AMONG OURSELVES

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 Fayetteville. 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 1, 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 1, 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.

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.

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 OR OFF RAILS. These cars have 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