

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD AT
PERRYMAN, MD., ON OCTOBER 18, 1932.

December 21, 1932.

To the Commission:

On October 18, 1932, there was a derailment of a freight train on the Pennsylvania Railroad at Perryman, Md., which resulted in the death of 1 employee, and the injury of 1 employee and 1 trespasser.

Location and method of operation

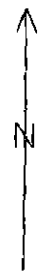
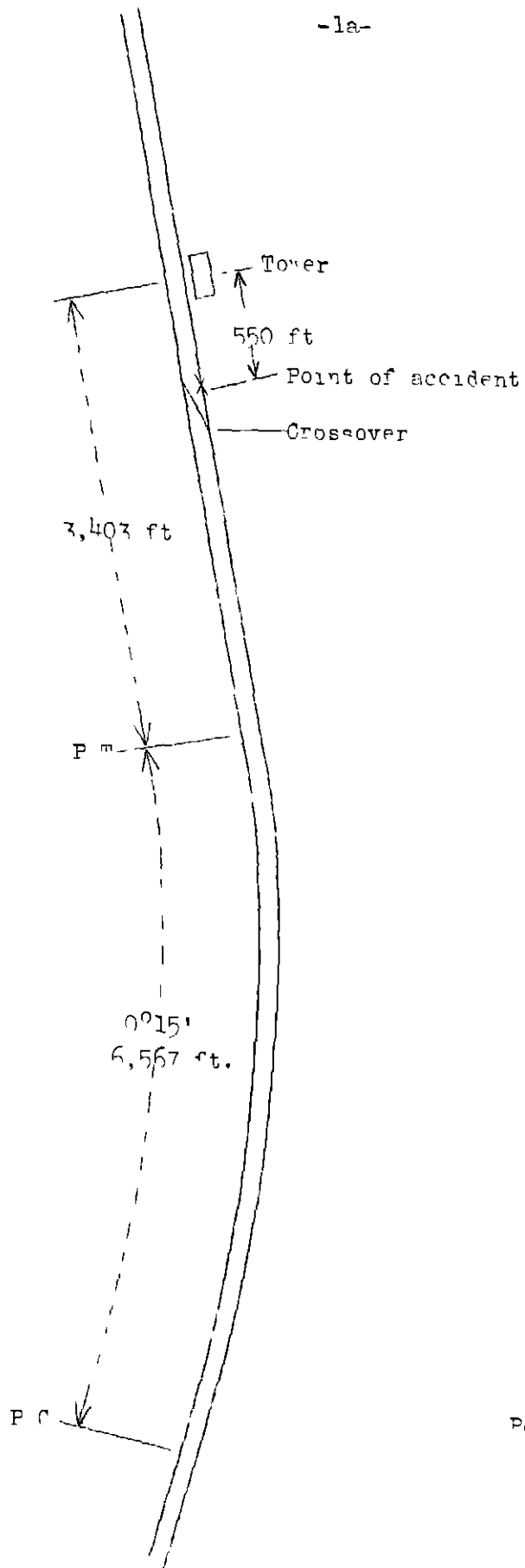
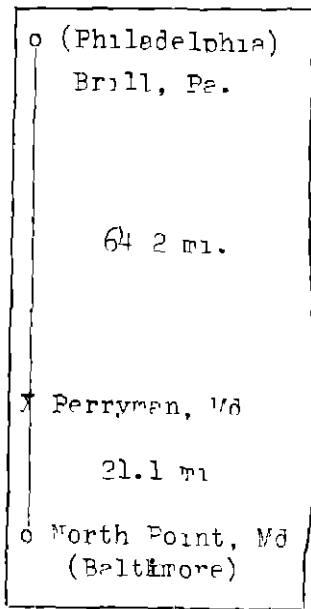
This accident occurred on that part of the Maryland Division extending between North Point, near Baltimore, Md., and Brill, near Philadelphia, Pa., a distance of 85.3 miles; in the vicinity of the point of accident this is a double-track line over which trains are operated by time-table, train orders, and an automatic block and cab-signal system. The accident occurred at a point approximately 550 feet south of Perryman interlocking tower; approaching this point from the south, there is a 0° 15' curve to the left 6,567 feet in length, followed by tangent track to Perryman tower, a distance of 3,403 feet, and for some distance beyond that point, the accident occurring on this tangent at a point about 2,850 feet from its southern end. The grade at the point of accident is 0.09 per cent ascending for northbound trains.

The track is laid with 130-pound rails, 39 feet in length, with an average of 21 ties to the rail-length, fully tie-plated, single-spiked, and is ballasted with stone to a depth of about 18 inches; the track is well maintained. Perryman tower consisted of a two-story frame structure, located 10 feet east of the northbound track.

The weather was cloudy and a dense fog prevailed at the time of the accident, which occurred about 8.01 a.m.

Description

Northbound freight train MD-6 consisted of 51 cars and a caboose, hauled by engine 3710, and was in charge of Conductor Patmore and Engineer Patterson. The train passed North Point, 21.1 miles south of Perryman, at 7.32 a.m., and was derailed at Perryman while traveling at a speed estimated to have been between 40 and 45 miles per hour.



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The engine and first 8 cars stopped with the head end of the engine 1,485 feet north of the tower; the rear truck of the eighth car and the following 16 cars were derailed and stopped in various positions within a space of 275 feet near the location of the tower. Some of the cars were destroyed, others badly damaged, the tower was demolished and the interlocking plant was badly damaged. The employee killed was a signalman and the employee injured was a block operator, both of whom were in the tower at the time of the accident.

Summary of evidence

Engineman Patterson stated that while he had looked back occasionally he could not see the entire length of the train, due to the fog, and his first indication of anything wrong was when the air brakes applied and the cab signal indication changed, he immediately moved the brake-valve to emergency position but it had no further effect, as the train line was then depleted. He estimated the speed of the train at the time of the accident at 40 or 45 miles per hour. Foreman Miller looked back along the train as it rounded curves, being able to see about 20 car-lengths, but noticed nothing irregular, while Head Brakeman McGlynn, who was riding in the brakemen's cabin on the tender, said he was able to see over the entire length of the train as it was rounding a curve about 6 miles south of the point of accident; he saw no fire flying at any time and there appeared to be nothing unusual until he observed the cars rocking more than is ordinarily the case, followed by a tank car appearing to rise in the air.

Conductor Patmore was riding in the caboose and as the train passed Bengies, 14 miles south of Perryman, he looked out and at that time the train appeared to be in good condition. He noticed no change in speed between North Point and the point of accident, it being about 40 or 45 miles per hour. After the accident he examined the equipment and found that the rear truck of the eighth car, which was derailed, was partly demolished. Rear Brakeman Simpson thought the train had been stopped by a burst air hose, so he immediately went back to flag, on his way he examined the track but found nothing out of the ordinary.

Operator Leight, on duty at Perryman tower, had the route properly lined and was watching the train as it approached, but there was no indication of anything wrong, and shortly after the head end of the train passed, the tower began to rock and then collapsed.

Car Inspector Graff, on duty at Bow View, Baltimore, at the time train MD-6 picked up cars at that point, said he inspected these cars while they were being switched. Among them were several tank cars equipped with arch-bar trucks and he paid particular attention to these trucks but found no defects, the only repairs required being the placing of a better pin in a brake hanger. He

also made a terminal test and a road test of the brakes before the train departed.

Car Inspector Reynolds, on duty at Perryville, 10 miles north of Perryman, at the time of the accident, said that as soon as he learned of its occurrence he went to the scene, arriving there about 9 a.m. Upon making an examination of the wreckage he found the rear truck of the eighth car damaged and with one pair of wheels off the track. The bottom arch bar on the left side was broken where it curved over the journal box; one column bolt was broken on the same side and the brake beams were also broken. The broken arch bar showed an old defect of about 30 per cent, but the column bolt appeared to indicate a new break. His examination of the other derailed equipment did not indicate any other broken parts except those which probably occurred during the course of the derailment.

Car Foreman White arrived at the scene about 9.30 a.m., and observed the broken arch bar under UTLX tank car 31871, the eighth car in the train, and found marks on the rail just north of the crossover switch, and there was evidence of something having disturbed the ballast at a highway crossing some distance south of the point of accident. Between that point and Bush River, 2.8 miles south of Perryman, he found part of a spring similar to those used in the truck of the tank car, and at a highway at Bush River the planks were grazed and a rail burnished. These marks appeared on the outside of the rail on the west or left side of the track, the same side of the track as that on which the broken arch bar was located, and it was his opinion that the damaged truck caused the accident. He described the break as showing an old defect of about 25 per cent of the total area, and he did not think it could have been seen by ordinary inspection, as the truck had been painted on October 6 and the car had not made a trip since that date until the day of the accident.

Crossing Watchman Williams, who was standing along the west side of the track at Bush River Neck highway crossing, 3,879 feet south of Perryman, at the time train ID-6 passed that point, said that although he did not see anything dragging or any sparks flying, he noticed ballast flying, and after the train passed he observed a mark on the crossing 6 or 8 inches from the outside of the west rail.

Section Foreman Wirsing had inspected the track on October 17 and found it in good condition. He arrived at the scene of accident between 8.20 and 8.50 a.m., and examined the track north of a facing-point crossover switch located approximately 550 feet south of the tower. The switch was intact and in good condition, but north of this point the rails were pulled away from the spikes and the track was out of line about 12 inches for a distance of approximately 150 feet to where it was torn up. He instructed a trackwalker to inspect the track south of the crossover and the trackwalker reported to him that there was nothing wrong.

An inspection of the track made by the Commission's inspectors subsequent to the accident revealed that the track was in good condition and nothing was found that could have contributed to the cause of the accident. A mark was found in the ballast at the Bush River Neck highway crossing which was 6 inches from the outside of the west rail; it was about 1 inch deep and extended entirely over the crossing. The next mark was on the west rail of the crossover south of the tower and conformed in position to the mark at the highway crossing, the final derailment occurring just north of this point. Examination of the rear truck of UTLX tank car 31871 disclosed that the bottom arch bar on the left side of the truck was broken at the bend in front of the journal box and the top arch bar was bent downward. The forward column bolt was broken and the truck, while it remained in its position under the car, was in a badly-damaged condition. An inspection of the broken arch bar showed an old defect which began at the lower outside corner near the bend at the journal box and extended 1 5/8 inches inward and 1 inch upward. Another old defect appeared near the center end on the bottom side of the arch bar, this defect extending 2 1/2 inches across the bar and being 3/8 inch deep.

Conclusions

This accident apparently was caused by the failure of an arch-bar truck under the eighth car in the train.

According to the statements of the members of the train crew, they had no knowledge of anything wrong until the train was derailed. An inspection of the track disclosed that something had been dragging, the first indication being a mark on a highway crossing on the outside of the left or west rail approximately 3 miles south of the point of accident. Another mark was found on the outside of the west rail of the crossover a short distance south of Perryman tower, followed by a mark on top of the main rail and then flange marks appeared on the ties. An examination of the rear truck of UTLX tank car 31871, the eighth car in the train, showed it to be in a badly-damaged condition. The lower arch bar on the left side was broken and the top bar was bent, a column bolt and the brake beams were also broken. Inspection of the broken arch bar revealed that it had been cracked for some time at the point of failure, and painted over subsequent to that time, thus preventing its detection when inspected by car inspectors.

Respectfully submitted,

W. P. BORLAND,

Director.