fanning, Mo. Says he wants to be a brakeman like "daddy."

Conductor's Birthday Party.

Mrs. M. C. Goodwin, wife of Conductor Goodwin, entertained a few friends on the evening of January 29, in celebration of her husband's birthday. The evening was spent in games, and a one course **luncheon was** served. The Frisco-Man joins in wishing Conductor Goodwin many more happy birthdays.



Coleman Improving.

Bert Coleman, for several years Bridge Inspector, with headquarters at Neodesha, Kans., and who has been confined to the Frisco Hospital in St. Louis for the last six months suffering from sciatic rheumatism, is reported to be slowly improving. Before coming to St. Louis, Mr. Coleman spent two months at Hot Springs. He has many friends among the Employes who will be glad to know that he is improving, and who join the Frisco-Man in wishing him a speedy recovery.

Popular Brakeman Dead.

Mr. J. A. Langford, one of the most popular brakemen on the south end, died January 18, at the Frisco Hospital in Springfield, after a few days' illness. He was about 30 years old, and for the last eight years has been in the employ of the Frisco.

Old Conductor Retires.

Frank Doggrell, who has been in the employ of the Frisco for 40 years as conductor, between Memphis and Birmingham, retired from active service January 30, his seventieth birthday anniversary. Mr. Doggrell is the father of J. H. Doggrell, General Superintendent of Transportation.

Engineer Promoted.

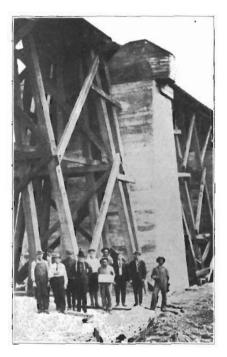
Tom Holland, an engineer on the Frisco since 1900, has been promoted to the position of traveling assistant superintendent of locomotive performance. His territory will be from Monett to Ellsworth, Kan., and branches, with headquarters in Joplin.

Mr. Holland began working for the Frisco when a mere lad, working with a steel gang carrying water in 1889.

He went to Monett in 1893 as train caller and held other minor positions

until 1899 when he began "firing." He was made engineer in 1900.

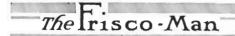
The boys are glad to hear of his promotion, and wish him much success in his new position.



The accompanying photo shows one of the two concrete piers over Cane Creek, near Cordova, Ala., and Foreman John Prativa and men. These piers are 55 feet high.

Bagby Resigns.

Lee Bagby, chief clerk to Freight Agent Warren Baker at Cape Girardeau, resigned February 1, to accept a position with the Portland Cement Company. Mr. Bagby has been with the Frisco for a number of years, and has many friends among Frisco employes. Ed. Willer, who was employed in the offices at Chaffee, will succeed Bagby.



Fifty-Fifty.



The above photograph shows little Suzanne Roach, granddaughter of Agent S. E. Wood, Fanning, Mo., "dividing" with her pet lamb.

Veteran Agent Resigns.

G. S. Burney after a continuous service as Agent at Mansfield, Mo., since October 15, 1885, has resigned. Agent Burney has been with the Company almost 35 years, beginning work as Agent and Operator at Cedar Gap in July, 1882.

Mr. Burney resigns to give his entire time to his farm and orchard near Mansfield. Besides being Agent for the Frisco he is known as one of the "apple kings" of the Ozarks, owning a large, well-caredfor and productive apple orchard.

The best wishes of the Frisco-Man go with Mr. Burney in his new occupation.



View showing R. D. Vaughn, assistant yardmaster, and Ed. Wheeler, general yardmaster, Afton, Okla.

Station Records.

The Frisco-Man has received an article from C. R. Welch, Train Auditor, on "Station Records," which is taken from the Telegraphers' Magazine. We are sorry that we do not have sufficient space for it this issue. However, the Frisco-Man is somewhat averse to using matter taken from other magazines. We prefer something original from the employes. The thoughtfulness of Mr. Welch is appreciated, however, and we hope that we will hear from him again.



Section Foreman W. II. Duncan and Gang, taken while doing some new work in North Yards, Springfield. Reading from left, those in the picture are: Jas. W. Letterman, James Yates, Preston Yates, Rubin McDaniel, Orin McNeil, Adrain Long, Ray Taylor, Wm. II. Duncan, Foreman, George Miller, Robert Breshears, Marion Shockley and Thomas Mayo. Foreman Duncan has been in the service of the Frisco for 15 years.

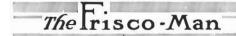
"Seals."

Below is letter addressed by Superintendent C. H. Baltzell, to Conductor H. H. Washburn, complimenting him on his article "Seals" which appeared in the December Frisco-Man.

I have just read aloud your article in the December issue of the Frisco-Man on Seals to the Freight Claim Prevention Committee in session at Hugo today.

We consider it a very able article and have benefited by the advice that the article contains. Yours truly,

C. H. Baltzell, Superintendent.



Promotions and Changes.

E. D. Levy, Second Vice President and General Manager, announces the appointment, effective March 1, of R. F. Carr, Superintendent of the Southern Division, to be Assistant General Manager, with headquarters at Springfield.

Effective February 1, Mr. O. G. Cox was appointed assistant superintendent of Cherokee Sub-Division, with headquarters at Sapulpa, Oklahoma, vice Mr. O. D. Lewis, appointed assistant superintendent at Sapulpa.

Effective February 1, Mr. W. G. Oldham was appointed assistant superintendent, territory Enid exclusive to Vernon, inclusive, and Enid exclusive to Avard, inclusive, headquarters Enid, vice Mr. J. T. Brooks transferred.

Effective January 22, Mr. W. E. Belter was appointed assistant superintendent in charge of Chickasha Sub-Division, with headquarters at Oklahoma City.

Effective January 22, Mr. F. C. Gow was appointed assistant superintendent in charge of Oklahoma Sub-Division, including Oklahoma City yard, with headquarters at Oklahoma City.

Effective January 22, Mr. W. J. Foley was appointed assistant superintendent in charge of Sherman Sub-Division, including Francis yard, with headquarters at Francis, Okla.

Effective January 22, Mr. B. S. Shirk was appointed assistant superintendent in charge of Creek Sub-Division, with headquarters at Francis, Okla.

Effective February 1, the office of superintendent terminals at Tulsa was abolished, and Mr. J. T. Brooks was appointed trainmaster of terminals at that point.

Effective January 23, J. F. Hill was appointed assistant superintendent of locomotive performance, headquarters Oklahoma City, vice W. E. Belter assigned to other duties.

Effective January 23, T. P. Holland was appointed assistant superintendent of

locomotive performance, Kansas Division, headquarters Joplin, vice G. A. Ermatinger assigned to other duties.

Effective January 23, R. Y. Humphrey was appointed assistant superintendent locomotive performance, Southwestern Division, headquarters Sapulpa, vice W. J. Foley assigned to other duties.

A. D. Lightner, superintendent of terminals at Tulsa, has been appointed general agent at Tulsa, in charge of the traffic and executive departments. The office of superintendent terminals having been abolished.

A. H. Moll was appointed chief dispatcher and division operator at Springfield, succeeding O. G. Cox, promoted. This effective February 1.

Effective February I, G. E. Cromer was appointed chief dispatcher and division operator at Newburg, succeeding A. II. Moll, transferred.

Effective February 1, D. E. Callahan was appointed chief dispatcher with headquarters at Enid, vice W. G. Oldham, assigned to other duties.

Effective January 16, Tulsa Stock Yards, Mile Post 421.6, Cherokee Sub-Division will be known as "East Tulsa."

Effective January 29, Berenice, Oklahoma, mile post K-527.4, will be known as Clifford, Oklahoma, owing to the confusion with a station by the name of Bernice on the M. O. & G. Understand that this is the connecting point of the O. F. S. L., which runs to Dilworth, and freight formerly routed via Berenice to Dilworth should be routed via Clifford.

Effective January 29, the blind siding at Mile E-440.2 now known as Petrolium has been changed to "NOLA."

Major Jonah.

Chief Engineer F. G. Jonah recently received from President Wilson a commission as Major in the Engineers' Officers Reserve Corps of the United States Army. Maj. Jonah will be subject to call for service in the army in the event of war.



HISTORY BY MCNAIR.

Having been called upon to write on the growth of the Central Division, I beg to submit the following, which is given from my memory of 35 years' service on this Division.

The Frisco Line from Monett, Missouri, to Paris, Texas, was constructed in a number of sections and was seven years and more in building. Not that the construction work was constantly in progress throughout that period.

The St. Louis, Arkansas and Texas Railway Company was incorporated in Missouri to construct the line from Monett (then Plymouth) to the Missouri-Arkansas State Line. The same company was incorporated in Arkansas to construct the line from said State line to a point just at the mouth of the Geveraux Cut on the north side, in Favetteville. From there to a connection with the then Little Rock and Fort Smith Railroad at Van Buren and from a like connection on the south side of the Arkansas River to the north line of Garrison Avenue in Fort Smith, the Missouri, Arkansas and Southern Railway Company was incorporated in Arkansas to build. The Ft. Smith & Van Buren Bridge Company built the bridge over the Arkansas River and the approaches thereto, connecting with the lines built under charter of M. & N. A. Ry. Co.

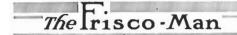
From Fort Smith to Paris, Texas, that part of the line in Arkansas, (the line runs in and out of the State a number of times between Ft. Smith and a point south of Jenson, a part of the Jenson Station grounds being in Arkansas and a part in Oklahoma) was built under the charter of Fort Smith and Southern Railway Company, an Arkansas corporation, while that part in Indian Territory, now State of Oklahoma, was built by St. Louis and San Francisco Railway Company; that company having been granted the right to do so by an Act of Congress. While for that portion of the line in Texas from Red River to Paris, was built as, and still is Paris and Great Northern Railroad Company, incorporated in Texas.

The construction of the line from Plymouth Junction southward was begun in the summer of 1880, and by the first day of December the 30 miles to Seligman was in operation, which operation consisted of a mixed passenger and freight train operated from Pierce City to Seligman and return daily. Distance 35 miles and it required about 3½ hours to make the trip one way. Threadgill's stage coach running from Seligman to Fayetteville did nearly as well in point of time.

This road, as constructed at that time, was but a mere shell of what the road is today. Road bed narrow, 12 and 14 feet on embankment and 18 feet in cuts. Rather than to borrow anything harder than earth to make the embankment much trestle bridging was built, much of it with framed bents, as pile driving was not an easy task, while timber was in abundance, being a solid forest all the way. Track was laid with steel railing weighing 52 pounds per yard and it might be interesting to know that that 52 pound steel rail cost more than the new 90 pound steel in that track today.

The construction of the line from Seligman to Fayetteville was begun in the summer of 1880, (first grading done south of State Line in September, 1880) and the first train -first regular passenger train ran into Rogers on May 10, 1881, and into what is now North Fayetteville on June 8th of that year.

Mixed train service from Fayetteville south to Winslow was installed about January I, 1882. Regular passenger train service was inaugurated to Mountainburg



about September 28, 1882, and to Van Buren a month later and into Fort Smith, via the Little Rock-Fort Smith Ry. Co's. ferry at Van Buren, about December 1, 1882.

The dates at which regular train service was installed does not indicate that the railroad was completed at that date—far from it.

Much temporary bridging was as soon as possible replaced with an embankment built by means of steam shovel. Continuous and grievous slides had to be contended with and great expense was incurred in removing the material sliding into the road bed and track. It was necessary to work steam shovels, all the teams available and hundreds of laborers at times, particularly after a heavy rain when the slopes of the mountain side would become saturated.

During the first two years the road was in operation south of Fayetteville, between Brentwood and Porter, the cost of removing slides amounted to over \$200,000.

South of the Missouri-Arkansas State line the road bed was all graded 14 feet wide on embankment and 18 feet in excavation. The track from Fayetteville south was laid with 56 pound steel rails.

The tunnel south of Winslow is 1707 feet long. Tunnel at Jenson is about 1200 feet long.

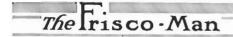
The construction of the bridge across the Arkansas River at Van Buren was begun in the spring or early winter of 1885 and was opened for traffic in the early spring of 1886.

The construction of the line from Fort Smith to Paris was begun early in 1886(?) and through train service was inaugurated about September I, 1887 (?) That line was graded with 16 foot road bed on embankment and 20 feet in cuts. That line was laid with 56 pound and 60 pound steel rails; mostly with the latter and heavier weight. Some 56 pound English steel was used in laying the track from Paris northward. The superstructure of both the Arkansas River Bridge and the Red River Bridge, as renewed in 1913 and 1914, is more than twice as heavy as the old spans taken out.

Most of the roads were originally laid with ties spaced 2 feet centers, 2640 per mile, as against 3200 per mile nowadays. Bridges were originally built to carry power weighing 30,000 to 35,000 pounds on axles. Nowadays we are building them to carry 55,000 and 60,000 pounds per axle weight, Cooper's E specifications. Where roads were built with steel rail weighing 52 pounds, 56 pounds and 60 pounds per yard in the early days, we now have 85 pound and 90 pound. We buy mostly 90 pound rails now.

After the line was opened up to Paris we had double daily through passenger train service, with equipment consisting of one combination, one baggage, one coach and one small sleeper on the night trains. We had also two regular freight trains daily each way and extra freight trains as business demanded. Texas gave us large shipments of cattle, often three and four section trains of live stock. Train leaving Paris at 7 a. m., would usually eat supper at Monett. We had to give them good runs to get the business.

When the Central Division was built into Arkansas and Texas we opened up a new or primitive country with great natural resources; mules, horses, hogs, cattle, eggs, poultry and untold billions of feet of hardwood and other timber. The Boston Mountain has best hardwood in the world. We shipped it to every state in the Union, also millions of feet to Mexico and the Hawaiian Islands. At first the forest products were shipped in the rough, as lumber, logs and ties, while today it is being manufactured and shipped as handles, vehicle and agricultural implement wood, wagons, staves, and in various other stages of finished and near finished products. I believe it is safe to say that the population has increased 500% since



we entered the territory and business 900%, as you all no doubt know we have a first class road, which has cost millions of dollars to obtain. I never saw a brighter outlook than we have now. We have learned at the school of experience.

Here is a list of names of the Superintendents on the Central Division from its birth to the present:

W. A. Thomas, dead.

F. E. Merrell, whereabouts unknown.

J. A. Mantor, living in Ft. Smith engaged in mercantile business.

A. O'Hara, dead.

G. H. Schleyer, Gen'l Manager Texas Lines.

LeRoy Kramer, V. Pres. Pullman Co., Chicago.

H. H. Brown, Supt. Kansas Division.

W. G. Koch, with Ft. Smith and Western.

C. H. Baltzell, our present Superintendent.

Our present captain on the Central Division and our leaders on entire system are men of high class, and I believe will compare favorably with any other railway organization in the country. If we all stand firm, having the thought of F. C. P. always on our mind there should be no reason why we should not succeed.

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Schooling versus Education.

By Kenneth L. Van Auken, Pres. Railway Educational Press.

A track foreman was in my office the other day, asking me what I thought about his accepting an offered position as roadmaster on another railroad, and he brought up the question of his education —said he had not had much schooling in his early days and he seriously doubted his ability to hold down the position.

It developed that his common school education was good, that he was able to handle reports of all kinds with ease, neatness and dispatch and the only question in his mind was regarding his technical education.

I found out on inquiry that he had had a very wide experience in track work, starting in as a laborer and having had charge of section and extra gangs.

This man was an educated man, but he had been educated in the school of experience instead of in college. He had kept up to date on track work methods, was interested in all new developments and read the opinions of other trackmen wherever he was able to get them.

Many people confuse the terms, schooling and education. A man can educate himself if he has the ground work of knowledge necessary to understand what he reads. Some of our best educated men have had almost no schooling at all in what we commonly look upon as schooling. They have educated themselves by reading and by keen observation through their own experience. The fact that a man has been to school or to college does not make him a good track man or a good car man. A man is of value in these positions on account of what he picks up in his daily experience and through what he has been able to find out about the practice of other men on other roads.

We are getting to the point where we judge a man by his ability and not by his schooling; and when ability is considered, the man who has educated himself usually has it on the one taught what he knows by others.



The Frisco-Man

MOTOR CAR CARE.

H. W. Cutshall.

FUEL. To prevent delay to entire gang while preparing sufficient gasoline for the day's run a five gallon lot should be carefully strained through a chamois to remove water and grit. To neglect straining will certainly cause carburetor and engine trouble. (Do not strain through a flag, the lint from it will clog fuel pipe and needle valve.)

Mix thoroughly with the gasoline, "A" oil in the proportion of 1/2 pint of oil to each gallon of gasoline (2-1/2 pints oil to 5 gallons gasoline.)

The importance of having oil and fuel well mixed before putting in tank of car must not be overlooked. Unmixed oil will clog fuel pipes and carburetor.

After a new car has been well broken in (after first 1000 miles run) the amount of grade "A" oil should be lessened to 1/4 pint to each gallon of gasoline (1-1/4 pints oil to 5 gallons gasoline.)

LUBRICATION. Grade "A" oil must be used mixed with gasoline as explained under "Fuel" to lubricate piston and rings, wrist pin, crank and connecting rod bearings on inside of engine. It should be used in the lubricator on top of engine and fed at the rate of 10 drops per minute when engine is new, gradually decreasing to 6 drops per minute after car is well broken in.

Use grade "A" oil on wheel bearings and idler pulley, which has an oil hole in either end of pulley hub. This should be oiled frequently. The boxing on fly wheel end of crank shaft.

Cup grease must be placed in the cups on engine and should be turned down one notch (1/4 turn) each mile travelled. Failure to keep grease cups filled and screwed down will result in worn main bearings, a loss of fuel and power.

Car or so-called "black" oil must not be used, and only such quantities as are actually required. Excessive use is not only wasteful but will cause carbon to form on inside of engine, with loss of power, where the lubricator is set to feed oil too fast or too much is mixed with gasoline. Keep car and engine clean at all times, less oil will be required and more satisfactory operation had.

STARTING. Two tests can and should be made to insure the prompt starting of the car.

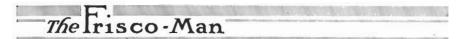
First, close the battery switch, then the "Coaster," take a screwdriver or any metal, place it across from screw holding wire in timer to fly wheel or axle boxing oil tube, a sharp buzz should occur in the vibrator. If it does not occur look for loose battery connection.

Second, open valve or cock in fuel pipe under gasoline tank. Close needle valve in carburetor, then open one full turn, now place your fingers under and raise valves in carburetor, hold these up until the gasoline begins to drip out of carburetor. It may require a minute or so for the gasoline to begin to drip.

Now set the "Timer" lever on "Center" open the "Coaster," open the "Throttle," open the "Relief" valve on top of the cylinder, open the "Lubricator."

Have two men push the car from the rear. As soon as the car begins to move close the "Coaster," when the engine fires immediately close the relief valve, "Advance" the "Timer" lever slowly until the engine runs smoothly.

After car has run a short distance, sufficiently to warm the engine thoroughly, close "Throttle" half way, now close the needle valve in carburetor until engine quits firing, then gradually open needle valve until engine fires regularly at a speed of about 10 miles per hour, at this point the carburetor will be properly adjusted, permitting the admission of more gasoline on a hard pull by opening throttle lever.



Now adjust the Lubricator to about 10 drops per minute while car is new, or 6 drops per minute after car has run 1000 miles.

Turn grease cup caps down one notch each mile as engine runs.

RUNNING. Speed of engine is governed by opening and closing of "Coaster." The "Throttle" should always be closed while car is coasting. This saves gasoline and prevents the spraying through coaster valve in front of engine, of lubrication over framework and deck of car.

The belt tightener or idler should not be pulled up any farther than is absolutely necessary to propel the car. Running with belt too tight causes friction nad loss of power, is liable to break lacing and tear out the holes in belt.

STOPPING. To stop the engine open the "Coaster." Immediately after stopping car the "Lubricator" should be closed to prevent waste of oil. Apply brake gradually, allow engine to turn as long as car is in motion. Have throttle closed to allow crank case to clear of all fuel. Release idler on belt when car is standing. When no attendant is near, switch on battery circuit must be open and battery box locked. Gasoline should be turned off in fuel pipe under tank.

GENERAL. The engine and car must be kept clean of dirt and grease at all times. All bolts, nuts and screws should be kept absolutely tight. It will prolong the life of the engine and car and add to the ease and economy of operation.

No changes of nor additions to the car or engine are to be made.

A white light in front and red light in rear of car has been provided and should be always carried in absolute readiness (See M. of W. & S. rule No. 341.)

PLACING CAR ON These cars have OR OFF RAILS. been provided with

devices especially designed to assist in the placing on or removal from the track, also to make handling and riding thereon safe and comfortable.

Foreman must designate a place or station for each man of his gang. These places must always be occupied by the designated member. It will be the duty of those placed in the extreme front and extreme rear (the tank end is front of car) to place the car on the rails and remove it therefrom.

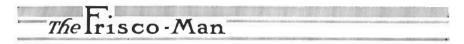
To place the car on the track proceed as follows:

Having the rear end of the car pointed toward the rails, the rear end men will station themselves alongside grasping with one hand the upright pipe of safety device and side member of car with the other. The front men will step directly in front of the car grasping the uprights of safety device and will push it back until rear wheels clear the rail and will hold in suspension until front wheels come up even with end of ties before lowering. (If lowered too quickly weight will come on brake blocks causing damage to them.) Front end men will then pick up front of car clear of rails and carry it around and place on rails. While front is being carried around rear end men will work one wheel towards rail and the other wheel over rail and not attempt to place rear wheels on rail until after front end has been placed.

Men must not be permitted to walk backwards under any circumstances and should always face when lifting car on or off of the rails.

Care must be exercised to have wheels clear rails so that weight of car will not damage them when setting car off of track.

LOADING TOOLS. Specific places must be had for every tool carried on the car and each must always be kept in its place while car is being operated. The men stationed or riding on each side of car must be assigned



to load their respective sides of the car.

The right side beginning from outside shall contain 1 lining bar, 1 claw bar, 1 track wrench, 1 track gauge, 1 jack handle, 1 level board; in front right side hooked with sharp point in, 3 to 5 picks; in rear right side hooked with sharp edge inside, 2 adzes, 2 spike mauls; alongside of inner frame, dinner pails. With head resting over front axle and lever pointing toward wheel, place jack on top of tools lying on deck of car. Jack should be removed from car and carried out of way by man seated directly over it when car is to be taken off of track.

The left side beginning from outside should carry 1 lining bar, 1 track wrench, 3 to 8 shovels piled in two rows with backs of shovels up and handles forward. Hook 1 track chisel in front of frame, place water keg under foreman's seat at rear of engine, provide a small box to carry small materials, carry flags on deck of car at rear between water keg and safety device. Do not tie flags to frame of car.

No tools are to be carried on the outside of car. (See M. of W. & S. Rule No. 342.)

When babbitt metal is heated some of the tin and antimony in it is burned out, making it unsuited for use in machinery bearings, and similar purposes, after several heatings. The oxidation of the metal is indicated by the formation of a scum on the surface.

Leather machine belts should be cleaned with gasoline to give a good binding surface, rather than load them with belt grease, when they slip repeatedly.



Crew Local 440, engine 663, taken at Wyandotte, Okla. Those in picture are (reading from left) Chas. E. Rice, conductor; Will J. Amber, F. E. Nediffer and Fred Albred, brakemen: E. E. Bridwell, engineer, and J. D. Smith, fireman.



Switch Engine "Crew", Afton, Okła. Reading from the left are: Ed. Wheeler, general yardmaster, Mrs. Ed. Wheeler, Beatrice and Mrs. Ross Loker. Bottom row: D, Bohanan, M. Loyd, Mrs. R. D. Vaughn, R. D. Vaughn.

All He Had Was Sympathy.

During the severe storm that flooded Galveston and caused some loss of life and much damage to property, an artillery officer, on leave of absence, telegraphed to his superior officer in command of the coast defenses at that point:

"Sympathy to the regiment; where are my clothes?"

The answer was:

"Sympathy from the regiment -you have no clothes."

The frisco-Man

STUDIES IN TRAFFIC.

Geo. L. Edwards.

Car Supply and Distribution.

Section 1 of the act to regulate commerce after defining the word "transportation" to include all cars and other vehicles and all instrumentalities and facilities of shipment or carriage, etc., provides, that it shall be the duty of every carrier subject to the act to provide and furnish such transportation upon reasonable request therefor. However, the carrier's duty to furnish such transportation is fixed by the common law and by the charter of the individual carriers rather than by the act to regulate commerce.

It is the common law duty of carriers to furnish a proper and adequate car equipment for all the reasonable needs of the business they advertise and undertake to do. If a carrier holds itself out as a carrier of commodities which require a special kind of equipment, such as oil or perishable freight, by providing rates for such commodities in its tariffs, it is the duty of such a carrier to furnish upon reasonable request, suitable facilities to insure the safe transportation and delivery of such freight unless that duty is specifically qualified by the tariff. That does not mean however, that a carrier must supply itself with a sufficient car equipment to protect the immediate movement of all freight offered it during unusual business periods and the inability of a carrier to furnish a shipper upon demand with all the cars he needs during a temporary car shortage is not subjecting him to any undue or unreasonable prejudice or disadvantage within the meaning of the act if no preference is shown between shippers.

As a practical matter, it is not always possible for carriers to furnish all shippers with just such cars as they would like and in such numbers and at such time as would best serve their purpose. Vast fluctuations and unforseen developments

of commerce or the fault of some connecting line or lines may occasionally bring about a condition in which the best managed road with the most ample freight equipment is unable to move as tendered all the freight upon its line, and that without any fault of its own. In defining the carriers' common law duty to furnish cars during a temporary shortage of coal cars, the United States District Court in Logan Coal Co. v. Penn, Rd. (154 Fed. Rep. 497) used the following language: "A railroad company is not required to keep a car equipment sufficiently extensive to meet the maximum output at any part of the year but is only required to furnish car facilities to coal shippers to meet a demand adjusted and regulated to utilize the company's car equipment with uniformity and regularity throughout the year."

The act to regulate commerce contains no provision which expressly or by implication gives the commission authority to require a carrier to acquire additional equipment or to supply itself with such kind and number of cars as in its opinion would constitute a necessary car service.

It may prescribe and enforce reasonable rules for the exchange, interchange and return of cars as between carriers when carriers fail to agree upon such rules, but in the absence of discrimination, it has no authority over the distribution of cars among shippers. However, if discrimination is practiced or even threatened, the commission may assume jurisdiction and prescribe rules for the distribution of cars as has been done from time to time in the coal industry.

In the matter of car distribution at a time when there was a shortage of coal cars, the Commission held that the only regulation or practice that is just, fair and reasonable, is to allow each mine a proportion based upon its ascertained

The risco Man

capacity and without regard as to whether the mine furnished fuel coal, commercial coal or both. It was further held, that carriers should post at intervals the ratings of the various mines upon their lines, based upon the disinterested and intelligent examination of experts into all the factors which make up their capacity both actual and potential. This involves an examination of the working rooms, thickness of the seam, switch and tipple efficiency, number of employes, character and number of machines used, and so forth. When the ratings of the various mines have been determined, all available cars including private cars, leased cars, system and foreign line fuel cars, as well as cars in the commercial service, are counted in assigning each mine its share. The rule laid down in Railroad Commission of Ohio v. Hocking Vallev Rv. Co. (12 I. C. C. R. 398) and consistently followed whenever the Commission has taken over the distribution of coal cars is, that each mine is entitled to all of its leased and private cars, all system and foreign line fuel cars assigned to it, and a sufficient number of cars in the commercial service to make up its proportion. If, however, the leased and private cars of any particular mine, together with the system and foreign line fuel cars assigned to it, are more than its proportion, all such cars must be delivered to it and all other available cars distributed among the other mines on the basis of a changed percentage.

It should be understood however, that the act to regulate commerce leaves carriers free to initiate their own rules and regulations and the Commission may interfere only when it becomes necessary to prevent some wrong forbidden by the act. Therefore, it has no authority to order a carrier to establish a system of mine ratings or car distribution until it fairly appears that without it, discrimination will result which can be prevented by the order.

QUESTION BOX ANSWERS.

R. S. T.--Express and transfer companies operating trucks, wagons, drays, automobiles, etc., are not subject to the act although performing services in connection with carriers as they are not carriers belonging to any of the classes enumerated in the act.

O. M.—Transit privileges such as milling in transit, "floating" cotton, etc., are a part of transportation as defined by section 1.

T. J. M. -Cars furnished shippers should be in suitable condition for use and not in such condition as to require shipper to go to the expense of preparing them for shipment such as cleaning, repairing, furnishing racks, grain doors, etc. However, if the shipper undertakes to put such cars in condition for use, it would be unlawful for the carrier, in the absence of tariff authority, to honor a claim or make any allowance for such work. There is a material difference between service and facilities furnished a carrier by a shipper and one who is not a shipper, for while a carrier may contract with a third party for repairs to their equipment or for racks and grain doors to be furnished, it may not lawfully reimburse a shipper for the expense thus incurred unless expressly so provided in its tariffs. See Conf. Rulings Nos. 19-78-292-360.





This department is for matters of interest to Agents. All Agents are welcome to contribute.

INNOVATIONS BY FREIGHT ACCOUNTING DEPARTMENT. *F. C. Freiburg.*

PROGRESS is the paramount issue of today. We cannot stand still and keep abreast of the times. This is particularly true of men in the railroad service. Frequent changes and improvements have been made in railroad methods, rules and regulations in the last few years. Although it may not have been forcefully impressed upon you, nevertheless considerable thought has been given by our management for the welfare of its employes. It is conceded that the duties of the station agent and his assistants are many. Bearing this in mind, it has been the aim of the Freight Accounting Department to lighten their burden as much as possible. From time to time freight reports have been greatly simplified, thereby lessening the work of the station force.

The most recent change has been in the adoption of a daily duplex Freight Received Report. At one writing the station record of Freight Received, as well as the report to the Freight Accounting Department, is made; thereby saving the time of making one extra report, as formerly.

In addition, the weekly shipper's order Report 26-C Local has been abolished, effective February 1st -and instead – the shipper's order ladings are attached to the waybills, or in lieu thereof a small memorandum slip when the lading has not been surrendered at the time waybill is reported.

Under our current instructions, agents are permitted to make adjustments as well as to refund overcharges on shipments previously reported. To facilitate the accounting of such corrections, we have put into effect on the first of this month, a weekly report Form 64-Local. This report has several advantages from an agent's stand point. Instead of adding or deducting the under or overcharge of local corrections in the Freight Received record, the cash book, as well as on form 35-Local, a direct credit or debit is taken on the new report. This prevents confusion in the accounting, especially to beginners. Furthermore, it has the effect of properly separating such entries in the cash book, and facilitates balancing of the accounts. It keeps apart current business from adjustments on previous months, and on that account, can subsequently be more readily checked and located.

Later on we may have something to say about mechanical appliances now used by modern and up to date railroad accounting offices. In the meantime, for our mutual benefit, an invitation is extended to all Frisco employes visiting St. Louis to inspect our mechanical accounting devices that have greatly benefited and assisted us in reducing the station accounting work.

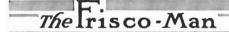
A Suggestion.

The following anonymous "idea" evidently came from an Agent, and although we would appreciate it much more if he would have given his name and address, we think it is worth attention. The communication reads:

"If the wire that binds a book of book tickets together were inserted from the other side, leaving the open brad on the top, then agents could lift the wire and sort the tickets which would be quite a help when making ticket reports."

A congressman-elect recently traveled from Philadelphia to Washington in his own biplane, piloted by an army officer. He says he is the first man to fly to congress.

10200



Shifts.

C. R. Langford installed permanent agent Welling, Okla., February 13.

S. W. Cooper installed ticket agent Sterling, Mo., February 13.

S. T. Westwood installed permanent agent Haworth, Okla., February 12.

Raymond E. Abbott installed agent Stanton, Mo., February 12.

H. M. White installed temporary agent Talihina, Okla., February 10.

Effective February 9, Rock Island, Okla., (Central Division—Arthur Sub-Division — Mile Post 431.7—formerly known as Maney Jct.) opened as a ticket only agency, joint with Midland Valley. J. P. Talbot installed ticket agent.

C. E. Gerteis installed temporary agent Tulsa, Okla., relieving J. T. Hulehan resigned.

W. E. Rash installed temporary agent Wilson, Ark., February 9.

W. H. White installed temporary agent Cement, Okla., February 9.

C. M. Rice installed permanent agent Tuskahoma, Okla., February 9.

R. T. Henderson installed permanent agent Cyril. Okla., February 9.

J. T. Lane installed temporary agent Zalma, Mo., February 8.

R. K. Rodgers installed temporary agent Clayton, Okla., February 8. J. F. Elchert installed temporary agent Rosedale, Kans., February 5.

J. J. Guidroz installed permanent agent Morrison, Okla., February 5.

J. M. Story installed permanent agent Depew, Okla., February 6.

R. F. Wright installed permanent agent Claremore, Okla., February 1.

E. R. Slocum installed permanent agent Bristow, Okla., February 2.

H. L. Turner installed permanent ticket agent Holly Springs, Miss., February 5.

W. R. Marsh installed permanent agent Reeds, Mo., February 1.

T. T. Gillihan installed permanent agent Prescott, Kans., February 2.

D. W. Sherman installed permanent agent Wallerville, Miss., February 5.

J. O. Bolton installed permanent agent Deckerville, Ark., February 5.

R. D. Newman installed permanent agent Eram, Okla., February 1.

W. L. Hadaway installed temporary agent Foreman, Ark., January 31.

J. R. Burt installed permanent agent Mineral Wells, Miss., January 31.

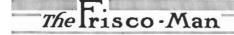
C. H. Bowman installed temporary agent Terlton, Okla., January 29.

W. L. Brewer installed permanent agent Goltry, Okla., January 30.

J. W. Alderman installed temporary agent Valley Park, Mo., January 29.



View showing men of Yale Shops, Memphis, Tenn., submitted by J. A. Williams, piece work checker.



A. A. Green installed temporary agent Rudy, Ark., January 29.

C. W. Taylor installed temporary agent Jericho, Ark., January 29.

J. R. Leasure installed permanent agent Middleton, Okla., January 19.

J. E. Montgomery installed temporary agent Delta, Mo., January 16.

C. W. Miller installed permanent agent Sapulpa, Okla., January 22.

W. T. Staten installed permanent agent Mannford, Okla., January 19.

H. M. White installed temporary agent Tuskahoma, Okla., January 20.

A. A. Crow installed permanent ticket agent Benoit, Ala., January 16.

R. D. Hiller installed permanent agent Warwick, Okla., January 11.

10 M

Future Events.

The Western Oil Jobbers' Association will hold their convention in St. Louis March 21-23, 1917. The Western Refiners' Association, American Petroleum Association and the Independent Oil Men's Association will probably participate in this meeting making it one of the greatest oil conventions ever held.

The American Iron, Steel & Heavy Hardware Association will hold their convention in New Orleans March 27-29, 1917.

A. A. U. National Outdoor Junior and Senior Track Meet, St. Louis, during March, 1917.

North Central Association of Colleges and Secondary Schools, St. Louis, during March, 1917. Mr. Harry E. Brown, Kennilworth, Ill., Secretary.

Missouri State Butter & Egg Association, St. Louis, during March, 1917.

National Association of Real Estate Exchanges, Milwaukee, Wis., during March, 1917.

Religious Educational Association, Boston, Mass., during March, 1917.

Public School Music Supervisors' National Conference, Grand Rapids, Mich., March 19-23, 1917. Mr. P. W. Dykema, Pres., Madison, Wis.



Agent P. E. Barney and Assistant A. Critchlow, Davidson, Okla., force, "striking a balance."

Hears from Maxey.

The Frisco-Man has received an interesting letter from Agent J. T. Maxey, Forney, Okla., in which he states that he believes the employes should co-operate with one another to a greater extent in Freight Claim Prevention, and adds that, in his opinion, it would be a good idea for Mr. Whitelam to show a list of all damage cases (iled, and the Station.



Loading steel drainage pipe taken from under levee of main ditch of the Little River Drainage District M. P. T. 136, Leachville Subdivision.

Electric reflectors have been provided in a St. Louis park with which a rare collection of water lilies is illuminated at night.



Mean Shot.

Jones keeps pigs as a hobby. He is of very small stature, and one evening he was taking a pig he had sold to its new owner, resting one arm on its neck to guide it along.

As luck would have it, Brown, who is his mortal enemy met him, and seized his chance.

"Hallo, Jones!" he said. "Have you started courting again?"

Mark of Recognition.

He—This is my photograph with my two French poodles. You recognize me, heh?

She—I think so. You are the one with the hat on, are you not?

Ha! Ha!

Wifey-Who is that picture from?

Hubby --What do you want to know for?

Wifey — What do I want to know for? Well, you are certainly the most inquisitive man I ever met!

Rather Wheezy.

"What do you think of that horse I sold you -hasn't he a fine coat? Ain't he a dandy?"

"Yes, I like his coat all right; but I don't like his pants!"

Where Ignorance is Bliss.

His Sister -Isn't our Edward just wonderful? He's already been promoted to field marshal. From private to field marshal in two months!

Her Friend -Really?

His Sister-Yes; field court marshal!

In the Asylum.

Visitor Is that clock right?

Superintendent No, sir. Had it been right it would not have been here.



Heard among the office boys in St. Louis.

Arthur-That tune seems to haunt me.

Charlie. It ought to, seeing the way you murdered it.

A Scathing Retort.

The following is given by W. O. Cov, Frisco-Man Correspondent at Chaffee.

Conductor Little boy, why aren't you in school?

Little Boy – Don't want to go,

Conductor What do you propose to do while you are growing up?

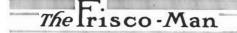
Little Boy -Be a brakeman.

He Was Right.

Superintendent Terminals, P. W. Conley, tells this one on himself. "Few days ago I met an Irishman on Union Boulevard and asked him to tell me where Windermere place was, and he replied, 'The first place you meet'. I followed directions closely and found that he was right."

"She has such an air of refinement."

"Yes; her father's in Standard Oil." - Princeton Tiger.



A Mere Nothing.

Father - Dear me, the baby has swallowed a piece of worsted.

Mother — That's nothing to the yarns she'll have to swallow if she lives to grow up.

That Settled It.

Uncle Hank—Jimmie, your mother tells me she gives you pennies to be good. Do you think that is right?

Jimmie -Of course, it is! You don't want me to be good for nothing, do you?

So He Did.

Jones -I heard to-day that your son was an undertaker. You told me he was a physician.

Bones—You misunderstood me. I said he followed the medical profession.

A Sporting Offer.

Man -I want to help you, but if I give you a nickel I'm afraid you won't put it to good use.

Tramp – Well, a nickel ain't enough tuh do much harm with, or much good either, so take a chance, mister.

Mercy!

"Oh, Mrs. Smith," exclaimed little Bessie Brown, "please may I take my cat up into your attic!"

"What do you want to do that for, Bessie?"

"Why, Puss is hungry and mother said you had rats in your garret."

Presence of Mind

"Oh, John!" shricked Mrs. Dorkins. "The baby has swallowed a silver piece."

Mr. Dorkins took a handful of change out of his pocket and looked it over.

"Calm yourself, Maria," he said. "It was that counterfeit quarter I've been trying to get rid of." –*Brooklyn Citizen*.

Pat's Rejoinder.



Patrick, lately over, was working in the yards of a railroad. One day he happened to be in the yard office when the force was out. The telephone rang excitedly for sometime, before Pat came to the conclusion that it ought to be answered. He approached the instrument cautiously, and slowly put the transmitter to his mouth, as he had seen the "boss" often do.

"Hillo, there," he called.

"Hello," answered someone at the other end, "is this eight-six-ought-four-eight?"

"Aw, g'wan; Phat d'ye think Oi am, a box car?" replied Pat.

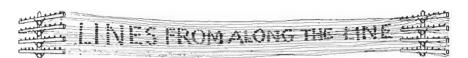


Not for Her.

Florine So Delphine has given up learning stenography.

Pauline --Yes; she found she'd have to let a man dictate to her.--Judge.

But that shouldn't have worried Delphine, for when it comes to transcribing notes the **stenographer** usually has the last word.



Get the Habit.

The Frisco-Man is tickled at the excellent response to its request of last month for corre-spondents, and the employes are to be compli-mented on their showing, and on their efforts in adding to make the Frisco-Man the BEST OF ITS KIND. It is hoped that this enthusiasm w continue, and will spread each month. GE THE HABIT—you, not only the other fellow. will GET

KANSAS CITY-George McKenna, who was holding a position in the Car Depart-C. L. Price

ment as Report Clerk, has been transferred to Accountant Clerk in the Store Department.

Mr. Forster, Master Mechanic, is taking a few ceks vacation. Mr. Worman is acting Master weeks vacation. Mr. Worman is acting Master Mechanic while Mr. Forster is on his vacation. C. J. McKenzie, Chief Clerk in Mr. Forster's

office, is very sick, and is now in St. Lukes Hospital. We are all hoping that Mac will have an carly recovery. J. M. Walker, clerk in the store department, has

listened to the call of the wild and beat it back to Wichita. So-long John, we know she is happy now.

George Samms, former roundhouse clerk at Pittsburg, has been transferred to Kansas City as a clerk in Mr. Kew's office. How do you like the big city now, Georgie?

Chris Nelson, general car foreman, has been on the sick list for a few days. While he is back at his desk his voice appears very mild. The barber made a mistake the other day and cut off his mustache, possibly that has something to do with his being so timid.

Car Department had a meeting at Kansas City Sunday, February 2. A large number of the foremen and inspectors off the Division attended. E. J. Price, general storekceper, was present and made a fine talk on the subject of material.

John Cosgrove, steel car repairer, is wearing a smile all over his face. John says he has the finest pair of twins in the country. Congratula-tions John.

Mr. Petchner, general lumber foreman, visited us January 28, which did us a great deal of good.

FORT SCOTT-Wm. Butler is being congratulated upon the arrival of a son at his . Needless to say Bill is a justly home February 7.

proud father. Mrs. James Brown's parents, who have been visiting with her for some time, have returned to

their home in Peoria, Ill.

Section Foreman Looney of Ash Grove has been changed to Garland, Kans., and Mr. Perry Nunn will he located at Ash Grove.

Fires were built under engines at Fort Scott the last week of January and part of the first week of February, as the weather was very cold. The The thermometer registered 6 below part of the time. People suffered for the want of gas in stoves.

A pretty but simple wedding took place Feb-ruary 6 when E. R. Jones, a Frisco employe, and Miss Merys were united in marriage. The bride is a daughter of Mr. and Mrs. Wm. R. Merys of this city.

Bessie, the small daughter of Engineer E Singleton of the Afton local, is confined to the hospital with pneumonia fever. Mr. Singleton is laying off for several days.

Conductor C. H. Heitz laid off sick at Afton February 5. Something he ate made him sick and his limbs were stiff, so as to cause him to think for a while he was paralyzed. A man relieved him for that day.

Conductor Lou Johnston laid off the first of the month on account of sickness. He has the Fort Scott lay-over on the Afton local.

The boys were admiring the 75 newly rebuilt box cars from Springfield in the yards here, also 8 steel coal cars newly rebuilt by the shop boys at FL Scott. Looks like the Frisco is going to be able to handle the rolling stock in a better shane.

Some of these spring-like days we have been having makes the Frisco boys begin to think about making garden at home and beds for posies at the shop grounds. They have them too. C. D. Toler, assistant superintendent locomotive

performance, has returned from St. Louis after spending 30 days riding 72 class engines on Eastern Division

G. A. Ermatinger has assumed duties as assistant G. A. Ermatinger has assumed duries as assistant superintendent of the Afton and Parsons Sub-Division at Pittsburg, Kans.

J. A. Henshaw, formerly of Sapulpa, and now general foreman at Fort Scott, says he likes Fort Scott fine.

The Southwestern Division has taken another man from the Northern Division in the person of Sam G. Manlove. We all regret to see Mr. Manlove leave, but arc sure Sam will make the Southwestern a good traveling engineer.

Fort Scott has one of the most enthusiastic Safety First Committees on the system.

Geo. R. Wilcox has moved to Neodesha to assume duties of assistant master mechanic at that point.

CHERRYVALE -Mrs. W. O. Adams, wife of Edw. L. Corrins engineer Adams, sold one dozen chicks which brought the top

price of \$11.94 at the local market. This is the highest price paid for one dozen chickens at this point.

Brakeman Meddie Winslow has become some actor, having taken part in a play given by the Elks of this city. It will not be a surprise to hear that he has thrown away his brake club and joined some grand opera company.

Archie Hall, section foreman, has been granted 90 days leave of absence. Foreman Bumgardner of Neodesha has his place.

Outlook for business this month is good, con-siderable coal is handled this way, also several good oil wells have been struck and account of no water in crecks more wells would be drilled.

J. F. Liston, assistant superintendent, was in Cherryvale several days on business.

Gus Mountian, second trick operator, while drilling for water at his home recently found coal, oil and ore but no gas.

Wm. Reddin, brakeman, has moved his family to Fort Scott, having been promoted recently and is now working out of that place.

Jack Waterbury, concrete foreman, was called home February 1 on account of the illness of his wife who is now improving rapidly.

Frank Ham, Jr., yard clerk, has made several New Year resolutions to cut down some expenses, as we understand this was done in order to start right, as he is about to take, hy law, a new partner for life.

SPRINGFIELD -- Mrs. Roy Hessinger, wife of pipe Mrs. G. M. Bear fitter Hessinger, and son Roy, Jr., will visit at Webb City for a month.

Turner Vance, blacksmith helper, and his son John, will visit at Sampson, Mo.

J. H. Bass, boiler washer, and wife are visiting in Kansas City and Los Angeles, Calif.

The Frisco-Man

Martin McNeal, shop man, wife and son, are visiting in St. Louis with relatives.

S. K. Martin, engineer, is laid up with a nervous breakdown, and was in a serious condition for a day or two. Mrs. J. E. Harvey, wife of boilermaker helper

Harvey, and son Ernest, expect to visit in St. Louis soon.

W. C. Moore, machinist apprentice, will visit in Kansas City for a few days. Geo. Peeler, air brakeman, recently spent two

weeks at Cabool, Mo.

Orville W. Cruise, machinist apprentice, will spend a month in Kansas City. Mr. and Mrs. J. T. Ward will spend a few weeks

at Cabool, Mo.

John Bowler, engineer, is confined to his home.

John Bowler, engineer, is contined to his nome. D. S. Atwell, machinist, will visit at Kansas City, Mo., and Vance, Nehr. Mrs. M. A. Wightman is reported seriously ill at the home of Mrs. Ed Mudell at Sapulpa, Okla., where she is visiting. Her son F. A. Wightman, superintendent of safety, left February 1 for Sapulpa. Mrs. Wightman is 84 years old, and has lived in Springfield since 1870. lived in Springfield since 1870.

D. L. Mathes, carpenter, and wite will visit at Kansas City, Mo.

FALL RIVER, KANS. -Fall River is improving, some of the section men I. C. McCord and the city together, are unloading two cars of cinders around the depot, a much needed improvement.

LIBERAL, MO.--Mrs. J. T. Dickeson, wife of the G. M. Hubbell Missouri Pacific Agent at this G. M. Hubbell blace, died suddenly of heart failure the night of February I, burial to be at Lyons, Kans. Mr. Dickeson has been with the Mo. Pac. nearly 30 years, and is well known among a good many Frisco employes.

CORDELL -Assistant Superintendent J. T. Brooks made Cordell a visit January 22 and 23 getting the Clinton-Cordell Switcher lined up

in good working order. Cashier Frank O'Halloran spent a week visiting relatives and friends at Richland, the latter part of January.

Charles A. Park installed as car clerk January

Charles A. Park installed as car clerk January 21, relieving Sam B. Grigg, Geo. A. Higgins, expense clerk, visited home folk at Manitour over Sunday, January 28, Our general claim agent, Paul Dubie, spent Monday, January 8, in Cordell on important busines: business.

business. C. E. Whitney, water service foreman of Enid, was in Cordell February 6, with a gang of men making some repairs and arranging with city for water for engine use.

WICHITA - Geo. Wilcox, acting master mechanic,

S. B. Ramsey was a visitor February 1. Springfield, is setting an engine and several machines for us this week, the first Wichita has ever had, and we are very proud of the new improvements.

J. M. Walker was appointed storekeeper here effective February 5. Mr. Walker was here as storekeeper once before and we are glad to see him back.

Miss Gladys Ramsey, daughter of car foreman Ramsey, spent the latter part of January visiting old friends in Ft. Scott.

Mr. Hamilton, our cashier, was recently ap pointed chief clerk to commercial agent S. P. Haas. Mr. E. E. Miller transferred to Fort Scott, Mr. Dee of Fort Scott came to Wichita as cashier. Everybody was sorry to see Mr. Miller leave, and wish him all success in his new place.

Car foreman Ramsey has the bad orders down to the minimum, which he is very proud of

February 1 and 2 the temperature was 10 below We had no passenger cars or engines to here. freeze up, however, and everything ran fine.

Mr. Art Jackson, switchman, is able to be up and around the yards after about five months sickness. Everybody is glad to see Art out again. Night car clerk Davidson visited friends in

Iantha, Mo., recently.

CLINTON -- Mr. Balke, roundhouse foreman, recently completed putting in an upright boiler in the roundhouse for a heating plant,

and to be used as a blower forfiring up engines. Conductor Ep. Wirth has been running on Conductor Ep. Wirth has been running on passengers 21 and 22 in Mr. Gery's place, who was

off sick. M. L. Rissel, conductor on 55, has been off sick

with rheumatism and a broken arch in the left foot.

Conductor A. T. Laney, who has been off sick for a long time, is up and around looking much better.

Asst. Supt. C. T. Mason was in Clinton recently and had a meeting on the book of rules, which was attended by some 20 or more of the railroad boys. Much good was gotten out of the meeting. We, as the High Line boys, would ask Mr. Mason to come more often as we enjoy such meetings.

Harold Balke, who was employed at the roundhouse, has accepted a position with the Brown Shoe Company, in St. Louis.

Our call boy, Mr. Jack Organ, a few weeks ago was initiated in the Holy-bonds-of-matrimony. Miss Lillian Adams of this city was the young lady in the case, and the good wishes of their friends are extended to them.

SAPULPA --- C. R. Bush, formerly employed **C. T. Bingemer** at this point as roadmaster's clerk, has been transferred to Spring-field with the Bureau of Accounts. C. C. Gorsuch, from Mr. Irving's office at Tulsa, Okla., succeeded him.

E. E. Harlow, trick dispatcher, resigned and

E. E. Harlow, trick dispatcher, resumed and was successfed by S. A. Salcup, L. E. Woodall, trick dispatcher, is away on a vacation. Mrs. Frank Denny, stenographer to Mr McCarty was taken ill Sunday, January 21 and was advised by the physician that she would be infinite advant two works. The entire office bedfast for about two weeks. The entire office force wishes her speedy recovery. Miss Mary force wishes her speedy recovery. Miss Mary Jane Muchmore will take her place until she returns.

A. P. Swindall, cashier at Bristow, Okla., spent Sunday January 21, in Oklahoma City. Mr. and Mrs. Aaron Morgan with a party of

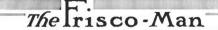
friends spent Sunday in Tulsa, having driven through in car,

M. E. West, transportation clerk, spent Tuesday, January 29 with his parents at Bois d'Arc, Mo.

Miss Mary Jane Muchmore, stenographer, spent Sunday February 4, at Vinita, Okla., with friends.

Mr. R. Robnett, maintenance clerk, and C. T. Bingemer, O. S. & D. clerk, spent Sunday, February 4, at their homes in Oklahoma City.

Mrs. Aaron Morgan states the only reason she has not learned to drive her car is because the street curbings are entirely too close together, not enabling her to turn around with any degree of accuracy.



SULPHUR, OKLA. Hugh Fortner, who has been working as fireman on the Sulphur Branch, departed W. Walters Branch, departed

recently with his wife and son for Sherman, where he now has a run out of there on 512 and 507.

CHAFFEE—Ed Willer, for the last two years W. O. Coy assistant chief clerk in the office of C. II. Claiborne, superintendent, has

been transferred to Cape Grardeau as chief clerk to General Agent, Mr. Baker, B. A. Hamilton, succeeding him at this point. C. E. Shannahan, assistant timekeeper of Spring-field, was visiting friends at Chaffee latter part of

fanuary.

Engineer J. C. Burner, who has been confined to his home for some time suffering with an injury sustained December 13, was again noticed on the about again John.

Through some Sherlock Holmes work we hear of the recent marriage of Clerk Frank Morgan. We

Wish you many years of happiness Frank. Arch Campbell, Jr., roadmaster's clerk of Cape Girardeau, made a flying trip to Chaffee January 31. Arch is son of chief dispatcher Arch Campbell, Sr. at this point.

Conductor A. M. Cagle was recently assigned to local train operating between Hayti and Harvard.

OPOLIS, KANS. -Weather last few days has been very cold and made the town loafers hunt the fire. W. L. Skipper

Ira Skipper has returned to work at Pittsburg,

Ira Skipper has returned to work at Pittsburg, after being off for a week with lagrippe. Earl Long, section foreman, spent Sunday, Feb-ruary 4, with his father, Mr. Andy Long, at Far-lington, Kans. I. N. Pritchett has taken a vacation and has

gone to visit his father in Northeastern Missouri, whom he hasn't seen for 30 years. Otto Matzen-bacher is filling vacancy of Mr. Pritchett while away

Business for January was good and prospects are for good business for February, if we can get plenty of cars to fill orders.

YALE, TENN. Rob! Rah! Rah! Who says that J. A. Williams Yale is a dead one? Now don't get excited. I am not speaking of Yale College, but of Yale. Tenn., the vivacious little city where the Frisco recently opened up a new car shop. While it is true that we do not build Fords or

Overland cars, we do however, build Cole "coal cars, and incidently thirty rehult cars were released during the week ending February 3. II. W. Collins is taking thirty days leave of

absence. II. C. "Buddy" Benham is reported on the sick

II. C. "Buddy" Benham is reported on the sick list. Buddy claims to have the "spudjisk". That must be something awful, Buddy. The Yale boys are looking for a Christmas wedding in May, that is far from Christmas, and we can't see how it could be called a "Christmas" welding unless it is "Bill." Yale "boys" have organized a five piece string band, and claim by spring they will be "ripe,"

Car foreman Weigman talks safety first to his eventy men so strong, that during the month of January not a single accident occurred.

It is reported that J. F. Green, section foreman, Yale Yards has resigned.

CAMPBELL, MO .- - Conductor Shrewsbury was **T. C. Clayton** off for a few days to attend to some business at Hoxie. He was relieved by conductor II. II. Washburn, Jr. Chas. Watson, traveling demurrage supervisor, was a recent Campbell visitor.

Conductor Chas. Horstman relieving conductor Pickard on Campbell-Cape Girardeau local. Pick-

ard relieving Chapin on passenger run 882 and 881. Brakeman F. M. Busby has been assigned to trains 853 and 854 in place of brakeman C. C. Edwards.

Assistant Superintendent Jordan was a recent Campbell visitor.

GREENLAND, ARK. --Carl E. Kilby of Beatty, Ark., acted as relief agent Greenland three days the week of February 1,

while Agent Mullen was attending court. Greenland had an increase in revenue business of \$313.45 in January, 1917, over January, 1916.

Section foreman Sebourn received a car of crossing plank recently, and is now busy putting same in.

Mrs, Geo. Cole, who is now cook for Nelson's bridge gang, visited home folk Sunday, Feb-ruary 4.

Aug. Riley, bridge carpenter of Combs, Ark., was in Greenland one day recently.

JOPLIN-Wm. Taylor, night machinist, was off recently on account of sickness. E. M. Taylor relieved him,

Harvey Jones, boilermaker, is back at work after a few days illness.

Geo. Nelson, night hostler helper was called home recently on account of the death of his father.

Ed Pitman's two year old son fell and broke his

leg, a few days ago. Fannic, our roundhouse "Mascot" has an addition of three to her canine family.

MONETT - Herbert Such, stenographer to

MONETT - Herbert Such, stenographer to Frank L. Kyler general vardmaster E. P. Hogan. has been promoted to night bag-gage agent at Oklahoma City. M. Bougher, a graduate of the Springfield Business College, has been appointed his successor. Night yardmaster Harry Flenning is laying off and engine foreman A. Gellete is relieving him. Day caller K. C. Herschfield returned to work after a few days off. Extra caller F. Kyler who relieved him is working in night caller W. O. Gates's place for a few mights. Gates's place for a few nights.

Monett is the proud possessor of a Frisco Telephone Exchange, which is a great improvement over the old style circuit.

We are anxiously awaiting the appearance of some of the new engines at Monett. The No. 2 came the other night and could hardly get through the yard on account of the boys wanting to examine her.







TUPELO SUB-DIVISION.

Meeting was called to order at Amory, Miss., January 20 by Chairman M. D. Ross, with the following members present: J. R. Buchanan, O. E. Bradway, and J. A. Allen.

Several cards were received during the month and each was taken up and given proper attention.

1

Meeting adjourned 3:00 P. M.

FORT SCOTT MEETING.

Meeting was called to order January 20 by Acting Chairman, C. F. Hesser, with the following members present: C. F. Hesser, J. J. Cummings, E. E. Dix, G. L. Swearingen, W. A. Johnston, W. I. Elliott, Tom Hall, Lester Rose, and Stanley McQuitty.

Visitors: II. E. Ernest, Traveling Auditor; C. H. Findley, Engineer; and Claude Reeder, Roadmaster's Clerk.

Mr. Cummins read a paper on Safety First that was enjoyed by all. Mr. Johnson, General Car Foreman, has been asked to prepare a paper for the next meeting.

A number of Postal Cards were turned in by the Committee, each of which was read and fully discussed, after which the meeting adjourned.

JOPLIN-PITTSBURG MEETING.

Meeting of the Northern Division, Joplin and Pittsburg Districts Joint Safety First Committees was held in Joplin, January 22. The following were present: Joplin Members, J. F. Liston, L. A. Henshaw, G. L. Seanor, and D. I. Kunce. Pittsburg Members: G. R. Carson, C. E. Bissell, H. W. Cooper, S. B. Peter, and C. B. Darnell. Visitors present: F. A. Wightman, A. F. Prugger, M. L. Kemper, B. D. Cullifer, B. D. Bradford, O. A. Clary, B. D. Herriford, Chas. Robbins, L. M. McCrea, Clyde Pender, G. E. Amos, and Lee Long. Mr. Wightman was called on to make a talk, which was enjoyed by all.

A large number of Postal Cards were turned in at this meeting, and each was taken up and acted upon.

Meeting adjourned at 11:35 P. M.

SALEM MEETING.

The following members were present at the regular meeting of the Salem Safety Committee January 12 were: A. McCormick, T. H. Houston, Percy Pelton, Chris Jason, B. E. Lutzenberger, Thos. R. Judd, and J. L. Bangert. Visitors: L. Bangert, engineer, and Paul McMurtrey, brakeman.

A number of communications were received, and many cards turned in, which were fully discussed.

Meeting adjourned at 9:00 P. M.

FAYETTEVILLE COMMITTEE.

The meeting was called to order 2 P. M. January 20 with the following members present: W. P. McNair, Ree Alley, Cleve Goff, R. P. McRoy, Jas. Keough, J. H. Goodin, and J. W. Robinson. Visitors: Fred Taylor, lineman.

A number of SF-I reports were received, and each was thoroughly discussed, and proper action was taken.

1

NEODESHA COMMITTEE.

Meeting Neodesha Safety Committee January 27, called to order at 1:30 P. M. by Acting Chairman R. Holland, Division Roadmaster, with the following members present:

E. E. Carter, R. Holland, James Keily, R. B. Oliver, C. S. Havens, A. C. Scherman, W. W. Wicker,

Visitors: Mrs. Floy Newland, Supt. Ladies' Department: F. M. Galloway, engineer; T. P. Fennessey, brakeman; C. S. Johnson, brakeman; C. A. Carr, engineer; B. F. Beasley, brakeman; M. Freeman

The Frisco-Man

brakeman; D. Longhill, ex-conductor; D. S. Vanhorn, conductor; H. W. Bale, brakeman; F. A. Williams, fireman; F. Venn, conductor; E. A. Stevens, fireman; A. C. Neal, fireman; C. W. Smith, fireman; R. E. Garrett, fireman; A. Montgomery, engineer; J. W. Siverd, brakeman; J. B. Levitt, engine foreman.

All cards received since last meeting were taken up and properly handled.

Talks were made by Mrs. Newland, Superintendent of the Ladies' Department of the Safety First League, R. Holland, Division Roadmaster; D. S. Vanhorn, conductor; J. M. Hall, conductor; D. Longhill, conductor.

James Keily, roundhouse foreman made a good talk in which it was suggested that these meetings be held so shopmen and machinists could attend.

SPRINGFIELD LEAGUE.

The regular meeting of the Springfield Women's Safety League was held February 2, at Heer's Auditorium. The usual business detail was handled and various communications read.

Mrs. G. M. Bear appointed at the last meeting as representative to place proposed bills on Anti-Trespassing and regulation of Auto Traffic over grade crossings before the various Women's Clubs of Springfield, reported that she had not completed this work, but that she had received the endorsement of several clubs whose total membership numbered 1350.

100

HUGO LEAGUE.

Meeting of the Frisco Women's Safety League of Hugo was called to order January 18, by Mrs. Floy Newland, Supervisor. Officers for the ensuing year were elected as follows: President, Mrs. Guy Simmons; Vice-President, Mrs. Mc-Daniels; Secretary, Mrs. Rosenbaum; Treasurer, Mrs. Campbell; Press Reporter Mrs. Evans.

Plans for the work of the new year were discussed.

Eleven visitors, officers and members of the Fort Smith League were present and added materially to the interest of the meeting.

At the close of the meeting the ladics together with the F. C. P. Committee were given a trip over the Terminal in a special train, by Superintendent Baltzell.

After supper together at the Webb Hotel everyone went to the Assembly room over the station where about one hundred and fifty persons enjoyed an evening dancing. Music furnished by a Hugo Orchestra.

ST. LOUIS LEAGUE.

The meeting was called to order at 2.45 P. M. February 8, by the President.

Dr. A. S. Barnes, Jr., was then introduced and he entertained the ladies for about an hour with one of the most interesting Safety First talks that they have ever heard. Dr. Barnes took up the Safety First work from the health stand-point giving many illustrations. The ladies were permitted to ask questions—and all thoroughly enjoyed it.

Our friend and staunch supporter, Mr. Spaulding, also gave the ladies a fine talk and particularly tried to impress them with the idea of co-operation as the best means to the desired results of the Safety First Movement on the Frisco.

FORT SMITH LEAGUE.

Meeting was called to order January 11 by President Mrs. C. H. Baltzell. Addresses were made by Mrs. Baltzell, Mr. F. A. Wightman, and Mr. C. H. Baltzell, all of which were very interesting. Mrs. John T. Wilkerson talked regarding the distribution of the Frisco-Man.

Mrs. II. Gunn, representing the Engineers, and Mrs. C. R. Batte, representing the Dispatchers, were appointed to prepare papers or addresses for the next meeting.

The frisco-Man

SPEED OF TRAIN

MILES DER HOUR.	FEET PER MINUTE:	FEET PER SECOND.
20	1760	29.3
30	2640	44.0
40	3520	58.7
50	4400	73.3
60	5280	88.0

Crossing a railroad track, either in a vehicle or on foot takes time, and when a train is coming this time may mean your last on this earth.

The Engineering Department has compiled a table presented herewith that shows the distance in feet per second a train travels when running at a given rate of speed.

The pedestrian or automobilist cannot tell whether a train is moving at the rate of fifty or thirty miles an hour, and this error in judgment often costs lives.

With these facts in mind, it is urged that all pedestrians and drivers of vehicles will let the trains pass before crossing, and will also exercise double caution at double tracks.

"NO: I CAN'T AFFORD IT"

There's magic in those words.

They save you heart-ache and remorse.

They bring comfort and happiness.

The first time you say them requires some courage, but each time it is easier, and then comes the day when you **can** afford it—but you are too clever to waste your money.

Try those words to make your Savings Account grow.

The Central National Bank Tulsa, Okla, --Adv.





ST. LOUIS F. C. P. C. MEETS.

Meeting of the St. Louis Terminals F. C. P. Committee was called to order January 12 with the following members present: H. M. Robinson, M. H. Rudolph, R. L. Klein, Wm. Hohlt, H. Skelton, Albert Sandoe, T. W. Morris, W. T. Doughertv, and J. S. McGuigan. Mr. L. C. McCutcheon, Asst. Superintendent F. L. & D. Claims, Springfield, was a visitor.

Postal cards received since last meeting were taken up and each was properly acted upon.

Meeting adjourned at 6 P. M.

HUGO F. C. P. MEETING.

Meeting of the Central Division Freight Claim Prevention Committee was held at Hugo, Okla., January 18, with the following members present: C. H. Baltzell, B. D. Miller, J. W. Claiborne, J. Keough, A. Scherrey, T. E. Fountain, H. Kirk, D. B. Singleton, J. R. Heimbaugh, E. D. Creekmore, C. H. Keesee, D. C. Blakeslee, G. W. Green, T. R. Wiley, W. H. Trent, V. E. Cowdrey, and Wm. Henry.

Visitors present: L. C. McCutcheon, N. E. Edens, H. G. Evans, Ashley P. Johnson, J. R. Gill, W. T. Erwin, W. F. Morrow, R. B. Miller, Geo. Rasbach, W. B. Miller, Harry Boyd, M. K. Robers, John Hume, W. W. Hughes, D. W. Wright and M. F. Brennan.

Meeting was opened by Superintendent Baltzell, who had 119 postal cards the more important ones of which, were discussed and passed.

Mr. McCutcheon, representing Mr. Whitelam's department, talked at length on the statistics and on the details of Freight Claim Prevention work generally.

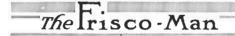
At 4:30 P. M. meeting adjourned for luncheon, and convened again at 7:30 P. M. in the Assembly Hall, where a program was successfully carried out. An article "Seals" by Conductor Washburn on the River & Cape Division, appearing in the Frisco-Man, was read. Also a letter from Agent McNair, Fayetteville, who was unable to attend on account of illness. This letter was in form of an article which was entitled "The Growth of the Central Division," which will appear in another part of the Frisco-Man.

A number of short talks were made, after which the meeting was adjourned.

One of the most important phases of the economical operation of locomotives is the question of water. Until some twenty-five years ago, any water available at wayside tanks was used in locomotive boilers regardless of its quality. About that time, the Dearborn Chemical Company was formed, with the object of making scientific analyses of waters at all points, and treating the waters chemically so as to remove such injurious salts as may be contained, preventing thereby the formation of scale, and correcting other troubles that the natural waters produce, such as corrosion, pitting, foaming, etc.

The Dearborn Chemical Company maintains an extensive laboratory for the analysis and investigation of water conditions, and they are the leading manufacturing chemists in this field of work. They operate manufacturing plants in Chicago, New York City and Toronto, with selling branches in the principal cities of the United States and foreign countries.– *Adr.*

Graphite and oil will arrest cutting in bronze bearings when oil alone proves ineffective.



What is Theory?

A short and correct definition of THEORY is -- "A description of the best way to accomplish a purpose, and the reason why each operation employed is necessary." For instance, every railroader knows that a little sand between the driving wheels of the locomotive and a slipperv rail prevents slipping and enables the locomotive to perform its work. The reason is that the sand creates friction. This statement is true theory. The placing of the sand box on the locomotive with a discharge pipe to deliver the sand in front of the driving wheel is an application of two simple theories: (1) The theory of gravitation, or the knowledge that the weight of the sand causes it to flow down to the desired point, is practically applied; and (2) the theory of friction is practically demonstrated by the drivers taking proper hold of the rails.

Theory, practically applied, is what accomplishes every successful operation. Many men who are good practical mechanics ridicule theory and call impractical unsuccessful men theorists. This is due to lack of knowledge as to what theory really is. In short, they confuse hypothesis with theory. An hypothesis is a supposition, not a proved principle or fact. A mechanic who spends a lifetime trying to develop perpetual motion works on an hypothesis. He thinks perpetual motion can be developed in a machine. He has no good reason to support his supposition. It is against theory and particularly the theory of friction. The man who tries to tell what electricity is simply states an hypothesis. He only states what he thinks, not what he absolutely knows. The educated engineer who states what steam is, and how it is made to perform useful work, states theory. He states what is absolutely known, and can give proved reasons why steam properly applied yields useful force.

While the educated electrician cannot tell what electricity is, he can tell how to



The Trained Man Wins

In the railroad business it's the *trained* man who wins. Carrying hundreds of millions of passengers every year, it is absolutely necessary that the responsible positions in railroading be filled with none but the most highly trained men. Your advancement will depend largely on the thoroughness of your training.

If you really want a better job and are willing to devote a little of your spare time to getting ready, the *International Correspondence Schools* can help you. More than two hundred of the railroad systems of the United States and Canada have endorsed the *I.C.S.* method of instruction and recommended it to their employes.

You're ambitious. You want to get ahead. Then don't turn this page until you have clipped the coupon, marked the line of work you want to follow and mailed it to the I. C. S. for full particulars. Doing so will not obligate you.

-TEAR OUT HERE INTERNATIONAL CORRESPONDENCE SCHOOLS Box 8614, SCRANTON, PA. Explain, without obligating me, how I can qualify for the position, or 'r the subject, before which I mark X. R. R. Agency Accounting R. R. Genl, Office Acc'ting Bookkeeper Schographer and Typht Locomotive Engineer Locomotive Engineer Traveling Engineer Traveling Fireman Air Brake Inspector Higher Accounting Mathematics Good English Air Brake Inspector Air Brake Repairman Round House Foreman Trainmen and Carmen Railway Conductor Good English Salesmanship Advertising Man Civil Service Railway Mail Clerk Electrical Engineer Electrician Wastric Wislam Mechanical Engineer Mechanical Draftsman Machine Shop Practice Boiler Maker or Designer Steam Engincer Electric Wiring Steam-Electric Engineer Civil Engineer Surveying and Telegraph Expert Mine Foreman or Engineer Surveying and Mapping R. R. Constructing Bridge Engineer Metallurgist or Prospector Chemical Engineer Agriewiture Spanish Powitry Raising German Architect Architectural Draftsman Automobiles French tate Repairing Italian **Contractor and Builder** Structural Engineer Name Occupation & Employer. Street and No. Cltv. State. If name of Course you want is not in this list. write it helow.

[29]

The Fisco-Man

develop and apply an electric current to useful purposes, and in developing and applying the current he is putting theory into practice. Proper technical education is an education that teaches theory and how to apply theories to useful purposes. The practical man who ridicules theory is wrong. In fact, it is not always good judgment to ridicule hypothesis; for, before a theory is demonstrated it must necessarily be an hypothesis. When Watt noticed that steam caused the lid on his mother's tea kettle to rise, he formed an hypothesis that steam had a force that might be applied to useful work. When he proved his hypothesis, he developed a theory.

The practical man who adds to his practical skill a good knowledge of the theories of his vocation, not only becomes a better practical man, but he equips himself to practically develop new methods as well as to frequently apply old methods in an easier manner and with better results.

The object of vocational education is to give to the practical man, or the man engaged in practical work, knowledge that will be of real value to him and will fit him for advancement in his vocation.

Quite a number of the passenger cars on this railroad are equipped with the Vapor System of Heating manufactured by the Chicago Car Heating Company.

These cars have five radiating pipes on each side, divided into two circuits of two and three pipes. Each circuit has its own Cut-out Valve so that it is possible to give heat in either two pipes, three pipes or five pipes on each side of the car.

With this arrangement any degree of regulation which could be desired is possible and with a little judgment the trainmen can keep the cars in comfortable temperature at any and all times.

In mild weather only part of the system should be used. This will make it more comfortable for the passengers and be more economical for the company.

This system is described fully in the instruction books which the manufacturers furnish free upon request.- Adv.

THE I. C. S. Report.

Lessons passed by Frisco employes during month of January.

Lessons passed by Frisco employes during month of January. E. D. Perry, Ft. Smith, Ark.; J. E. Belk, Cape Grardeau, Mo.; Wm. E. Belter, Oklahoma City, Okla.; R. E. Estes, fireman, Ft. Smith, Ark.; A. C. Dickson, vd. fireman, Tulsa, Okla.; R. F. Williams, elan shell eng., Oklahoma City, Okla.; Clifford L. Sweet, agent, Springfield, Mo.; John J. Sullvan, angle light insp., Monett, Mo.; W. S. Whitten, engineer, Birninghan, Ala.; Goo, Rains, steel car rep., Fort Smith, Ark.; Thos, F. O'Connor, Loco, eng., Memphis, Tenn.; C. O. Hill, fireman, Chaffee, Mo.; R. A. Walker, fireman, St. Louis, Mo.; A. M. Morris, fireman, Chaffee, Mo.; Robt. W. Reed, fireman, Springfield, Mo.; Floyd M. Barry, oper-tor, Ash Grove, Mo.; W. K. Murray, b-maker, Sherman, Tex.; E. D. Mead, fireman, Springfield, Mo.; Toto G. Mayer, mach. appr., Springfield, Mo.; Freman, Joplin, Mo.; Goo, R. Troxell, fireman, Sapulpa, Okla.; Geoge Cozad, fireman, Joplin, Mo.; F. L. Lewis, coppersmith, Sherman, Tex.; Frederick D. Stoops, layout blr. mkr., Neodesha, Kans.; R. E. Garrett, fireman, Nocidesha, Kans.; Edward Grahan, porter, Pittsburg, Kans.; Louis A. Clark, mch. Ippr., Springfield, Mo.; Mo.; M. Davis, meh. appr., Memphis, Tenn.; Bernard S. B. Hagr, Shnston, clerk, Springfield, Mo.; Amsten, Shus, Frederick D. Stoops, layout blr. mkr., Neodesha, Kans.; R. E. Garrett, fireman, Neodesha, Kans.; Edward Grahan, porter, Pittsburg, Kans.; Louis A. Clark, mch. Ippr., Springfield, Mo.; B. M. Jonston, clerk, Springfield, Mo.; Alfred Mcans, Springfield, Mo.; T. A. Alston, mach., Springfield, Me. Springfield, Mo.; T. A. Alston, mach., Springfield, Mo.; Hus, F. Borund, Mo.; Gibert, E. Selb, Shop man, Springfield, Mo.; Carl J. Saxe, Monett, Mo.; Miss D. Brownfield, Clerk, Konett, Mo.; Miss D. Brownfield, Clerk, Monett, Mo.; Miss

SMALL ICE PLANTS FOR

SMALL TOWNS.

We Make Them.-Write Us NOW.

UNITED IRON WORKS COMPANY. Springfield, Missouri. -Adv.

Contribute to the Frisco-Man.



The Frisco-Man proposes to set aside each month space to be devoted to the discussion of Home Topics. This page solicits contributions from the Frisco Employes generally, and Frisco Women especially. If you have a new recipe for preparing any article of food let us have it—anything pertaining to the Home.

How About It?

Do the Frisco Ladies take an interest in the Women's Department? The Frisco-Man is wondering. If they do, it is only too glad to receive contributions for its columns. These contributions may consist of recipes, or little household hints. If the Ladies want this department continued, will they kindly signify their desire by contributing something. It's up to you, Ladies.

M

Quince Tapioca.

Peel ripe quinces of medium size and cut out the cores. Steam them until tender but not soft. Set them in a baking dish and fill the core cavities, which should have been made rather large, with sugar. Cook one-half cupful of ground or instant tapioca in one quart of water, with a little salt and sugar to taste. Let cook for fifteen minutes, then pour over the quinces, cover the dish and bake for half an hour. Serve with cream and sugar. Another method that is very nice, is to mix the quinces, sliced (after steaming tender), with the boiled tapioca, and bake them.

Heart Sandwiches.

On a thin slice of buttered bread lay a lettuce leaf, spread with mayonnaise dressing, and sprinkle lightly with grated cheese and finely minced English walnuts. Lay another slice of buttered bread over the mixture, and with a sharp knife trim into heart shapes.

Noname.

The following recipe is given by a Frisco Lady.

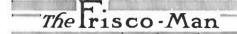
She says "As meat is high, do not throw away any small portion that might be left over after a meal. Take this meat, grind up a cupful, add two cups of tomatoes, hot, a small onion, salt and sugar to suit taste, and a quarter teaspoonful of red pepper. Boil together and serve hot with boiled potatoes.

Cupid Salad.

Make a plain tomato jelly and let it harden in a large flat vessel. When the jelly is well set, cut it into heartshaped pieces and place each piece on crisp leaves of lettuce. Prepare a cupful of stoned olives, sliced, and chopped cucumber pickle. Mix these with mayonnaise, and place a little heap of them upon each red jelly heart.

Salmon Hearts.

Cut very light bread into slices a quarter of an inch thick. Cut them into heart shapes. Brush both sides with melted butter and put into the oven to brown. When the hearts have cooled, spread each with a thick coating of canned salmon. Around the edges of the hearts place a border of finely minced hard-boiled eggs, the whites only, and and slices of lemon. Serve on small plates garnished with parsley, or place the hearts on lettuce leaves, letting the curly lettuce leaves extend almost to the edge of the plates.



Jelly Whip.

Dissolve one package of gelatine in a cup of cold water. Add to that two cups of sugar and one quart of boiling water. Divide the mixture into three parts, in one of which place marshmallows and white grapes, in the second one put pineapple and oranges, and in the third nuts. Fill individual glasses with different mixtures and serve them.

Crumb Cake.

Put three cupfuls of sifted flour into a mixing bowl, one and one-half cupfuls dark brown sugar and four or five teaspoonfuls of cocoa or chocolate. Stir all together, then add one-half cupful butter and rub ingredients together as for pie crust. Add one cupful of sour milk, one teaspoonful of soda and a pinch of salt; beat all together. Pour batter into a greased pan and bake in slow oven. Ice if desired.

Hygienic Pie Crust.

With all the delicious fruit and berry pies that are made during the late summer months, it seems hard that so many people are debarred from eating them on account of the ordinary pie crust not agreeing with them. My recipe will, however, make these dainties possible to everyone, as it is not so rich as when the usual amount of shortening is used.

Sift into a mixing bowl two cupfuls of pastry flour and one scant teaspoonful of salt. Cut into the flour one rounding tablespoonful of lard and moisten to the right consistency with thick, cold cream. Turn into a bowl, cover with a moist napkin, and place if possible on the ice for four or five hours before using. Use as you would any ordinary pic crust.

Potted Mackerel.

This is an excellent recipe for pickled or potted mackerel. During the summer months, when in so many localities quantities of mackerel can be either freshly caught or inexpensively purchased, this formula will prove very helpful in keeping them for winter use.

Take two fresh mackerel weighing when cleaned two or two and a half pounds each. Cut into pieces about six inches long, lay in a baking pan and cover with equal parts of vinegar and water. Add half a teaspoonful each of whole cloves and allspice, a teaspoonful of celery seed and three or four bay leaves. Set the pan in a slow oven and allow the fish to barely simmer for five hours. Fill sterilized jars to overflowing and seal boiling hot. The fish will keep indefinitely if the directions are closely followed.

Making Light Bread.

"Like most household problems, there is no single best way to make bread. However, there are several points in bread making, a knowledge of which is necessary to succeed, whatever method is followed." This is a statement taken from a bulletin "Making Light Bread" by Addie D. Root of the College of Agriculture, University of Missouri.

This bulletin gives important information concerning the different ingredients of light bread. The proper proportions and the handling of the various ingredients as in mixing, kneading, raising, and Some valuable baking are discussed. suggestions are given upon the most desirable kind and size of bread pans, also upon the care of bread after baking. Bread often prematurely spoils after baking from causes difficult to discover. Some of these are discussed and a remedy given. The bulletin contains the Missouri score card for judging bread and an explanation of its use. This bulletin may be obtained by writing the College of Agriculture, Columbia, Missouri.

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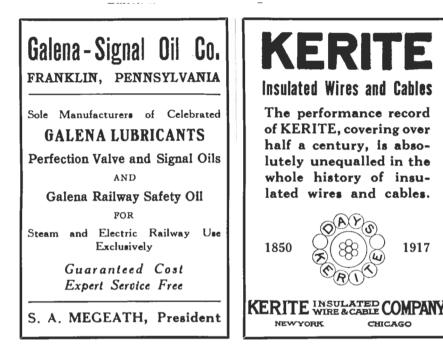
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