## INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUPEAU OF SATETY IN RE INVES-TIGNION OF AN ACCIDENT WHICH OCCURRED ON THE MORTH-EAST PENTSYLVANIA RAILROAD, READING COMPANY, NEAR WILLOW GROVE, PA., ON JULY 27, 1924.

August 12, 1924.

To the Commission:

On July 27, 1924, a passenger train on the North-Bast Pennsylvania Railroad, Reading Company, struck an automobile and was derailed near Willow Grove, Pa., resulting in the death of one employee and four travelers on the highway, and the injury of three passengers, one employee, and three travelers on the highway.

Location and method of operation.

This accident occurred on that part of the North-East Pennsylvania Railroad, Reading Company, extending between Glenside and Ivyland, Pa., a distance of 9.6 miles, which is a single-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at Moreland Road, which crosses the main line and a siding almost at right angles at a point 1,125 feet south of Willow Grove station. The track is tangent for a considerable distance in either direction, more than 3,700 feet south of the crossing, thile the grade is 1.31 per cent descending northward from a point about 1,550 feet south of the crossing nearly to Willow Grove station.

Approaching the railroad from the dest on Moreland Road, the view of the track in both directions is obstructed until a vehicle reaches a point 8 or 10 feet from the siding which is on the west side of the main track. The grade on the highway is slightly ascending eastward. A crossing sign is located on the south side of the highway about 10 feet west of the tracks, reading "RAILROAD CROSSING. STOP, LOOK & LISTEN." The crossing is also protected by an automatic crossing bell, 10 inches in diameter, located on the north sile of the highway, on an iron mast about 15 feet in height. This bell rings when a train approaches the crossing, the control circuit operated by northbound trains beginning at a point 2,570 feet south of the crossing; the bell continues to ring until the train passes the crossing. The hamver strikes the bell at the rate of 15 strokes in 10 seconds, and the bell can be plainly heard in an automobile tith the entine running at a point 300 feet distant. The weather "as clear at the time of the accident, Thick occurred at about 4.52 p. m.

## Description.

Northbound passenger train No. 2323 consisted of engine 163, running backward and hauling two steel-underframe coaches, it was in charge of Conductor Slack and Engineman Manheimer. This train left Glenside, 4.2 miles from Willow Grove, at 4.40 pm., on time, and at Moreland Road crossing the rear end of the tender struck the automobile while traveling at a speed of about 15 miles an hour.

The automobile, a Chrysler sedan, weighing about 3,000 pounds, was proceeding eastward on Moreland Road. It passed an eastbound automobile, which was standing just test of the tracks valuing for the train to pass, crossed the siding, and proceeded upon the main track directly in front of the approaching train at a speed estimated to have been 25 or 50 miles an hour and had reached approximately the center of the track when it was struck by the tender of train No 2223.

The body of the automobile was demolished, and the entire train was derailed. The tender was thrown to the east of the main track, the distern being torn loose from the frame and coming to rest bottom up, while the engine came to rest on its right side, fouling the siding. The coaches remained practically upright. The persons killed were the engineman, and four of the seven occupants of the automobile.

## Summary of evidence.

Fireman Templin stated that he was ringing the engine bell approaching Moreland Road, and that the engineman several times sounded the whistle signal for the crossing. The engine is of the double-cab type, and he did not see the approaching automobile; the first intimation he had of anything wrong was when the air brakes were applied in emergency just before reaching the crossing; he then saw the radiator of the automobile appear on his side of the engine just as the accident occurred. He estimated the speed of the train to have been about 15 miles an hour at the time of the accident.

The testimony of Conductor Slack and Trainmen Brown and Pidcock practically corroborated that of Fireman Temp- 1 lin; Trainman Pidcock also stated that he neard the highway crossing bell ringing after the accident. Signal Supervisor Steele and Signal Maintainer Emerick made an inspection of the highway crossing bell shortly after the accident and found it to be in proper working order.

The testicony of a number of other mitnesses was to the effect that the entire bell was ringing, the whistle was sounded several times as the train approached Moreland Road, and that the highway crossing bell was ringing and could be heard a considerable distance from the crossing.

Just prior to the accident there were three easthound automobils approaching this crossing. The first one stopped about 50 feet a st of the crossing; as the crossing beal was rinting and the view of the track from that point was obscured, the driver inquired of a pecestrain whether a train was approaching, and was informed in the affirmative. The friver and another occupant of the third car, which was also a sedan, stated that the second car passed the standing car; one of them said he thought the second car was joing to pull ahead and ware until the train passed but instead its speed increased and it proceeded upon the crossing. They heard the engine thistle sounded, and both the engine bell and the crossing bell ringing.

Superintentent Echert state; that the highway crossing bell has been in service at this crossing for about 15 years, and there had never been a plagman stationed at this point. This is the only accident thich has occurred at this toint in a period of several years. About 22 train movements per day are made over this crossing. Superintendent Eckert further stated that some of the enginesused on this branch have pilots at each end, and it is not unusual for an engine to be operated backward on this line. The engine involved in this accident has not equipped with a pilot at the rear of the tender, but in his opinion the fact that the engine was running backward was not a material factor in this accident.

## Conclusions

This accident was caused by the friver of an automobile proceeding upon a railroad crossing at grade directly in front of an approaching passenger train.

The investigation established the facts that as the train approached this crossing the angine cell was being rung continuously, crossing also were repeatedly sounded on the engine thistle, and the highway crossing bell was runging; also, there was another automobile standing just west of the tracks waiting for the train to pass, these facts were sufficient to give the driver of the automobile involved proper marning of the approach of a train.

Instead of evercising due care before proceeding upon the crossing, the driver passed the standing automobile at a high rate of speed and proceeded upon the track directly in front of the approaching train. Owing to injuries sustained by their, no statement could be obtained from the owner of the automobile, or from other surviving occupants.

This accident again directs attention to the vital necessity for drivers of automobiles definitely to ascertain that the way is clear and safe before proceeding over a railroad crossing.

All of the employees involved were experienced men. At the time of the accident none of them had been on duty in violation of any of the provisions of the hours of service laws.

Respectfully submitted,

W. P. BORLAND.

Director.