## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN ACCIDENT ON THE CHICAGO GREAT WESTERN RAILROAD AT WEST ST. PAUL, MINN., ON DECEMBER 4, 1934.

January 18, 1935.

To the Commission:

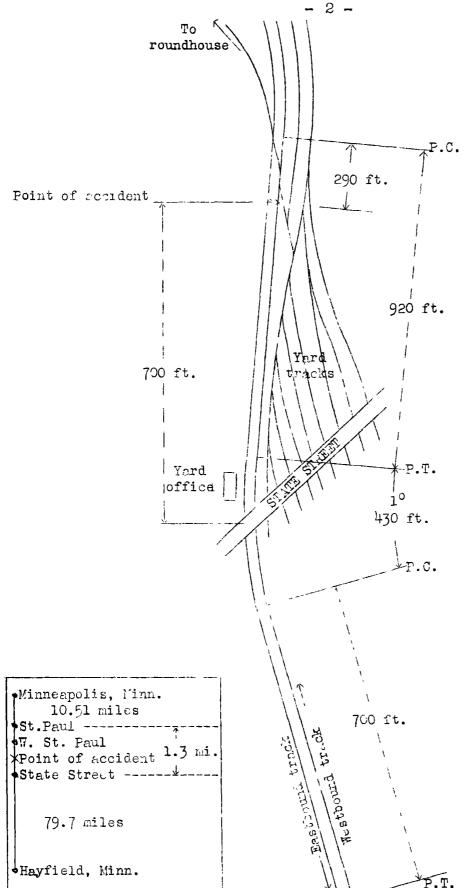
On December 4, 1954, there was a derailment of a passenger train on the Chicago Great Western Railroad at West St. Paul, Minn., which resulted in the injury of two employees.

### Location and method of operation

This accident occurred on the Tenth District of the Minnesota Division, which extends between Hayfield and Minneapolis, Minn., a distance of 91.5 miles. In the vicinity of the point of accident this is a double-track line over which trains are operated by time table, train orders, and an automatic blocksignal system. About 700 feet east of State Street there is a cross-over connecting the west-bound main track and a yard situated north of the tracks and the accident occurred on the west-bound track at a point 36 feet east of the frog of the cross-over. Approaching this point from the east, the track is tangent for a distance of 700 feet, followed by a 10 curve to the right 430 feet in length and then tangent track for a distance of 920 feet, the accident occurring on this latter tangent at a point about 290 feet from its western end. The grade is undulating and is 0.12 percent descending for west-bound trains at the point of accident.

The tracks are laid with 85-pound rails, with 21 or 22 hardwood ties to the rail length, single-spiked, tieplated, and ballasted with gravel; the tracks are well maintained. Special instructions contained in the time table restrict the speed of both passenger and freight trains to 20 miles per hour from State Street yard office to Fillmore Avenue, a distance of about 3,800 feet, within which territory this accident occurred.

The weather was clear and cold at the time of the accident, which occurred at 8:40 a.m.



Inv. Mo. 1950 Chicago Great Western West St. Paul, Minn. December 4, 1934.

### Description

Train No. 1, a most-bound passenger train, consisted of laggage car, 1 stora e mail car, 1 mail car, 1 baggage car, 1 coach, 1 Pullman sleeping car, J coach, and 1 Pullman sleeping car, all of steel construction, hauled by engine 930, and was in charge of Conductor Cool and Engineman Laska. This train left Hayfield, 79.7 miles east of State Street, at 6:36 a.m., 1 hour and 26 minutes late, passed South St. Paul, the last open office, 5.6 miles from State Street, at 8:35 a.m., 1 hour and 22 minutes late, and was derailed while traveling at a speed estimated to have been about 20 miles per hour.

Engine 930 stopped on its left side to the left of and parallel with the east-bound track about 200 feet beyond the point of derailment, while the tender was on its right side at an angle across both tracks; the first three cars were derailed but remained upright in general line with the track. The exployees injured were the engineman and fireman.

# Sunary of evidence

Engineman Laska stated that he reduced speed to 20 miles par hour at State Street to comply with the time table speed restrictions and just be one he reached the cross-over he felt the engine rise and then drop down upon the ties; when the engine struck the cross-over it turned to the laft and then went over on its side. Just as soon as he realized the engine was derailed, he applied the air brakes in emergency and said it seemed as if the online had run over something or had encountered a broken rail. Fireman Johnson saw the front end of the engine rise and then drop down and thought it had run over something, as he felt a jolt followed by the derailment of the engine.

Conductor Cool, who was in the seventh car, stated that he felt an emergency application of the air brakes and a light jerk before the train stopped. He and Flagman Boyd both estimated the speed of their train to have been about 20 miles per hour at the time of the accident.

Yardraster Callahan stated that he was in the yard office when Train No. 1 passed; he saw snow flying but noticed nothing unusual. He had walked along the track in the vicinity of the point of accident that morning and had noticed nothing unusual.

The snow along the track and between the rails was about 6 or 8 inches above the rails and he just could see the tops of the rails, but the switches and frogs had been cleaned of snow. Four engines and one transfer train had passed through the cross-over leading from the yard to the west-bound main and three of these engines also used the cross-over between the west-bound and east-bound main tracks leading to the roundhouse track, all within 3 hours prior to the time of the accident, the last movement being at about 8:20 a.m. He was unable to determine the cause of the accident.

Section Foreman Grimms arrived at the scene of the accident about 40 minutes after its occurrence, inspected the track and found a brake shoe with badly burned marks indicating that possibly a wheel had run over it. This shoe was found about 2 or 3 inches from the gauge side of the right rail of the west-bound track, on the engineman's side and near the point where two burned spots were found on top of the rail. The first mark on the rail appeared to have been made by something dragging along the ball of the rail, and it extended to within 4 or 5 feet of a joint on which the bolts had been driven down and partly sheared off on the gauge side of the rail; there also was a small groove in the snow, having the appearance of a finger having been drawn through the snow. Section Foreman Grimms then went over the track with the level board and gauge and found it to be in good condition.

Car Foreman Draz was of the opinion that the brake shoe found by the section foreman had not been used recently; it was somewhat rusted and he thought that if it had just come from a car it would have had a brighter appearance.

Roundhouse Foreman Brunner inspected the engine as it lay on its side after the accident and found nothing that might have contributed to the cause of the accident. He also stated that at the time the brake shoe was found the face of the shoe was covered with snow and ice but the back of it was clear and showed recent burns on the lugs, indicating that it had been dragged along the rail.

Car Repairman Reetz stated that he was standing between the west-bound track and the scale track and saw Train No. 1 as it reached the yard office; he then saw it rocking and jumping on the ties but did not see snow flying or any object in front of the engine.

Superintendent Freiberger stated that the switches and frogs had been cleaned several times during the snows from November 29 through December 3. The last regular movement over the west-bound track was about 7:30 the previous night, although during the

night frequent movements had been made through the cross-overs.

The first mark of derailment, about 36 feet east of the frog of the cross-over, appeared to have been caused by a blow at the side of the ball of the right rail and was followed by marks on the base of the rail apparently caused by wheel treads. The rail joint had been dataged by contact with the wheels and the track was torn up for a distance of 350 feet beyond that point. The brake shoe found after the accident was a standard freight car shoe and apparently had not been in service recently as it was somewhat corroded and was broken across at the center, the two parts being held together with a middle strap at the back. A chip was broken out of one corner at the end and appeared to be a fresh fracture. The corners at the center break were friction burned and apparently had been pushed along the base of the rail by the wheel of the engine truck.

#### Conclusions

It is believed that this accident was caused by a brake shoe lying on a rail.

The evidence indicated that the engine struck a brake shoe which was found lying near the gauge side of the right rail. The track was covered with snow; the face of the brake shoe was covered with snow and ice, while on its back were badly burned marks; there also was evidence of something having been dragging along the rail and two burnel spots were on the rail near where the shoe was found. Due to its somewhat corroded condition, it did not appear to have been in service recently, and no explanation could be offered as to just when and how this brake shoe came to be on the rail.

Respectfully submitted,

W. J. PATTERSON,

Director.