

1904

INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY CONCERNING AN
ACCIDENT ON THE CHESTNUT RIDGE RAILWAY AT DELAWARE
AVENUE, PA., ON MARCH 23, 1934.

May 29, 1934.

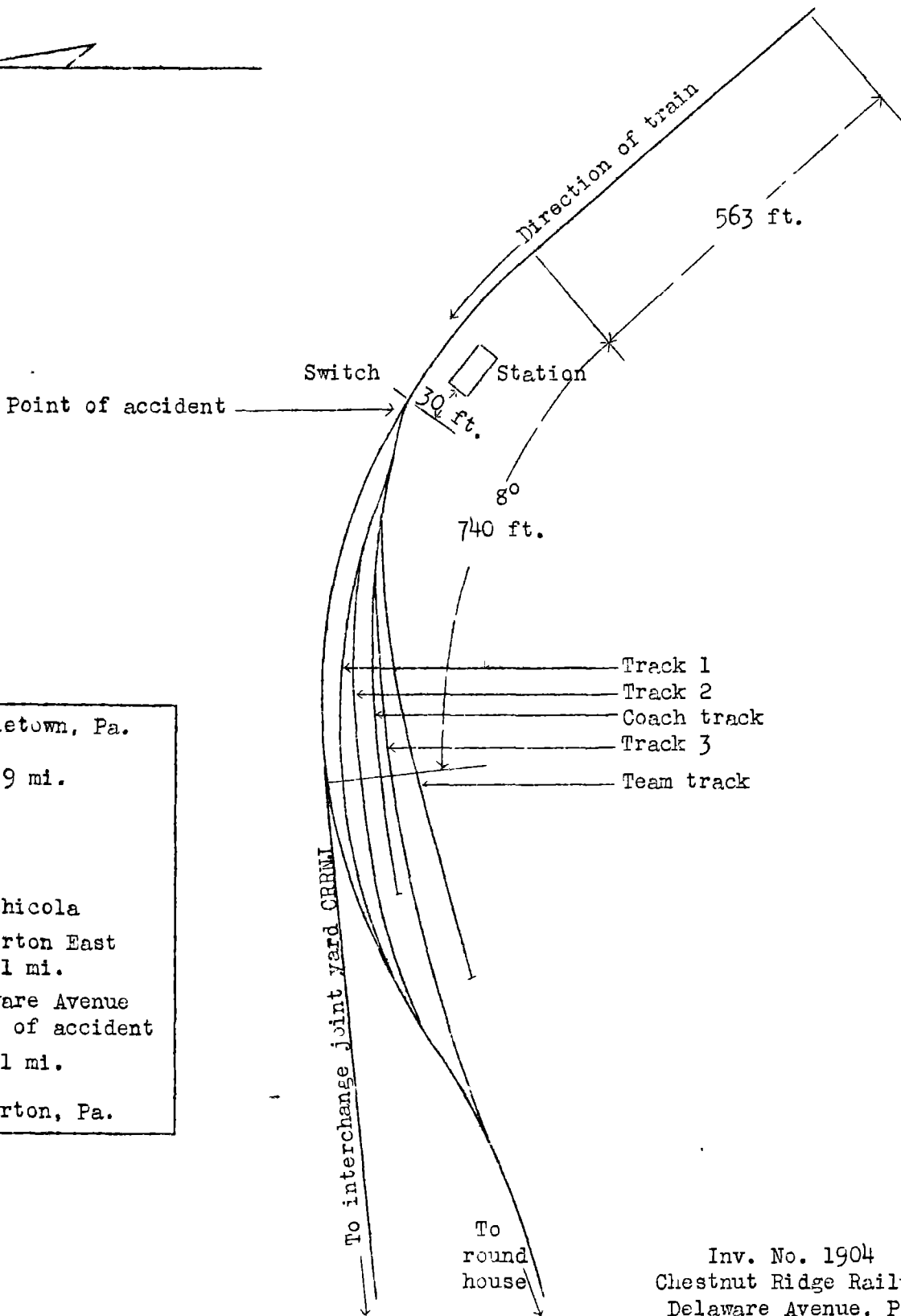
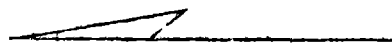
To the Commission:

On March 23, 1934, there was a derailment of a freight train on the Chestnut Ridge Railway at Delaware Avenue, Pa., which resulted in the death of one employee.

Location and method of operation

This is a short-line railway extending between Palmerton and Kunkletown, Pa., a distance of 11 miles, and is a single-track line over which a Mack motor bus and a switch engine are operated by time table and train orders; the switch engine is required to clear the time-table rights of the motor bus. The work performed by the switch engine consists of handling local and interline business between the interchanges with the Central Railroad of New Jersey, the Lehigh and New England Railroad, and the plants of the New Jersey Zinc Company and other industries in the vicinity. The Delaware Avenue yard is located on the south side of the main track and consists of the following tracks, from north to south: track 1, track 2, coach track, track 3, and a team track. The accident occurred at the switch leading to these tracks, located 30 feet west of the station. Approaching this switch from the east, the track is tangent for a distance of 523 feet, followed by an 8° curve to the left 740 feet in length, the accident occurring on this curve at a point approximately 213 feet from its eastern end.

The switch involved is a facing-point switch for west-bound trains and leads off the main track to the left. The switch stand, of the intermediate type, is located on the right side of the track, and is equipped with a disc and switch lamp. The normal position of this switch is for the main track.



• Kunkletown, Pa.	
	9 mi.
• Aquashicola	
• Palmerton East	1 mi.
• Delaware Avenue	
• Point of accident	1 mi.
• Palmerton, Pa.	

Inv. No. 1904
 Chestnut Ridge Railway
 Delaware Avenue, Pa.
 March 26, 1934

The track is laid with 80-pound rails, 33 feet in length, with 18 or 19 treated oak ties to the rail length, tieplated, with anti-creepers and braces, and is double-spiked on curves. The track is ballasted with cinders to a depth of 18 inches and is well maintained.

The weather was clear at the time of the accident, which occurred about 5:35 a.m.

Description

Switch engine 4 and a caboose, in charge of Conductor Reppert and Engineer Balliet, departed east-bound from the round house at West Plant, located west of Delaware Avenue, at 4:46 a.m., and performed work at Palmerton East and Aquashicola, approximately 1 mile east of Delaware Avenue. The train then consisting of engine 4, seven empty box cars and a caboose, departed from Aquashicola, west-bound, in a back-up movement, with the intention of proceeding to the Central Railroad of New Jersey joint yard, and on reaching the east switch of the yard at Delaware Avenue the caboose was derailed while traveling at a speed estimated to have been between 5 and 10 miles per hour.

The caboose stopped on its side, badly damaged, across the main track about 226 feet beyond the switch; the cars were not derailed but headed in on track 2. The employee killed was the conductor.

Summary of evidence

Brakeman Bowman, who was riding in the west or lead end of the caboose, stated that on passing the Delaware Avenue Station at a speed of about 3 miles per hour the caboose struck something hard and he was knocked down; when he got to his feet he tried to open the door, but by that time the caboose was off the track and he was unable to get off until after it stopped, about five car lengths beyond the switch. They had passed over this switch in the opposite direction about 30 minutes previously and at that time noticed no unusual condition of the track. The caboose is equipped with a conductor's emergency valve, with a back-up signal and tail hose at each end, and ordinarily the air is cut through to the caboose, but he did not know whether it was cut through on this occasion although it was cut in on the cars.

Brakeman Shelly stated that the air was cut in on the caboose when they left the round house but he was unable to state positively whether he cut in the air on the caboose after the switching had been done. They picked up the conductor at Palmerton East, where he had remained to handle a switch, and Brakeman Shelly

and the conductor were riding in the east end of the caboose, the brakeman's first intimation of anything wrong being when the car reached the switch point and he felt from the motion of the caboose that it was about to be derailed. He followed the conductor out on the east platform but made no attempt to open the conductor's valve as he wanted to get off; he thought the speed of the train at the time of the accident was about 8 or 10 miles per hour. After the accident Brakeman Shelly saw the switch lock lying on the head block tie and the switch handle free, but he could not tell how far the points were open as a car was standing on the switch. Brakeman Shelly further stated that he had previously found this switch unlocked. Instructions had been issued by the former superintendent that all main-line switches were to be kept locked and that the air brakes must be cut in on cabooses at all times.

Engineman Balliet stated that in making the back-up movement he was looking back constantly, but on starting around the curve on which the accident occurred his view of the rear of his train was obscured by the station building. On reaching a point where he could see, he noticed that the caboose was missing and immediately brought the train to a stop, and as he got off the engine Brakeman Shelly came up and told him that the caboose had been derailed. He estimated the speed of his train to have been about 5 or 6 miles per hour. The brake-pipe pressure was 70 pounds, and main reservoir pressure 90 pounds; the air was coupled in the train but the brakes did not apply when the caboose was derailed. The statements of Fireman Craig brought out nothing additional of importance.

Section Foreman Frable stated that the first mark of derailment on the north rail was 16 feet west of the switch point while on the south rail it was 13 feet from the switch point. The caboose had tipped over at a point about 150 feet beyond and finally stopped 60 feet beyond that point. The track was in good condition and the only work necessary at the switch during the winter had been the tightening of bolts, while after the accident no changes were necessary. Section Foreman Frable stated that he had frequently found this switch unlocked and also other main-track switches.

Auditor and General Freight and Passenger Agent Martin stated that the work is to a great extent of a uniform nature, following a set schedule from day to day. Train crews are familiar with the type of work to be done and only one switch crew is at work at one time. He had never issued instructions personally that the air should be cut in on the caboose on all movements, but

such instructions had been issued previous to the time he entered the service of this company in 1951 and he had never abrogated or modified these instructions. When riding with these crews he had always found the air properly coupled up in the caboose.

Motorman Fritzingler, of the motor bus, stated that he arrived at Delaware Avenue soon after the accident but did not observe the switch lamp at that time. When attending to the switch lamps he had occasionally found main-line switches unlocked.

Conductor Smith and Brakeman Borger, members of the crew working on the day before the accident, stated they used the switch in the early part of the afternoon in the course of their work and as far as they knew they closed and locked it. Several hours later they made a trailing movement over it and their last movement through this switch was in a back-up movement on their way to the round house; they were riding on the platform of the caboose at that time and noticed nothing wrong.

Inspection of the track by the Commission's inspectors disclosed marks that indicated the wheels of the caboose had straddled the switch points.

Conclusions

This accident was caused by a cocked or partly-opened switch.

After the accident the switch was found cocked, with the lock lying on the head block tie, and it was apparent that at the time the caboose encountered the switch, its cocked or partly-opened position caused the caboose to straddle the points and to become derailed. The last time this switch had been used was on the previous day, by another switch crew, and they were unable to say whether or not it had been locked properly; the switch also had been passed over in a trailing movement by engine 4 a short time prior to the accident, nothing unusual being noticed at that time.

The evidence indicated that this switch and also other switches are found occasionally to be unlocked, while in this particular case it was evident that the air brakes were not cut in on the caboose and also that none of the employees in the

caboose was maintaining a proper lookout so as to be prepared to stop the train in case the track was obstructed. These matters are of importance if trains are to be operated in safety, even on a railway as small as the one involved in this case, and the conditions disclosed by this investigation strongly suggest the need for increased supervision of operating practices.

Respectfully submitted,

W. J. PATTERSON

Director.