

FRISCO

# All Aboard

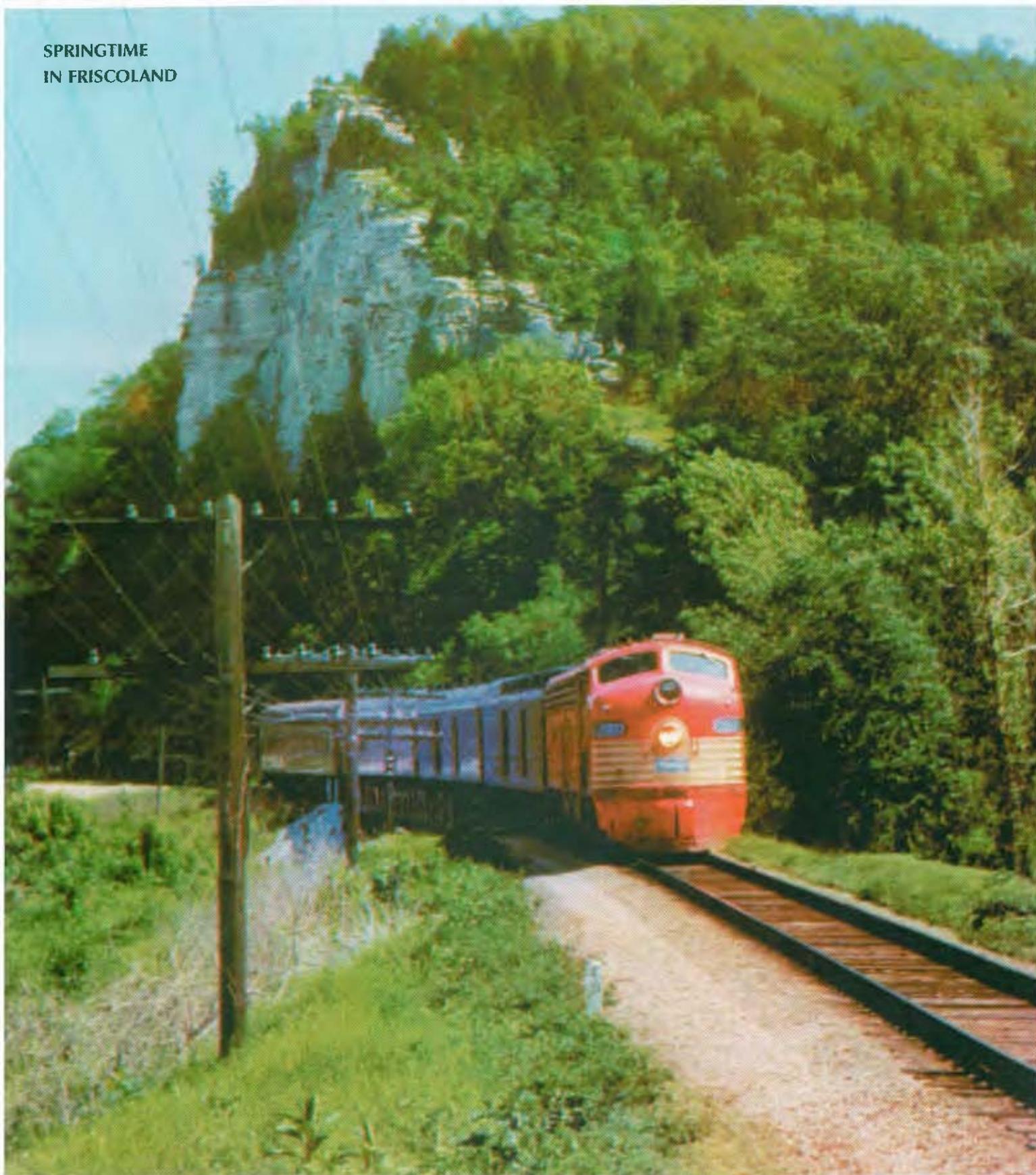
FRISCO

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SPRINGTIME  
IN FRISCOLAND





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This rare 1909 photo shows the Frisco's *Chadwick Flyer*, crossing the flooded Finley River at Ozark, MO.

**About the Covers**

This issue marks a milestone in the publication of the **ALL ABOARD** as we present our first full-color covers.

**FRONT:** Our front cover is a company photo of Northbound Train 808, the *Sunnyland*, as it rounds a bend on the River Division south of Crystal City at Selma, MO, circa. April, 1957.

**BACK:** From the collection of Frisco Folk Kevin Johnson, our back cover features a selection of rare reproductions of a colorful series of post card size calenders that were distributed by the Frisco in 1902.



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# OLD MONUMENT FINDS NEW HOME

★ ★  
1882  
★ ★

On September 10, 1880, the Missouri, Arkansas, and Southern Railway, a wholly owned and controlled construction subsidiary of the Frisco, was incorporated for the purpose of constructing approximately sixty-three miles of standard gauge, single track railroad between Fayetteville and Ft. Smith, AR. The new line would complete the link between the Ft. Smith area and the Frisco's main line at Monett, MO.

Early in the construction of the line, the decision was made to cut through the top of an Arkansas mountain at a location approximately twenty-three miles south of Fayetteville. When completed in 1882, the **Boston Mountain Tunnel** measured 1,726 ft. long, 14 ft. wide, and 19 ft. high. The tunnel and the town that formed around it were later named in honor of Edward F. Winslow, president of the Frisco between 1880 and 1889.

M. A. & S. R. W.  
PLANS, SECTIONS  
AND ISOMETRICAL VIEW OF  
BOSTON MOUNTAIN TUNNEL  
PORTAL  
SCALE 5 FT. = 1 INCH

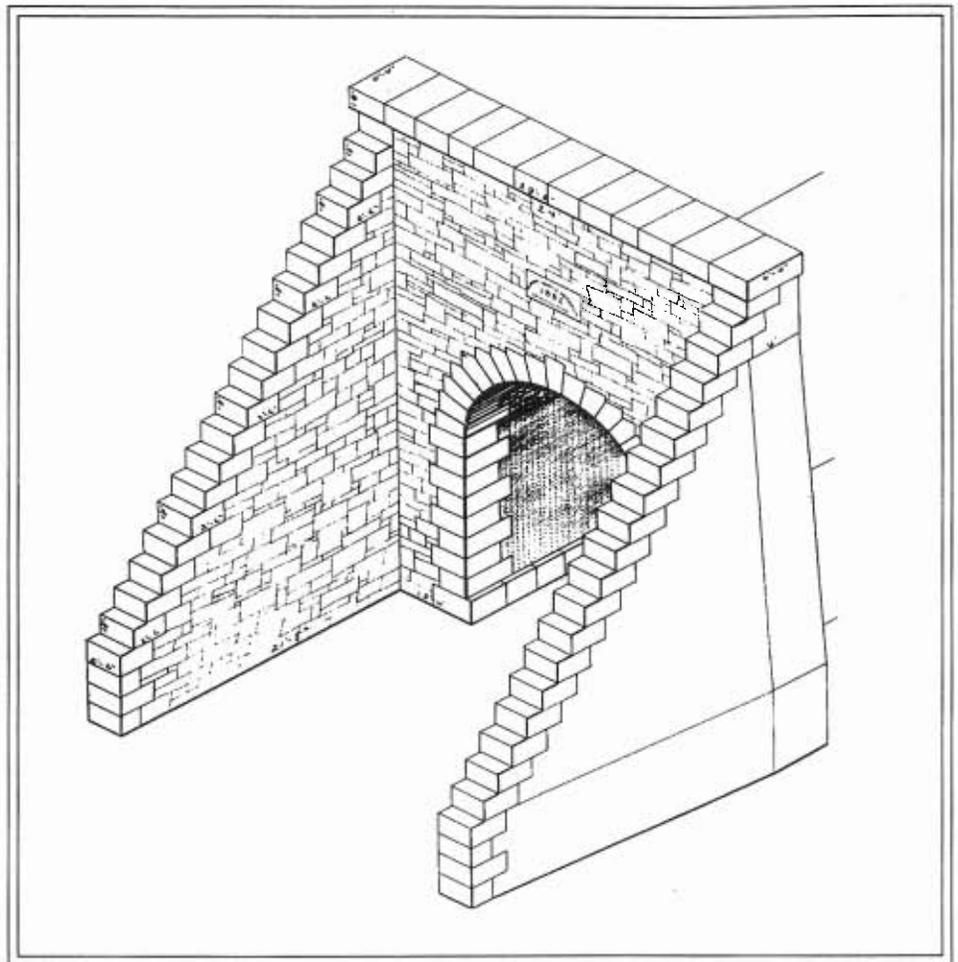
EDITORS NOTE: The portal graphic on this page and the isometric drawing on page 4 were taken from the original linen drawings for the Boston Mountain Tunnel, 1882.

Two distinctive characteristics of the tunnel were:

1) It was completely lined with brick that, according to company records, took two shifts of workmen 2 1/2 years to complete. 2) Each portal featured a 4'9" x 2'9" x 18" **1882** date stone hand carved from a single piece of sandstone, weighing approximately 1,500 lbs. In place for eighty-five years, the date stones stood as a monument to the ingenuity and hard work of those who designed and built the tunnel.

In August, 1967, the Frisco initiated "Operation Big Bore." The nine-month project was designed to enlarge the tunnel to 24 ft. high - 18 ft. wide, in order to accommodate the higher and wider loads of modern railroading. In the process, each portal was rebuilt and the date stones were removed.

According to our records, the north stone was destroyed during the rebuilding. Fortunately, the south stone survived and eventually "landed" in the front yard of Jim Elliott who was Manager of Automotive Equipment at the time.



According to Mr. Elliott, *"Where it landed when we unloaded it is where it has been for the past twenty-eight years!"*

Thanks to the generosity of Mr. Elliott, we are pleased to announce that the 1882

Winslow Tunnel date stone has a new home at The Frisco Railroad Museum Inc. It is now the centerpiece of the museum's main entrance courtyard.



*Winslow Tunnel, south portal, 1967, prior to rebuild.  
Frisco photo*



*Winslow Tunnel, south portal, December 25, 1988.  
R.E. Napper photo*



*"Easy does it," is the direction from museum project director Stan Weddle as president Alan Schmitt gently lifts the Winslow date stone from its home of twenty-eight years on the farm of retired Frisco employee Jim Elliott.*

*Photo by Donna Wagner*

*"Easy does it," is again the order of the day as president Alan Schmitt gently positions the Winslow date stone at its new home in the entrance courtyard of the museum.*

*Photo by Donna Wagner*



*The Winslow Tunnel date stone in place and secure at its new home in the entrance courtyard of the museum.*

*Photo by Donna Wagner*

# FACTS AND FABLES OF DIESEL FREIGHT UNITS

**EDITORS NOTE:** *The following essay on Facts and Fables of Diesel Freight Units, was included in the instruction manual for a class on the operation and maintenance of diesel locomotives, presented by EMD in March, 1947. The author is unknown.*

"A diesel engine is an amazing assortment of bolts, nuts, valves, heaters, coolers, expanders, contractors, and other gadgets too numerous to mention here. All of these are screwed and welded together to form a single unit. The resulting unit is expected to start out with below the average grade of fuel oil and change it into BTU - then the BTU into MEP - the MEP into RPM - the RPM into BHP - the BHP into KWH. Then the electrical gear takes over and makes a BHP out of KWH and RPM out of BHP, and then, if everything is in working order, you finally get MPH. All of this takes place in a fraction of a second in the confines of an all too small engine room. This gives you a rough idea of the confusion characteristic to all Diesel Freight Units.

"The Diesel engine was invented by a man named Mr. Diesel. The writer has checked back into his life and character, and is satisfied that this was not done with any malicious intent as he was a very fine man and loved the human race. Had the idea been left as he left it, nothing would have happened to it. The responsibilities rest upon the shoulders of certain individuals and corporations and Diesel engine manufacturers, so do not hold it against Mr. Diesel. The

## ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION

LA GRANGE

ILLINOIS

INSTRUCTION SCHEDULE

ELECTRO-MOTIVE DIESEL LOCOMOTIVE SCHOOL

"There are three main classes of Diesel engines. Namely, High-speed Diesels, Slow-speed Diesels, and No-speed Diesels. The principal difference in these engines is that the High-speed Diesel runs faster than the Slow-speed Diesel, and they both run faster than the No-speed Diesel. The High-speed Diesel makes noise faster than the Slow-speed Diesel. A Slow-speed Diesel can become a High-speed Diesel by the simple procedure of speeding it up. Either the High-speed Diesel or the Slow-speed Diesel can become a No-speed Diesel by merely shutting the engine down. This can be accomplished in several different ways. The correct way is by shutting the fuel oil off. This can be accomplished very easily. None of the Diesel engines invented up to now will run without fuel oil. This seems to be a characteristic of a Diesel engine. The engine can also be shut down by placing a monkey wrench in an appropriate place so as to jam the gear train, but as this method is not recommended by the manufactures association, we will omit it in the presentation.

"A Diesel engine has several important parts that

should be mentioned, among them is the cylinder. This is a long round hole filled with air that is covered on one end with a cover full of round holes containing valves that admit fuel, air, and sometimes water and carelessly placed tools. These valves open and closer according to a predetermined sequence of events. The other end is plugged with a movable plug called a piston. This is free to move up and down within certain limits and would come out altogether if it were not for the connecting rod. This connecting rod is important too, as it is what changes the MEP in RPM, and without it we would be stuck with the MEP, which no one knows how to use up to now. This whole assembly is held in place by crab studs and nuts to prevent it from joining the bird gang. Each cylinder has four crabs, so we might be more considerate of the noise that the engine makes, considering the noise that you would make if you had the same number of crabs.

"To start the Diesel engine, it takes a certain amount of knowledge, steady nerves, and a certain amount of bravery. First you set all of the switches in the correct position, with the fuel pump shut off. Then open the relief valves



This incidentally, is the only useful one up to now. But there should be another lock on the unit, and that is on the door between the engine room and cab, so that when the Road Foreman goes back into the engine room to see if there is any water in the toilet water tank, the fireman can lock this door and keep him back there where he belongs, but will never stay. After all, the engineer was put on the unit to run the train, so why not let him?

"Another confusing so-called interlock keeps you from starting the engine with the overspeed trip kicked out. Here, a word of advice - when you fail to start an engine on account of someone having stopped it by tripping this device, phone the yard office at once and report water in the fuel oil. While you are draining the water out of the lines, filters, pumps, tanks, and so forth, reset it. Then you are ready to try again. However, don't forget to notify the Road Foreman that you are now ready to go, otherwise he might get tired of waiting, get disgusted and go up town and get drunk.

"There is another interlock on the starting contactors that keeps the engine from loading up when the starting contactors are stuck. For some unknown reason this contactor seems to be unusually hard to locate, but there is a movement afoot to have a seeing eye dog assigned to each unit to lead the engineer to the contacts, so that he can tell the fireman to tell the brakeman to get him a flagstaff so that the fireman can break the stick contacts loose.

"Meanwhile, the conductor will be walking many miles up and down, up

and down, the tracks and wearing out his shoes, so it is important to hurry. If he is afflicted with high blood pressure, it is very important that you hurry, and if he has already used up his shoe coupon, it is most very important that you hurry.

"The power of a Diesel engine is measured in horsepower. Why, no one seems to know. Therefore, if you want to measure the power of an engine, the natural thing to do is to find a horse, hitch him to the engine and see which could pull the most. Here a word of caution is necessary. First, horses are scarce, and even if you could find one, it would be



another problem to hitch him up to the locomotive - for with so many Road Foreman around who resemble the south end of a horse headed north, it would be very easy to hitch a Road Foreman up to a locomotive and put the horse in the cab with the engineer. Not that the engineer would mind, because he would be much better off with a whole horse in the cab with him than with just the worst part of one. But if there was no Road Foreman in the cab, who would ever think to look back in the log book and report everything that

the man in front of him reported. And, after all, that is the only way that the Company can tell is the Road Foreman has ever been on the locomotive, so it is very important that he do this so that the Company will remember to pay him each month. Anyway, getting back to the horse, it would be very hard to find one that wouldn't be scared by the faces of the EMD men around, and he would probably end up by kicking the nose of the unit in and going home.

"So it would be much better to rely upon the instruments that the electrical men have invented. They will indicate this power in terms of Amps, Volts, or Kilowatts, depending upon the individual whims of the electrical designer. With a little arithmetic these values can be converted to HP as nearly accurate as by using a horse. Of all the power generated, some goes to work, some goes to friction, some goes to heat, and the rest goes to hell, which is all that you could expect under the circumstances.

"The writer recommends that the prospective Diesel engineer does not take these engines too seriously, or study about them too much in trying to learn all about them. By the time that he becomes familiar with one particular type of engine, it is obsolete, because the designer has the thought of some more interlocks to incorporate into the engine. It has also been noted that once an engineer gets to spending too much time thinking about this Diesel, he may acquire a type of mental derangement that only a dimly lighted bar can provide treatment for." ☐