

## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE NEW YORK, CHICAGO & ST. LOUIS RAILROAD NEAR WESTFIELD, N. Y., ON APRIL 29, 1927.

June 7, 1927.

To the Commission:

On April 29, 1927, a freight train of the New York, Chicago & St. Louis Railroad collided with a gasoline motor car and was derailed near Westfield, N. Y., resulting in the death of three employees and the injury of one employee. This accident was investigated in conjunction with a representative of the Public Service Commission of New York.

Location and method of operation

This accident occurred on the Buffalo Division, extending between Buffalo, N. Y., and Conneaut, Ohio, a distance of 116.8 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. Automatic block signals are installed in this territory to afford protection only at places considered dangerous, such as curves, etc. The motor car was struck at a point about one-half mile west of the station at Westfield, this point being 87 feet east of what is known as bridge 39, which is 592.1 feet in length, but the train apparently was not derailed until it reached a point 2,234 feet westward, at about the frog of the trailing-point switch leading to what is known as Gales Spur. Approaching from the east there is a 3° curve to the right 610.8 feet in length, 2,275.2 feet of tangent, a 2° curve to the left 410.8 feet in length, and then more than one-half mile of tangent. The grade is practically level at the point where the train struck the motor car, which was on the first-mentioned tangent at a point 512 feet from its eastern end; the train then crossed bridge 39, rounded the 2° curve to the left, and was derailed on the last-mentioned tangent at a point about 60 feet from its eastern end.

There is an eastbound distant signal located about 50 feet west of the switch leading to the spur, the normal position of which is caution. In the event a westbound train passes the home signal, located about 4,675 feet east of the distant signal, near the station at Westfield, the eastbound distant signal displays a stop indication.

The weather was clear at the time of the accident, which occurred at about 1.33 p. m.

### Description

Westbound freight train No. 55 consisted of 1 test caboose, 66 cars and a caboose, in the order given, hauled by engine 670, and was in charge of Conductor Johnson and Engineman Butler. It left Buffalo Junction, 56 miles east of Westfield, at 11 30 a m , five hours late, and collided with the gasoline motor car on reaching a point about one-half mile west of Westfield station while traveling at a speed estimated to have been between 40 and 45 miles per hour.

The eastbound gasoline motor car involved, a four-wheel Mudge car, type E-6, was loaded with car-repair tools and material, weighing about 350 pounds, and was in charge of Car Repairman Hoyt and laborer Greco. After repairs had been made to a bad-order car at Gales Spur the motor car departed for Westfield, nearly 1 mile distant, at which point it was intended to clear train No. 55. While crossing bridge 39, however, train No. 55 was observed approaching, the motor car was brought to a stop and an attempt was made to remove it from the track, but before this could be accomplished it was struck by train No. 55.

The motor car was demolished but the train continued until it reached the switch leading to Gales Spur. The engine was then derailed and it came to rest on its left side at a point about 325 feet west of the switch. The first 12 cars in the train were piled up within a space of about 200 feet and the wreckage caught fire and was consumed, 5 other cars were also derailed but they were not badly damaged. The track was torn up for a distance of about 400 feet, beginning at the frog of the switch. The employees killed were the engineman, fireman and head brakeman.

### Summary of evidence

Car Repairman Hoyt, located at Pomfret, 4.3 miles east of Westfield, said that at about 11.45 a.m. he received information from the operator at Pomfret that train No. 55 had departed from Tifft Yard, near Buffalo Junction, at 11.30 a.m. He then proceeded to Gales Spur and completed his work at that point shortly after 1 p.m. After consulting his time-table he decided that train No. 55 probably would not reach Pomfret until 1.40 p.m. and that he would have ample time in which to return as far as Westfield. The motor car was placed on the main track at 1.22p.m. and he started toward Westfield at 1.26 p.m. At this time the eastbound distant signal near the spur-track switch was in the caution or normal position, indicating that there was no train between the signal and the station at Westfield, but by the time his motor car was about two-thirds of the way across bridge 39 he saw the distant signal go to the stop position,

which indicated to him that train No. 55 had passed Westfield station. He said he realized that he would have to get the motor car off the track immediately and it was at about this time that he saw the train rounding the curve under Portage Street bridge, about 1,000 feet east of bridge 39. The motor car was brought to a stop just east of bridge 39 and he and Laborer Greco had succeeded only in lifting the rear wheels off the track before they had to get out of the way in order to avoid being struck by the approaching train. Car Repairman Hoyt also said that Engineman Butler leaned out of the cab window, motioned him to get out of the way, and sounded two blasts on the whistle. He estimated the speed of the train to have been about 40 miles per hour, and said he did not know whether the brakes were applied by the engineman prior to the occurrence of the accident; he did not notice any unusual motion of the engine as it passed him. After the train had stopped he proceeded to the point where the engine was lying and found the left front wheel of the motor car between the right brake adjusting nut bolt and the forward driving wheel. Car Repairman Hoyt further stated that at Gales Spur there was no means of communicating with an operator or dispatcher in order to obtain information concerning approaching trains, and that he had never been furnished with a portable telephone for that purpose. The statements of Laborer Greco brought out no additional facts of importance.

Conductor Johnson, of train No. 55, stated that his train passed Westfield at 1.32 p. m. and that the accident occurred at about 1.33 p. m., at which time he estimated the speed to have been about 45 miles an hour. He said that the air brakes were not applied in emergency but that after the motor car was struck Engineman Butler made an ordinary air-brake application and then released the brakes. The statements of Brakeman Tyger and Flagman Pearson were similar to those of Conductor Johnson. All three of these employees were of the opinion that the pony truck of the engine was derailed at the time the motor car was struck, saying that examination of the track after the accident disclosed that there were marks on the ties on the south side of the north rail, and that bolts had been sheared off, apparently caused by a wheel. Conductor Johnson, however, could not account for the absence of wheel marks on the south side of the south rail. He also said that he saw a motor car wheel wedged behind one of the cylinders of the derailed engine, but he did not think any of the parts of the motor car were responsible for the marks on the ties. Flagman Pearson said that the marks were about  $1\frac{1}{2}$  inches wide, quite deep and somewhat rounded in their appearance.

Road Foreman of Engines Rossiter stated that examination of the derailed engine disclosed a wheel of the motor car to be wedged in front of the right front driving wheel; the

brake rigging was intact and the wheels and flanges were in good condition. He also said that the throttle was closed, with the brake valve in the full release position. His examination of the track disclosed no wheel marks, but there was a mark about  $1\frac{1}{4}$  and  $1\frac{1}{2}$  inches wide, somewhat rounded in shape, on the south side of the north rail, while on the south side of the south rail there were marks apparently made by some part of the motor car having been dragging on the ties; there were hardly any marks after the bridge had been crossed.

Track Supervisor Case stated that his examination of the track, starting at the point where the motor car was struck and proceeding westward, disclosed that 21 bolts were sheared off on the south side of the north rail and about 4 or 5 bolts were entirely cut off on the south side of the south rail. There were marks between the north guard rail and the main track and several spikes were driven down below the bases of the rails. Track Supervisor Case at first was of the opinion that the pony truck of the engine was derailed on striking the motor car but after further examination of the track he concluded that one of the jacks loaded on the motor car evidently got under the engine and was dragged across the bridge, shearing the bolts, marking the ties and driving down the spikes, and it was his idea that the marks on the south side of the south rail were the ones which were made by the motor-car wheels dragging under the engine. He thought that when the engine reached Gales Spur switch the jack struck the wing rail of the frog, bending the wing rail and tearing out the lead rails, precipitating the derailment.

Subsequent to the accident the Commission's inspectors examined the track and the derailed engine and wreckage. The marks on the ties and the sheared bolts were found to be practically as described by Track Supervisor Case. There was no indication of derailed wheels until the frog of the switch at Gales Spur was reached. One of the wheels of the motor car was found on the south side of the track at a point about 125 feet west of the switch and about 200 feet east of where the engine came to rest. There was an indentation on this wheel, apparently made by an engine wheel, and inspection of the engine disclosed that there was an indentation on the flange of the south wheel of the pony truck. The engine wheels and flanges were in good condition and the brake rigging was intact.

#### Conclusions

This accident was caused by train No. 55 colliding with a motor car, some of the wreckage of the motor car, or some of the tools, lodging under the engine and resulting in the subsequent derailment of the train.

The car repairman in charge of the motor car estimated that train No. 55 would not reach Porfret until 1.40 p. m., thus making up about 15 minutes in lost time, when as a matter of fact it made up about 30 minutes in time, and he was not aware of the approach of the train until it was too late to enable him, with the assistance of his helper, to remove the motor car from the track. Apparently the wreckage of the motor car, and possibly some of the tools, became wedged under the engine and dragged along the track, marking the ties, shearing off bolts and driving down spikes, until the engine reached the frog of the switch leading to Gales Spur, a distance of 2,234 feet. At this point the wing rail of the frog was struck and bent, and the lead rails torn out, causing the derailment of the train. It further appeared that the engineer did not attempt to bring the train to a stop as soon as possible; had he applied the air brakes in emergency as soon as he saw the motor car, it is probable he could have stopped the train before it reached Gales Spur switch.

In this particular case the car repairman had no way of obtaining information concerning approaching trains before he departed from the point at which he had been working. Had he been equipped with a portable telephone it would have been possible for him to have ascertained the fact that train No. 55 was making up more time than he anticipated and the accident could have been averted. The situation in which this car repairman found himself, however, working at a point where he was entirely without means of communication, is by no means uncommon; employees in other departments, such as carpenters, bridge men, signal maintainers, etc., are apt to be placed in the same position, under circumstances which require them literally to "take a chance" until they can reach an open office and obtain a lineup on approaching trains. It has been pointed out previously that the growing use of gasoline motor cars in the various departments of a railroad is introducing an additional element of danger to the safe operation of trains, and steps should be taken toward providing more adequate protection for their movements.

The employees involved were experienced men; at the time of the accident the crew of train No. 55 had been on duty about 3 hours, after from 14½ to 21 hours off duty.

Respectfully submitted,

W. P. BORLAND,

Director.