

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
PENNSYLVANIA RAILROAD AT KINGSLEY, MICH., ON FEBRU-
ARY 10, 1924.

April 5, 1924.

To the Commission:

On February 10, 1924, there was a derailment of a snow plow on the Pennsylvania Railroad at Kingsley, Mich., resulting in the death of two employees.

Location and method of operation.

This accident occurred on the Traverse City Branch of the Mackinaw Division, extending between Walton Junction and Traverse City, Mich., a distance of 25.97 miles; this is a single-track line over which trains are operated by timetable, train orders, and a manual block-signal system. The accident occurred opposite the station at Kingsley; approaching this point from the south the track is tangent for 823 feet, followed by a compound curve to the right 1,300 feet in length, with a maximum curvature of 3° , the accident occurring on this curve at a point 265 feet from its northern end, where the curvature is at its maximum. The grade is descending for northbound trains, varying from 1.01 to 1.30 per cent, being at its maximum at the point of derailment. The track is laid with 70-pound rails, 33 feet in length, with 18 hardwood ties to the rail-length, and ballasted with gravel and clay; tie-plates are used on curves. The gauge, surface, and alinement were good. The weather was clear at the time of the accident, which occurred at about 9.55 p.m.

Description.

Snow plow extra 9616, en route from Mackinaw City to Traverse City, consisted of snow plow 994485, engine 9616, and a caboose, in the order named, and was in charge of Conductor Torongo and Engineman Neal. It left Walton Junction, northbound, at 9.25 p.m., and on reaching Kingsley, 9.29 miles beyond, was derailed opposite the station while traveling at a speed estimated to have been between 15 and 20 miles an hour.

The snow plow was derailed to the left and completely demolished, while the engine was only partially derailed and remained upright, slightly damaged. The employees killed were two section men, who were operating the wings of the plow.

Summary of evidence.

Members of the crew stated their first knowledge of anything wrong was when the accident occurred. Engineman Neal said he was using the independent engine brake coming down the hill, and on feeling the engine quiver he immediately applied the air brakes in emergency, after which the men on the plow sounded a stop signal. Immediately after the accident he examined the track for some distance south of the station, but found nothing to indicate that the plow was derailed at the highway crossing located about 400 feet south of the station, the marks on the track plainly showing that the derailment occurred opposite the station. Engineman Neal also said that the air brakes had been tested and worked properly en route, but sometime after the accident he found that the left driver brake sleeve was broken off in the piston and the piston hanging out of the sleeve; he did not know when this occurred, but said it had no effect on the braking power. With the exception of the damage done by the snow plow there was no other defect about the engine. The statements of Conductor Torongo who was riding in the caboose, and Fireman Peterson practically corroborated those of Engineman Neal, although the fireman's statement indicated that the emergency application was made after receiving a stop signal from the men in the plow. Conductor Torongo said he examined the trucks of the plow but could find nothing wrong with them, and was of the impression that the snow and ice was so high on the outside of the west rail that it raised the front of the plow, allowing the wheels to climb the rail. Brakemen Bodary and Shaffer were riding in the cupola of the snow plow at the time of the accident. Brakeman Bodary felt the plow derail on the left side and stated that when he realized it was derailed he sounded the whistle, while Brakeman Shaffer stated that he made an attempt to apply the air brakes, but that the jar knocked him off his seat before he could accomplish this.

The snow plow was overhauled on November 1, 1923, and was last inspected at Mackinaw City before starting on this trip. The wings of the plow are controlled by hand operation, they were not in use at the time of the accident. Trains were being operated daily in the vicinity of the point of accident, and the track had been plowed frequently during the season.

Measurements made after the derailment showed that there was a bank of snow 32 inches west of the west rail, about 3 feet in height, with its east wall perpendicular, nothing being made this way from being plowed on prior occasions. Just outside the west rail the snow was level with the top of the rail, rising to about 4 inches at the bank of snow, too high for the left wing and the point of the snow plow.

Conclusions.

This accident was caused by ice and snow packed on the west side of the track raising the left wing and nose of the snow plow, allowing the wheels to mount the west rail.

All of the employees involved were experienced men. At the time of the accident they had been on duty less than 9 hours, prior to which they had been off duty 8 hours or more.

Respectfully submitted,

W. P. BORLAND,

Director.