INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED AT THE INTERSECTION OF THE TRACKS OF THE ILLINOIS CENTRAL RAILROAD AND THE GREAT NORTHERN RAILWAY AT HILLS, MINN., ON MARCH 28, 1923.

April 28, 1923.

TO THE COMMISSION

On March 28, 1923, there was a side collision between two passenger trains at the intersection of the tracks of the Illinois Central Railroad and the Great Northern Railway at Hills, Minn., which resulted in the death of one employee and the injury of one employee

The investigation of this accident was made in conjunction with a representative of the Minnesota Railroad and Warehouse Commission.

Location and method of operation.

At the point of accident both railroads are single-track lines over which trains are operated by time-table and train orders, no block-signal system being in use. The general direction of the Illinois Central Railroad is east and west, and of the Great Northern Railway north and south. Approaching the crossing from the east on the Illinois Central Railroad the track is tangent for over 2,000 feet, while the grade is practically level from the station to the crossing, a distance of approximately 800 feet; approaching this crossing from the north on the Great Northern Railway commencing at the station and proceeding south, the track is tangent for 1,297 feet, followed by a curve of 1° to the right 600 feet in length, the track is then tangent for 175 feet to the point of accident. The grade from the depot southward is 0.3 per cent descending for 800 feet and is then level to the point of accident. There is no interlocking plant at this crossing, and the only fixed signals protecting the movement of trains over this crossing are stop boards located 200 and 800 feet distant on the Illinois Central Railroad and 400 feet distant on the Great Northern Railway; it is also required by state law, as well as by the operating rules of the Great Northern Railway, that all trains shall stop when approaching a railroad crossing at grade, not less than 200 feet or more than 800 feet from the crossing, provided it is not equipped with an interlocking plant, the Illinois Central rule requires

trains to approach such crossings with caution, and to stop where required by law. The view of the crossing, and the intervening space between the tracks of each line, is unobstructed, the track of each line being built on a fill for over 750 feet approaching the crossing. The weather was cloudy at the time of the accident, which occurred at about 10.30 a.m.

Description.

Illinois Central westbound passenger train No. 711 consisted of one combination mail and baggage car, one coach, one dining car and one Pullman sleeping car, all of all-steel construction, hauled by engine 2032, and was in charge of Conductor Harrington and Engineman Flickinger This train left the station at Hills at 10.28 a.m., 38 minutes late, and collided with Great Northern passenger train No. 181 at the intersection of the track of these two lines, approximately 800 feet west of the station, while traveling at an estimated speed of 4 miles an hour

Great Northern southbound passenger train No. 181 consisted of one combination mail and baggage car and two coaches, all of wooden construction, hauled by engine 928, and was in charge of Conductor Butler and Engineman Church. This train arrived at Hills at 10.20 a.m., completed its station work, pulled down and took water at the tank, located about 200 feet south of the station, and then proceeded southward toward the crossing and collided with Illinois Central passenger train No. 711 at the crossing, which is approximately 1,800 feet south of the water tank, while traveling at a speed of about 8 miles an hour.

The force of the collision derailed Illinois Central engine 2032 to the south of the Illinois Central track and west of the crossing, it came to rest at the bottom of a 15-foot embankment in an upright position, quite badly damaged, the tender and the forward truck of the baggage car were also derailed Great Northern engine 928 was derailed and came to rest in an upright position across the Illinois Central track just west of the crossing, the tender remained coupled and was derailed to the east of the Great Northern track. The employee killed was the fireman of Illinois Central engine 2032.

Summary of evidence.

Engineman Flickinger, of Illinois Central Train No. 711, stated that after the usual station work was completed he received a proceed signal from the conductor, sounded two blasts on the whistle, and proceeded westward At this time

he saw the Great Northern train near their house-track switch, which is approximately 1,300 feet north of the crossing, moving south He stated that the Great Northern train then drifted to a point in the vicinity of the stop board located about 400 feet north of the crossing and then began to work steam, at this time his own train was about 75 feet from the crossing, traveling at a speed of 15 miles an hour, and he said he at once applied the air brakes in emergency and had reduced speed to about 4 miles an hour at the time of the collision. He was positive in his statement that the Great Northern train did not stop at any time after he first saw it

Conductor Harrington, of train No. 711, stated that immediately after leaving the station, he heard the engineman sound the crossing whistle, and was engaged in collecting transportation when he felt the air brakes applied in emergency, the collision occurring shortly afterwards, he estimated the speed at the time of collision at 4 or 5 miles an hour. He did not see the Great Northern train at any time He said the usual station stop at Hills was made, with the engine standing about 200 feet west of the 800-foot board, or 400 feet east of the 300-foot board, and that this stop was according to the rules and complied with all the requirements of the law, and added that a second stop was never made for the crossing.

Baggageman Matzen was standing in the door of the baggage car and saw the Great Northern train approaching when it was opposite the section house, which is 1,166 feet from the crossing. He also stated that the Great Northern train did not stop, and that the brakes were applied on his own train when about 80 feet from the crossing, after which he jumped to the ground; he estimated the speed of his train at the time he jumped to have been about 12 miles an hour Flagman Welker's statements practically corroborated those of the other Illinois Central employees, except that he estimated the speed of his train at the time of the accident to have been 12 or 15 miles an hour

Engineman Church, of Great Northern train No. 161, stated that after the usual stop at the station at Hills, the train moved southward to the water tank, took water and proceeded southward toward the crossing and stopped at a point between 100 and 150 feet north of the crossing stop board, an approximate distance of 550 feet north of the Illinois Central crossing. From his position on the right side of the southbound train he could not see and did not know there was a westbound train approaching the crossing From his side of the engine cab he was able to see the crossing was clear and he was informed by the fireman that it was clear on that side He said that after coming to a full stop, he released the air

brakes, sounded the whistle, and started ahead, and was working steam at the time of the collision, at which time he thought the speed of his train was about 8 miles an hour. He was of the opinion that the Illinois Central engine ran into his engine. Engineman Church further stated that he had always found his fireman to be reliable, and felt no uneasiness on account of his leaving his position on the left side of the cab

Fireman Johnson, of train No. 161, stated that after taking water at the tank he got on his seat box and rode to the point at which they stopped for the Illinois Central crossing; that after this stop was made he continued to ride in this position for about a car length and then got down to put in a fire and was engaged in doing this until the moment of the collision. He stated positively that when the stop for the crossing was made he observed the Illinois Central train standing at their station and that it was still standing there when he left his seat box to put in a fire.

The testimony of Conductor R. A. Butler and Baggageman R. F. Butler, of train No. 161, added nothing of importance to the evidence; each corroborated the statement of the engineman and fireman that the crossing stop was made after leaving the water tank, Baggageman R. F. Butler stated that he saw the Illinois Central train standing at the station at the time the stop was made for the crossing, but did not notice when that train left the station. Both the conductor and baggageman stated that a whistle signal was sounded after stopping for the crossing.

Statements made by various outside witnesses, including passengers on the two trains, were as conflicting as those made by the employees, and brought out no additional information of importance.

Conclusions

This accident was caused by the failure of the engine crews of the two trains to take proper precautions for the safe movement of their respective trains over the crossing at grade.

Much testimony was presented in an endeavor to prove which engine actually reached the crossing first, but under the circumstances it is not considered of great importance to settle this question, for it is clear that neither could have reached the crossing more than a very few feet in advance of the other, and that had either engine crew exercised the prope degree of care this situation would not have arisen.

Engineman Flickinger, according to his own statement, made no attempt to bring his train to a stop until it was within 75 feet of the crossing, while the fireman of the Great Northern train got down from his seat box when his train was some distance from the crossing, and Engineman Church then began to work steam, knowing his fireman was not maintaining a lookout, and continued to work steam until the accident occurred. There is no evidence that either train had the right of way over the other, and as each was in plain sight, and moving at a low rate of speed, it would have been a simple matter to have stopped and to have made sure that the movement could be made in safety before proceeding over the crossing.

It is probable that the density of traffic over this crossing would not warrant the installation of an interlocking plant to guard against accidents of this character, but ample protection could be afforded by the use of crossing gates, or manually operated semaphore signals, which would require that a trainman proceed to the crossing in advance of his train and place the signal governing movements over the opposing line in stop position before his own train started to move over the crossing. Had such a protective device been in use, this accident undoubtedly would not have occurred.

All of the employees involved were experienced men, one of the engineman had been employed as such for more than 27 years and the other for more than 32 years. At the time of the accident the crew of the Illinois Central train had been on duty less than 4 hours, after off-duty periods of from 22 to 60 hours, the crew of the Great Northern train had been on duty nearly 8 hours, after off-duty periods of from 23 hours to several days.

Respectfully submitted,

W. P. BORLAND,

Director.