INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LOUISVILLE & NASHVILLE RAILROAD NEAR DRIVERS, ILL., ON AUGUST 12, 1926.

September 23, 1926.

To the Commission:

On August 12, 1926, there was a derailment of a freight train on the Louisville & Nashville Railroad near Drivers, Ill., resulting in the death of two employees and the injury of one employee.

Location and method of operation

This accident occurred on that part of the St. Louis Division extending between St. Louis, Mo., and Howell, Ind., a distance of 163.81 miles; in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a point nearly 1 mile north of the station at Drivers, approaching this point from the south the track is tangent for a distance of 3,695 feet and then there is a 2° curve to the left 613 feet in length, followed by a tangent extending 2,157 feet to the point of derailment, this tangent continuing for a considerable distance beyond. The grade is practically level to the approximate point of derailment, which was at the beginning of a grade 1.155 per cent ascending for northbound trains. The track is laid with 90-pound rails, 33 feet in length, with an average of about 18 ties to the rail-length, single-spiked, and ballasted with chats to a depth of about 8 inches, the track is well maintained.

A heavy rain storm prevailed at the time of the accident, which occurred at about 2.45 p. m.

Description

Northbound second-class freight train No. 60, a fast freight train, consisted of 24 cars and a caboose, hauled by engine 969, and was in charge of Conductor Dew and Engineman Summers. This train passed Mt. Vernon, the last open office, 4.8 miles south of Drivers, at 2.35 p. m., according to the train sheet, 4 hours and 30 minutes late; and on reaching a point nearly 1 mile north of Drivers, traveling at a speed estimated to have been between 30 and

40 miles an hour, it was derailed by an opening in the track, due to a section of rail, 17 feet in length, having been removed at a point where the rails were being renewed.

Engine 969 and 13 cars were derailed; the engine came to rest on its right side at a point about 250 feet north of the missing rail section and about 20 feet east of the track. The derailed cars were scattered on both sides of the track. The employees killed were the engineman and fireman.

Summary of evidence

None of the surviving members of the crew of train No. 60 was aware of anything wrong prior to the accident. Head Brakeman Hart said it was raining hard when approaching the point of derailment and that he took shelter in the first car, an empty box car, and sat down on the right side, both doors being open, saying he could maintain a better lookout from this car than from the left side of the engine cab. The whistle signal was sounded for Plummers crossing, located about 2½ miles south of Drivers station, and also for the station at Drivers, at this time he was standing in the doorway, looking back along the right side of the train, watching for a signal from the rear end for the purpose of passing it on to the engineman, but he did not see any signal given, nor could he see the caboose owing to the severe storm. Head Brakeman Hart then went back inside the car and was not in position to see anything along the side of the track; he did not observe the stationary caution and stop signals displayed by the section force to protect the track repair work, and did not notice any reduction in the speed of the train or any air brake application prior to the derailment.

Conductor Dow said that at Shops, 5.7 miles south of Drivers, he had engaged Engineman Summers in conversation but noticed nothing unusual with his physical condition. It started to rain when the train passed Mt. Vernon and on reaching a point about 1½ miles south of the point of derailment the rain came down in torrents, raining so hard until the time of the derailment that vision was entirely restricted. The engine whistle was sounded for Plummers crossing and also for the station at Drivers, but Conductor Dow said he did not attempt to give signals from the rear end of the train while passing Drivers, as required, as it would have been impossible for the men on the head end to have seen them, owing to the storm. Prior to the accident he had no knowledge whatever of the caution and stop signals displayed in the vicinity of Drivers by the maintenance-of-way employees, but on going back subsequently he saw the stationary yellow flag located at the prescribed distance; he stated, however, that from his position on the

left side of the cupola together with the storm, it would have been impossible for him to have seen those flags. He estimated the speed of his train to have been between 30 and 35 miles an hour passing Drivers, and said that it was about the same at the time of the accident, he noticed no air-brake application, while on his arrival at the engine immediately after the accident the driving wheels of the derailed engine were revolving in forward motion. Conductor Dow further stated that ordinarily when the track is disturbed, as in this instance, advance information to the effect is issued by the dispatcher.

The statements of Flagman Young practically corroborated those of Conductor Dow; Flagman Young also said that on going back to flag immediately after the accident he saw a stationary red flag and also a flagman at a point 76 rail-lengths from the rear end of his train. He asked the flagman whether or not he had flagged the train, and also as to whether or not he had used a torpedo, and he said the flagman replied that he had made an effort to stop the train and that he had also placed a torpedo on the rail, but that the torpedo had not exploded; the flagman showed him the unexploded torpedo but on examining it he found that the clamps on the torpedo were broken off. Flagman Young then continued on back and at this time observed that the stationary yellow flag or caution signal was displayed at the prescribed distance.

Track Supervisor Endicott stated that on the day prior to the derailment three section gangs were laying rail in the vicinity of the point of accident, the work being completed with the exception of six or eight rails. In connection with this work there was considerable splicing to be done and he issued instructions for three gangs to return on the following day, the day of the accident, to space ties and smooth out the track and also to lay the remaining six or eight rails. On the day before the accident he had notified the dispatcher through the operator at Mt. Vernon, Ill., that rail was going to be laid, but owing to the small amount of work to be performed on the day ofthe accident he did not think it advisable again to notify the dispatcher, notifying the dispatcher, however, would in no way have relieved the section gangs ofthe duty of affording proper flag protection. Track Supervisor Endicott further stated that on the day of the accident he was at Addieville, located 28.3 miles north of Drivers.

Section Foreman Newton stated that prior to laying the remaining eight rails on the day of the accident flagmen were sent out in each direction equipped with flags and torpedoes. As the old rails were taken out new rails were put in and securely bolted and spiked; at the final

connection, however, there was about 7 inches of expansion, which could not be driven back, and it was decided to remove and cut the rail. While they were engaged in cutting the rail, some one gave warning of the approaching train, and three of the section men immediately started running toward the train, giving stop signals, but to no avail. After the accident Section Foreman Newton proceeded southward and definitely ascertained that Section Flagman Windle had displayed the stationary caution and stop signals, as required. Section Foreman Newton inquired as to the torpedo and Flagman Windle informed him that it had not been exploded, saying that something had displaced it from the rail, at the same time showing the section foreman where it was laying beside the rail. On picking it up Section Foreman Newton observed that the clamps were broken off and told Flagman Windle he should have exercised better judgment than to use a torpedo without clamps; he asked the flagman as to whether or not he had other torpedoes in his possession and the flagman produced some good ones from his pocket. Section Foreman Newton further stated that he did not hear the engine whistle sounded as train No. 60 approached, and was ofthe opinion that he could not have heard it owing to the noise caused by cutting the rail. It further appeared that while he did not think the weather conditions were such as to require the use of night signals, saying that he could see the outline of Engineman Summers in the cab as the train rounded the curve, 1,157 feet from the point of derailment, he acknowledged that had the section flagman been equipped with and used a lighted red fusee the engineman would have been enabled to see it better than a red flag. The statements of Section Foremen Hampton and Stephens, and Section Laborer Venezia practically corroborated those of Section Foreman Newton.

Section Flagman Windle stated that after going back and displaying the stationary caution signal, a tin flag, painted bright yellow, at a point 5,810 feet south of the point of derailment, he returned and displayed the stationary stop signal, a red cloth flag set in a staff, at a point 3,170 feet south of the point of derailment, and in addition placed a torpedo, which had the clamps broken off, on the rail in the immediate vicinity of the stop signal, he then stationed himself beside the track, on the engineman's side, near the stop signal. As train No. 60 approached he heard no signal sounded on the engine whistle and on definitely realizing that the train was not going to be brought to a stop before reaching the stationary stop signal he attempted to release the red flag from the staff; the flag did not come out and he took hold of the staff with his left hand while he released the flag with his right hand, then took a step to-

wards the track to wave the red flag but before he could accomplish this the engine had passed him, moving at a speed of about 35 or 40 miles an hour. He did not know whether or not the side window on the engineman's side of the cab was open, did not see the engineman in the cab, and did not know whether he could have seen him as it was raining very hard; it did not occur to him to throw anything at the engine cab in an endeavor to attract attention. He had three torpedoes in his possession; the clamps had been broken off of the torpedo which he placed on the rail and he did not realize that there was a possibility that a torpedo in this condition would fail to serve the purpose for which it was intended, and having used torpedoes in this condition before he did not substitute one of the other torpedoes for it. On this occasion, however, the torpedo was not exploded by the train, having become displaced, and after the accident it was located outside the rail. He said that he saw the torpedo on the rail about three or four minutes before the train passed. Flagman Windle further stated that at the time train No. 60 approached he had not taken shelter from the rain, but had remained in the immediate vicinity of the stop signal. When the engine whistle was not sounded in response to the caution signal it indicated to him that the engineman had not seen that signal, but he thought the engineman would see the stop signal, saying that occasionally they stop very close to the stop signal.

Conclusions

This accident was caused by train No. 60 entering upon a section of track under repair, which was not afforded proper protection, resulting in its being derailed on encountering an opening in the track, for which Section Flagman Windle is primarily responsible.

Section Flagman Windle said he displayed the usual caution and stop flags, and then placed a torpedo on the rail, which had the clamps broken off, after which he stationed himself in the immediate vicinity of the stop flag. When the engine whistle was not sounded for the caution flag, it indicated to him that the engineman had not seen that signal, yet he took no further action toward stopping the train until he definitely realized it was not going to stop at the stop flag, but at this time it was too late to avert the accident. Had he put down a torpedo in proper condition for use, and had he shown a little energy in endeavoring to attract the attention of the engine crew, the accident probably would not have occurred.

The testimony is to the effect that the engine

whistle was sounded on two occasions within a distance of 2½ miles south of Drivers, indicating that Engineman Summers was in full possession of his faculties up to that point. Beyond that point, however, a different situation existed; it did not appear definitely that he acknowledged the caution flag, and he paid no attention to the stop flag or to the signals of the men working at the point where the derailment occurred, the evidence indicating that no application of the air brakes was made and that steam was being worked at the time of the accident. It is possible Engineman Summers may have become incapacitated, but any attempt to explain why he failed to perform his duties would be mere conjecture.

The flagging rules governing maintenance-of-way employees do not provide for the use of hand flags or fusees, but they do provide that the man assigned as flagman shall be provided with tools so that he may work near the stop flag, this provision applying even when work is being done which makes the track unsafe for the movement of trains at slow speed. The requirements of safety would seem to dictate fully as high a standard of duty and responsibility for maintenance of way flagmen as exists for train flagmen, especially during the performance of such important work as changing out rail, they should be furnished with all the equipment supplied to train flagmen, should be properly instructed in its use, and should be required to devote all their attention to flagging duty.

All of the employees involved were experienced men; at the time of the accident the train and engine crews had been on duty less than 6½ hours, prior to which they had been off duty 24 hours or more.

Respectfully submitted,

W. P. Borland

Director.