INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BURFAU OF SAFFTY IN PE INVESTI-GATION OF AN ACCIDENT WHICH OCCUPRED ON THE MINNEAPOLIS, ST. PAUL & SAULTE STE. MARIE RAILWAY AT ANNANDALE, MINN., ON AUGUST 12, 1922.

September 11, 1922.

To the Commission:

On August 12, 1922, there was a collision between a passenger train and an automobile truck, followed by a side collision between the passenger train and a freight train, on the Minneapolis, St. Paul & Saulte Ste. Marie Railway at Annandale, Minn., which resulted in the death of 6 passengers, 2 employees and 2 other persons, and the injusy of 35 passengers and 4 employees.

Location and method of operation.

This accident occurred on the First Cistrict of the Minnesota Division, a single-track line 120 miles in length, extending between Minneapolis and Glenwood, Minn., over which trains are operated by time-table, train orders and manual block-signal system. The accident occurred at a road cossing, one -fourth of a mile east of Annandale station. which is 50.7 miles west of Minneapolis. For approximately 2 miles east of the station and for a considerable distance west of this point, the track is tangent. Approaching the road crossing from the east the grade for a distance of 4,000 feet descends at an average gradient of 0.7 per cent. A state highway approaches the railway from the south at a right angle until within about 300 feet, then makes an abrupt turn to the left and extends nearly parallel with the track for 300 feet, following which there is a 250-foot right-hand curve and a 100-foot tangent ending at the crossing. the abrupt left turn referred to, the view from the highway is largely obscured by trees and bushes on both sides, and on the tangent following this curve, the view of the corssing, as seen from the highway, is obscured for some distance by a large sign-board, 60 by 15 feet, which however is not so located as to obstruct the view from the highway of a train approaching the crossing from the east.

A passing track extends from a point west of the depot at Annandale to a point about one-fourth of a mile east of the depot, the east switch of this passing track being on the south side of the track and about 26 feet west of the center of the highway crossing. The weather was clear at the time of the accident, which occurred about 2.35 in the afternoon.

Description.

Fastbound freight train No. 2, engine 807, in charge of Conductor Bradley and Engineran Wallace, was at the time of the accident standing on the passing track near the east end.

Westbound passenger train No. 107, corsisting of engine 727, 1 mail and express car, 1 baggage car, 1 smoker, 2 coaches, 2 tourist cars, 1 diner and 5 sleepers, in the order named, was in charge of Conductor Matthews and Engineman Whitchurch. The equipment consisted of 4 steel, 3 wood, 2 steel and 4 wood cars, in the order named. This train, due to leave Camden Place, 47.6 miles east of Annandale, at 12.05 p.m., left more than 1 hour late. There were delays en route, and at the time of the accident the train was about 1 hour and 15 minutes late. Travelling at about 45 miles an hour, at the usual rate of speed, it struck an automobile oil-tank truck at the highway coossing referred to, hurling it against and overturning and damaging the switch-stand to such an extent as to permit the switch-points to open. The engine and tender and the first truck of the mail car passed over this switch on the main track, but the rear truck of the mail car and the following cars entered The train then separated between the mail and the siding. baggage cars, and the engine tender and mail car proceeded on the main track, with the rear truck of the mail car derailed, to a point about 800 feet west of the crossing where they came to a stop with the rear end of the mail car resting against a box car on the siding. The baggage car collided with the freight train and was practically demolished; it came to rest across both tracks and on top of the freight engine, which was overturned by the impact, the smoker lay across the passing track with one end down the bank on the south side of the track, the forward portion crushed in by one of the following coaches. This coach together with a following tourist car remained apright parallel with tracks but derailed. The other coach and tourist car lay to the north and nearly clear of both tracks, the tourist car being overturned. The six rear cars remained on the track undamaged. One box car in the freight train was destroyed and five others damaged. The two employees killed were the engineman of train No. 2 and the baggageman of train No. 107, the two other persons killed were the driver of the truck and another man riding on the truck.

Summary of evidence.

Brakeman Rahm of train No. 2 stated that after doing some work at the Annandale station, train No. 2 was roved down to the east end of the passing track. It was customary for the brakeman to get out on the crossing and flag, when any portion of a train was waiting close to a high ray crossing and not blocking it, although there was no written rule to that effect, and after his train stopped, he walked down to the engine. Train No. 107 not being in sight, he sat on the rail until the train came around the curve about 2 miles east of Annandale; he then walked down toward the switch. He heard train No. 107 sound the whistle at the east mile board and also heard the highway crossing whistle. He stated he had been standing there waiting 5 or 6 minutes. When he was opposite the switch, he noticed the switch securely locked in its proper position, while standing near the switch, he saw the truck approaching on the highway, He at once proceeded to the middle of the road signaled the approaching truck to stop. He estimated the truck was about 225 feet distant from the crossing when he first began to signal and he repeated his stop signals four or five times. He thought the truck was running about 12 or 15 miles an hour. The driver and the man by his side appeared to be talking and laughing and paid no attention to him. When the truck driver was about 40 or 50 feet away, Brakeman Rahm saw him look toward the approaching passenger train then only a short distance away, and then he swerved to the left probably at that time seeing his danger. Knowing that an accident could not be avoided, Brakeman Rahm gave the engineer of the on-coming train an emergency stop signal, and jumped back to get out of the way of flying parts of the truck. He said he heard the emergency application of the brakes as the engine passed him. The truck seemed to be pushed forward by the engine and the engine and first part of the mail car passed safely over the switch. Then the points evidently oecame opened, allo ing the rear trucks of the mail car to enter the passing track. They proceeded in this way until the connection between the mail and baggage cars was broken, and the baggage car collided with the engine of train No. 2.

Engineman Whitchurch of train No. 107 stated that he was approaching Annandale at the usual rate of speed, betten 40 and 50 miles an hour. Although they were late, he had a heavy train of 13 cars and he was not trying to make up time but only to maintain schedule time. He stated he whistled at the mile board, and the crossing signal as he approached the crossing sign. He had completed the crossing whistle, consuming about 9 seconds, before he saw Brakeman Rahm at the crossing, who was facing south and seemed to be giving violent signals to someone on the opposite side of the track. The

engineman had his mand on the brake lever and when near the crossing the fireman said, "You are going to hit a truck!", he made an emergency application of the brakes. It was not more than a second when he was splashed with gasoline from the truck which has been struck, and both the engineman and fireman were blinded for the time being. The engineman did not see the truck at any time. Engineman Whitehurch said the bell on the engine of train No. 107, which works automatically, had been ringing all the way from Maple Lake, 6.3 miles south of Annandale, and it was still ringing after the accident; also that the air was working on the entire train and the brake equipment was operating properly. His engine was only slightly damaged.

Fireman Inman of train No. 107 saw the freight on the passing track and the switch lined up for the main line. He did not see the brakeman of train No. 2, who was on the north side of the track, but when between 50 and 100 feet from the crossing he noticed a yellow oil truck approaching slowly; although the driver was proceeding apparently in a safe manner, but when he saw that the truck did not stop he called a warning to the engineman who immediately applied the brakes in emergency.

Conclusions.

This accident was caused by the driver of an automobile truck proceeding upon a highway and railroad crossing at grade directly in front of a passenger train which was approaching at high speed only a short distance away.

The truck driver and his companion were instantly killed when struck by the engine of train No. 107. The evidence, however, indicates that the truck driver paid no attention whatever to the stop signals given by Brakeman Rahm who was standing on the crossing, and that he did not book toward the east to see if there was an approaching westbound train until it was too late for him to stop.

The railroad officials stated that it is not customary to protect highway crossings by flagman or by gates, and that in that state there are (an) laws requiring such protection. It is customary, however, for the trainmen as far as possible to protect train movements over road crossings, as was done by Brakeman Rahm in this instance. There can be no possible extenuation for such gross carelessness as was shown by the truck driver in failing to heed the stop signals given by Brakeman Rahm as well as in neglecting to look toward.

the east when approaching the crossing. Unless automobile drivers heed warning signs and flagmen's signals at railroad crossings, other accidents of this character may be expected to occur in the future.

Respectfully submitted,

W. P. Borland,

Chief, Bureau of Safety.