

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON
THE ATLANTA, BIRMINGHAM & ATLANTIC RAILWAY NEAR
WESTOVER, ALA., ON NOVEMBER 26, 1925.

January 28, 1926.

To the Commission:

On November 26, 1925, there was a derailment of a freight train on the Atlanta, Birmingham & Atlantic Railway near Westover, Ala., resulting in the death of one employee and injury of two employees.

Location and method of operation

This accident occurred on that part of the Birmingham Division which extends between Birmingham and Lineville, Ala., a distance of 104.2 miles, and 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 the entrance to a cut on a 5° curve, at a point 5,465 feet east of the station at Westover; approaching this point from the east there is a 3° curve to the right 1,306 feet in length and then 1,034 feet of tangent, followed by a 5° curve to the left 1,720 feet in length, the accident occurring on this curve at a point 570 feet from its eastern end. The grade for about 4,000 feet is 0.4 per cent ascending for west-bound trains.

The track is laid with 80-pound rails, 33 feet in length, with about 18 to 20 pine and cypress ties to the rail-length, single-spiked, tie-plated on curves, and ballasted with from 8 to 12 inches of slag and cinder ballast. The track was poorly maintained. The only speed restrictions in effect were a time-table restriction of 40 miles an hour for passenger trains, 30 miles an hour for mixed and fast freight trains, and 25 miles an hour for all other trains.

The weather was cloudy at the time of the accident, which occurred at 3 p.m.

Description

Westbound local freight train No. 53, consisting of 14 cars and a caboose, hauled by engine 105, was in charge of Conductor Coleman and Engineman Gould. It left Lineville, its eastern terminus, at 8.55 a. m., 1 hour and

25 minutes late, departed from Arkwright, 9.2 miles east of Westover and the last open office, at 2.20 p. m., according to the train sheet, 3 hours and 20 minutes late, and was derailed at a point approximately 1 mile east of Westover while traveling at a speed estimated to have been between 20 and 25 miles an hour.

The engine and tender and the first six cars were derailed, the engine and tender coming to rest on their sides to the left of the track on the inside of the curve; the third car turned over to the right while the other derailed cars remained upright on the roadbed. The employee killed was a brakeman who was riding on the third car.

Summary of evidence

Engineman Gould stated that just prior to coming on to the curve on which the accident occurred he eased off on the throttle to prevent exceeding a speed of 25 miles an hour. As his train was rounding the curve he heard a noise under the tender which sounded as if a brake beam were down and upon looking around he saw his fireman in the gangway about to leave the engine; he immediately applied the air brakes in emergency and on looking back he saw the tender and first car leaving the rails. It was about at this time that Engineman Gould jumped, and he said the speed had been so reduced that he was able to keep his feet when landing on the ground. Engineman Gould was of the opinion that the tender was the first to leave the rails and that the action of the tender trucks in turning to one side caused the left or inside rail of the curve to turn over under the engine, resulting in the engine turning over on the inside of the curve. He said he inspected the engine and tender before leaving Lineville on the morning of the accident and found nothing wrong, and after the accident he again looked over the engine but was unable to find anything which in his opinion would have caused or contributed to the derailment. Engineman Gould was positive that his train had not exceeded a speed of 25 miles an hour at any time during the trip, due to the fact that Conductor Coleman had cautioned him two days previously not to exceed that speed as he, Coleman, had received a letter from Superintendent Huddleson relative to the speed of his train.

Conductor Coleman was riding in the engine as his train approached the point of accident and said that at or near a road crossing just east of the point of accident he felt the engine lurch to the left as though hitting a low spot in the track, and as the engine did not seem to right itself he became alarmed, went out on the running board and jumped just before the engine turned over. He made an inspection of the equipment and track shortly afterward but found nothing which would have caused the accident. The statements of Flagman

Hearn and of brakeman Penn and Hannah brought out no additional facts and added nothing of importance to the evidence.

Section Foreman Robinson, in charge of the track on which this accident occurred, said that about two weeks previously he had straightened up the track generally in the vicinity of the point of accident, spiking and gauging the curve, while about a month previously he had put in some new ties at or near the road crossing just east of the point of accident. He said it was not possible to keep the track properly gauged on account of the number of old and decayed ties, about 50 per cent, which would hold the spikes only temporarily, and that on account of the shortage of labor he was unable to give the track the attention it needed to keep it in first-class condition, his work consisting mainly of doing what he could under the circumstances and in remedying the worst and most dangerous portions of the track. He thought the track in the vicinity of the point of accident was fairly safe, but not for a speed greater than 25 miles an hour.

Roadmaster Lowery inspected the track after the occurrence of the accident and said the only defect he could find was a low center just east of the point of accident; in the course of his examination he found some marks on the rails on the inside of the curve but was unable to determine whether these marks were due to the derailment or were made during the re-railing of the equipment after the accident. Owing to the short time that he had been roadmaster on this district he had not had time to make a thorough inspection of all of the track, but said the general condition was fair, although he did not consider the track entirely safe for freight trains at a greater speed than 25 miles an hour.

The first mark of derailment was a flange mark on the outside rail of the curve, at a point 570 feet from the eastern end of the curve; the flange mark extended along the top of the rail a distance of about 11 feet to where it dropped to the ties on the outside of the rail, and then it ran an additional distance of 16 feet to where it dropped off the ends of the ties; the track westward from this point was badly torn up as a result of the derailment, the rails on the inside of the curve being turned over and otherwise torn out of place and buried in the dirt and wreckage.

Cross levels and measurements of the gauge taken after the accident showed that the elevation was fairly uniform. At a point 82½ feet east of the first wheel mark on the rail, however, there was a swinging joint where there was ¾ inch variation within a distance of 16½ feet. The gauge from the point of the curve to the point where the first mark of derailment appeared varied from 1/2 inch tight to 1 1/8 inches open; at the

joint near which the first wheel was scuffed the gauge was standard, at the center of the rail east of this joint, 16.5 feet distant, the gauge was 3/4 inch open, while at the joint 33 feet distant the gauge was 1/2 inch tight. There were several old ties under each rail, and many of the spikes were loose, or away from the base of the rail.

Conclusions

This accident is believed to have been due to poor track conditions.

At the time the Commission's inspectors reached the scene of the accident the track had been cleared and traffic resumed, and it was impossible to determine from the evidence the exact manner in which the equipment was derailed, although it seems quite possible that it was a tender derailment. Examination of the engine and tender failed to disclose anything which could have contributed to the occurrence of the accident, but examination of the track showed it to be very poorly maintained. The elevation was fairly uniform, but there were wide variations in gauge, and it seems probable that these variations, coupled with the very poor condition of the ties and spiking, as well as swinging joints, permitted the equipment to sway from one side to the other until finally the track, as a result of its weakened condition, gave way under the strain, resulting in the derailment of the train.

In connection with the investigation of another derailment which occurred on the same division of this railway on October 3, 1925, similar track conditions were found to exist and in the conclusions of that report covering that investigation the following statement was made.

"The evidence indicated that there were not enough section men to maintain the track properly, and that about all that could be done with the force available was to make repairs to the worst places and then do the best they could with the rest of the track. Such a situation is not conducive to the safe movement of trains, and measures toward eliminating this condition should be taken as quickly as possible."

The occurrence of the accident here under investigation simply emphasizes what was previously said. The continued existence of such conditions makes it imperative that the management of this railway take steps toward providing at least a reasonable margin of safety for the operation of trains at ordinary speeds.

Respectfully submitted,

W. P. Borland
Director.