INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LINE OF THE READING COMPANY AT CARLISLE JUNCTION, PA., ON JULY 25, 1925.

December 24, 1925.

To the Commission:

On July 25, 1925, there was a collision between two portions of a train engaged in making a pickup movement on the line of the Reading Company at Carlisle Junction, Pa., resulting in the death of one employee.

Location and method of operation

This accident occurred on the Philadelphia, Harrisburg and Pittsburgh Branch of the Harrisburg Division, extending between Harrisburg and Lurgan, Pa., a distance of 42.7 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-signal system. The accident occurred within the interlocking limits of Carlisle Junction, on the westbound main track, at a point about 250 feet west of the tower, which is located on the north side of the tracks. About 275 feet west of the point of accident, between the main tracks, there is an all-route dwarf signal, governing reverse movements, while just east of this signal, between the signal and the point of accident, there is a crossover connecting the two main tracks, the crossover switches are trailing-point switches for movements with the current of traffic. There is a siding, known as No. 2 siding, located east of the tower, parallel to and south of the eastbound main track. The westbound home signal is located just north of the tracks, 683 feet east of the tower, while at a point 68 feet west of this signal there is a split-point derail. All switches and signals are controlled by the towermen.

The weather was cloudy and it was dark at the time of the accident, which occurred at about 3.10 a.m.

Description.

Westbound freight train extra 2012 consisted of 40 cars and a caboose, hauled by engine 2012, and was in charge of Conductor Heaps and Engineman Wood. At Carlisle Junction the train was brought to a stop on the westbound main track with the engine just east of the home signal, after which the engine was cut off, proceeded by the tower

to the crossover, backed through the crossover to the eastbound main track, then to No. 2 siding, and, in accordance with instructions, picked up a cut of cars. After these cars had been coupled to the train, a cut was made in order to clear the derail located just west of the westbound home signal, in making this cut, however, the derail was not cleared, the wheel of a car being left standing on the detector bar. Then the engine and P. & R. box car 16148 were cut off and moved forward to a point just west of the all-route dwarf signal. A caution signal was then displayed on the all-route dwarf signal, while a back-up signal was given by Brakeman White, it being intended to back through the crossover and replace this car on No. 2 siding, but as the derail was fouled by the car standing on the detector bar the route could not be lined for the crossover movement, remaining lined for the westbound main track, and shortly afterwards the box car was backed into that portion of the train from which it had been just previously cut off, the speed being estimated to have been about 5 or 6 miles an hour at the time of the impact.

P. & R. box car 16148 was badly damaged and the rear truck of the tender was derailed. The employee killed was the brakeman, who was riding on the right side of the rear of the tender at the time of the accident.

Summary of evidence

Conductor Heaps said he had to cut the train close to the detector bar in order to keep the head end of the train from fouling the crossover, after that portion of the train had been pulled ahead, owing to the limited space between the detector bar of the derail and clearance point of the crossover, and at the time the cut was made he was of the impression the wheels cleared the detector bar, although at this time he did not look closely to see whether this was the case. He then went to look at the hand brake on one of the cars in the head portion of his train and was so engaged when the accident occurred. He then discovered that as the detector bar was fouled the towerman was prevented from lining the route for a movement through the crossover, and on looking under the car discovered for the first time that the car wheel lacked about 2 or 3 inches of being clear of the detector bar. Conductor Heaps further stated that there were about 21 cars between the derail and engine, and that the force of the impact did not move these cars, as they were standing with the air brakes applied. Conductor Heaps also said that he did not hear the towerman call to him, prior to the accident, that he could not operate the crossover switch.

Engineman Wood stated that after Conductor Heaps had cut the train in the vicinity of the derail, the head portion of the train was moved forward two or three car

lengths. Brakeman White then cut off the engine and first car, in order to replace this car on No. 2 siding, and the engine and car were moved to a point just west of the dwarf signal. Engineman Wood said that after a caution indication was displayed on the dwarf signal Brakeman White then gave a lantern back-up signal to Fireman Taylor, and the fireman in turn transmitted this signal to the engineman, after which the brakeman crossed over in front of the box car and also gave a back-up signal from the engineman's side of the engine. Engineman Wood did not realize that the route was not lined for the crossover until he failed to feel the engine moving through it, and he said that he immediately closed the throttle, but did not have time to apply the air brakes before the collision occurred, at which time he estimated the speed to have been between 5 and 6 miles an hour. Engineman Wood further stated that he did not hear the towerman shout to Brakeman White prior to starting the back-up movement and was of the opinion that in view of the existing conditions the towerman should have notified them that he could not line the route for the crossover.

Fireman T.K.Taylor stated that when the dwarf signal displayed a yellow indication, Brakeman White gave him a back-up signal, and he was unaware of anything wrong until the accident occurred, at which time the speed was about 6 miles an hour. Fireman Taylor further stated that after the back-up signal was received he began to work on the fire, and that he did not hear the towerman shout to the brakeman prior to starting the back-up movement.

Towerman Comp stated that after extra 2012 arrived the engine was cut off and proceeded to the tower, Brakeman White then entering the tower. He gave the brakeman 25 car tickets and told him they would have to replace P.& R. box car 16148, the first car of the cut, and that in order to line the route for a return movement through the crossover to replace this car on No. 2 siding it would be necessary not to foul the derail. After the train was cut at the derail by the conductor and moved ahead a short distance, the engine and box car were cut off and moved to a point just west of the dwarf signal. Towerman Comp said he then tried twice to unlock the derail but was unable to do so, and then went to the west window of the tower, at which time the engine was not making any noise, and called to Brakeman White as loudly as he could that the cars were on the detector bar and that it would be necessary to move them.

He displayed a caution signal on the dwarf signal, intending that they should back up on the main track and watched the engine moving back towards the train, but did not see the brakeman give any signal either to slow down or to stop, and the first he knew of anything wrong was when Conductor Heaps came into the tower and informed him of the accident.

Conclusions

This accident was caused by failure to have a definite understanding as to the movement to be made.

Conductor Heaps cut the train for the purpose of clearing the detector bar at the derail and then proceeded to engage himself with other duties without knowing definitely whether or not the detector bar had been cleared. After the engine and one car had been moved ahead to a point west of the dwarf signal Towerman Comp found he could not open the crossover switch and called to Brakeman White, who was the employee killed, that they would have to come back on the main track and move the cars enough to clear the detector bar, he then threw the dwarf signal to the caution position, indicating a back-up movement, intending that the engine and one car should be backed up on the main track, while the engine crew, and probably Brakeman White also, supposed that they were going to back through the crossover switch, the error not being discovered by the engineman until too late to avert the accident. Had Towerman Comp held the dwarf signal in the stop position until he was certain the crew knew of the movement which had to be made, this accident probably would not have occurred. It did not appear that Brakeman White made any statement prior to his death, but it seems probable that he did not hear the towerman call to him and that when he saw an indication displayed at the dwarf signal which authorized his engine to make a back-up movement he signalled the engine crew accordingly and that, from his position between the engine tender and the one car attached to it, he did not notice that the crossover switch had not been opened.

The employees involved were experienced men, familiar with the switches and signals involved in this accident. 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 law.

Respectfully submitted,

W. P. Borland,

Director.