Eq 11.2

INTERSTATE COMMERCE COMMISSION.

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE PENNSYLVANIA RAILROAD NEAR WESTMORELAND, PA., ON MARCH 11, 1934.

April 30, 1934.

To the Commission:

On March 11, 1934, an eastbound electric passenger train on the Pennsylvania Railroad collided with a freight car on an adjoining track which had been derailed and was fouling the main track, near Westmoreland, Pa., the collision resulting in the death of one passenger and the injury of two employees.

Location and method of operation.

This accident occurred on the Chestnut Hill Branch of the Philadelphia Terminal Division, which extends between North Philadelphia and Chestnut Hill, a distance of 6.8 miles. In the vicinity of the point of accident this is a double-track line over which both steam and electric trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at a point approximately ⅔ mile east of Westmoreland station The track between the station and point of accident is tangent and practically level.

The electric cars used in passenger service are of all-steel construction, 65 feet in length, having a total weight of approximately 118,600 pounds. The master controller and brake valve are so designed that when the handle of the master controller is released it moves automatically to the emergency position, which shuts off power and simultaneously applies the air brakes in emergency.

The weather was stormy, with snow and rain falling at the time of the accident, which occurred at 7.55 p.m.

Description.

Switch engine 733 and switching crew, in charge of Conductor Hayes and Engineman Purcell, had been working in the vicinity of the point of accident Their movements leading up to the occurrence of this accident began by leaving 6 loaded cars on a track known as the "straight" track, a tangent yard track approximately 635 feet in length which parallels the eastbound main track on the

right; then with 4 cars attached to the engine they proceeded eastward to Midvale freight yard, the entrance to which is approximately 200 feet east of the east switch of the straight track. Midvale yard consists of 11 dead-end tracks used to store freight for the industries in the vicinity. The switch engine and attached cars coupled to 9 cars standing on track 9 and moved westward, using a track known as the "run-around" track, which is parallel to and is joined at both ends to the straight track, in order to move around the 6 cars it had previously left on the straight track. While making this movement around the cars on the straight track, a gondola car, loaded with scrap iron and from which the 9 cars on track 9 had been uncoupled, slowly followed the engine and draft of cars from track 9, the grade from this point for a distance of more than 400 feet being 1.8 per cent descending, and collided with the cut of cars standing on the straight track, Conductor Hawes having thrown the switch for the straight track after the engine and draft of cars attached to it had cleared the switch. The force of the impact was sufficient to start the cars forward, the leading car of which in turn cornered the moving draft attached to the engine at the west end of the run-around track, derailing the west truck of the first car on the straight track and causing this car to lean toward and foul the eastbound main track.

Eastbound electric passenger train No. 3998 consisted of 2 all-steel motor cars, and was in charge of Conductor Nichols and Motorman Blood It left Broad Street station, Philadelphia, at 7.39 p.m., departed from Westmoreland at 7.54 p.m., and while traveling at a speed estimated to have been about 35 miles an hour, collided with the box car which was fouling the main track.

As a result of the collision the front end and about 22 feet of the right side of the leading car of train No. 3998 were crushed. The steel box car which fouled the track was badly damaged.

Summary of evidence.

Brakeman Brown of the switching crew said that after leaving the cars on the straight track he rode on the engine to yard track 9 in Midvale yard, made the coupling between the engine and cut of cars, went back and applied the hand brake on the tenth car, the gondola involved in this accident, and on account of the weather conditions he took the additional precaution of placing a small piece of wood under the wheel of the gondola car. He then made the cut between the gondola car and the ninth car and gave the engineman a back-up signal. As the engine and draft of cars

started to move he boarded the step of the last car and had ridden a car length or two when he saw the gondola car following He alighted from the car on which he was riding, boarded the gondola and made every effort to bring it to a stop but for some reason the hand brake did not work properly and the car continued on out of the yard until it struck the cars standing on the straight track. He said the car did not gain momentum after it had started and was moving at a rate of speed of about 4 miles an hour at the time it struck the cars on the straight track. The force of the impact started the cars forward and he at once climbed on top of the car ahead and had applied the hand brakes on three cars and was on the fourth car when the leading car in the draft side-swiped the cars moving on the run-around track.

Brakeman Sopp, of the switching crew, said he uncoupled the draft of six cars left on the straight track and while the engine with several cars attached to it proceeded eastward to track 9 in the yard, he coupled the air hose on the draft. He said he set only one hand brake on the draft as the grade was very slight and he knew that no other cars were to be shunted against them. When the engine and additional cars returned from the yard and passed on the run-around track he boarded one of the forward cars and had ridden a short distance when the brakes went on the engine and he saw some one giving stop signals from the rear. He at once started toward the engine and upon nearing a shout he crossed over to the main track at which time the eastbound electric train passed, immediately after which he heard the noise of the collision.

Conductor Hawes, of the switching crew said while Brakeman Brown went with the engine to track 9 in the yard to pick up 9 cars he remained with the draft on the straight track to list the numbers of the cars. His attention was first called to the gondola car creeping down out of the yard by a car inspector who was approaching from the direction of the yard and apparently mentioned it only as a matter of information. He saw Brakeman Brown on the car attempting to apply the hand brake but without success. The gondola car bumped into the draft of cars standing on the straight track and started them forward, the leading car of which side-swiped the cars moving on the run-around track, and resulted in the west end of the first car of the draft on the straight track being derailed and tilted toward the eastbound main track. Realizing that a train was due at any moment he started up the eastbound main track, toward Westmoreland station,

giving stop signals with his lantern. The motorman of an approaching eastbound electric train answered his stop signals and evidently applied the air brakes in emergency, but due to the wet rails the train slid until it crashed into the tilted box car. He did not remember having set the switch for the straight track after the engine and attached cars had passed it, but as it is his custom to do this he said he no doubt did it before being told by the car inspector of the approaching gondola car.

Motorman Blood, of train No. 3998, said his train left Westmoreland station at 7.54 p.m., on time, and while the weather was stormy, with rain and snow falling, he could see signal indications plainly. After passing the Philadelphia & Reading Railway bridge, which is approximately 825 feet west of the point of accident, he saw some one come out from between some cars ahead and to the right of the track giving stop signals, which he acknowledged, immediately after which he saw a second person appear also giving stop signals. He released the master controller handle, which automatically went to the emergency position, and the brakes became effective at once, the collision occurring before the speed of his train had been materially reduced. He estimated the speed of his train at the time he first saw the stop signals given at which time he estimated his train to have been 150 or 200 feet distant, to have been about 40 miles an hour, and about 35 miles an hour at the time of the collision. He said the brakes on his train were tested and pronounced in good working order by inspectors at Broad Street station, Philadelphia, before leaving that point and had worked properly considering the wet rail conditions in making the three station stops between that point and the point of accident.

Car Inspector Urbach, who was on duty at Midvale yard from 7 a.m. until 4 p.m on the day of the accident, said he inspected gondola car No. 857563 during the day; this car was in a draft of 28 or 30 cars and at the time of the inspection he noticed the brake ratchet wheel was against the end gate; he chalk-marked this car "no brake" on each side without making an actual test of the brake, it being his opinion that while there might have been some braking power there was notsufficient to pass it as being in proper working order. He said it is his custom to make minor repairs to cars whenever possible soon after an inspection is made, but he did not do so in this case as he was busy with other duties. He also said it is customary to report defective cars to the crew working in the yard, but he failed to do so on this occasion and could give no reason for his failure. In connection with the investigation of this accident Car Inspector Urbach, in company with

representatives of the Pennsylvania Railroad and of the Commission, went to Margie yard where the gondola car involved in this accident had been removed, and there he identified it as the car which he marked "no brake" in Midvale yard on the day of the accident.

Car Inspector Gehrung, on duty in Midvale yard, said he relieved Car Inspector Urbach at 4 p.m. on the day of the accident and received no advice from him regarding defective cars in the yard. Just prior to the occurrence of this accident he was in the immediate vicinity and said he noticed the gondola car following the draft of cars out of track 9 in the yard, and he informed Conductor Hawes of its approach. He also said he sa Conductor Hawes throw the switch for the straight track after the draft attached to the engine had entered the run around track. He saw Brakeman Brown on the gondola car attempting to apply the hand brake. The car was not moving very fast, and when it struck the cut of cars on the straight track the contact seemed no greater than that of an ordinary coupling. Afte the cars on the straight track had side-swiped the cars on the run around track he ran westward giving stop signals to an approaching eastbound passenger train. After the collision he examined the hand brake on the gondola car and found that the end gate was against the ratchet wheel and prevented it from working freely. He used an iron bai about three feet long in an effort to apply the brake, but without success. He was unable to find any chalk marks of "no brake" on either side of the car, but expressed the opinion that if there had been any such marks on the car the rain and snow would have washed them away.

Assistant Foreman Car Inspector Worrell stated that he made an examination of the gondola car about 30 minutes after the occurrence of this accident and at his direction Car Inspector Gehrung used a short iron bar in an effort to apply the hand brake but was unable to turn the brake wheel enough to tighten the brake chain or bring the brake shoes against the wheels, due to the end gate being pushed outward against the brake ratchet wheel He said the hand brake was unserviceable at that time, although the following day he inspected this car at Margie yard and test and examination at that time showed the brake to be in working order. He was of the opinion that the moving of this car from Midvale to Margie yard and subsequent handling resulted in the load shifting away from the end gate and relieved the load pressure from the end gate which in turn released the brake ratchet wheel.

Car Inspector Foreman Bond inspected the gondola car involved in this accident the day following the accident after it had been removed to Margie yard. A new brake wheel had been placed on the car, which at his direction was taken off and the original wheel put on. The hand brake was then applied and was properly effective. The car at the time of this inspection was properly loaded, the end gate was straight and solid against the end gate stops, both at the top and bottom. Examination of the brake rigging failed to disclose any defective condition. He said no repairs had been made to this car other than to change the bent brake wheel, which after the inspection, was replaced with a new wheel.

Conclusions.

This accident was caused by a gondola car moving out of a yard track and colliding with a cut of standing cars, due to an inefficient hand brake on the gondola car.

Car Inspector Urbach is primarily responsible for this accident. After finding the gondola car with what he supposed to have been a defective brake and so marked it, he failed to ascertain definitely whether or not this was the case, and then to repair it or to take such action as was necessary to have the condition remedied; had he done so this accident would not have occurred.

Rule 233 of Current Time-table No. 9, reads as follows:

> "When cars are left standing on the several heavy grades on the Chestnut Hill Branch they must, in addition to being properly secured by hand brakes, have chocks placed under the wheels to preclude the possibility of the cars moving when the engine is detached. * * * * * * * * *"

While Brakeman Brown testified that he applied the hand brake on the gondola car before uncoupling from it while it was on yard track 9, in addition to which he also placed a small piece of wood under the wheel, it is evident that he only partially complied with the rule above quoted. Had he properly chocked the wheels of this car at that time even though the brakes were ineffective this accident would not have occurred For his failure to do so he must share with Car Inspector Urbach the responsibility for this accident.

All of the employees involved in this accident were experienced men; at the time of the accident, none had been on duty in violation of any of the provisions of the hours of service law.

Respectfully submitted,

W. P. BORLAND,
Director.