## File No. 38

## February 6, 1918.

## MEMORANCIM TO COMMINSION THE CHORDS

Relative to accident on the Pittsburg & Lake Eric Reilrond, January 15, 1912.

Draft submitted by the Chief Inspector of Sefety Appliances as a basic for the report of the Commission.

On January 15, 1912, the Baltimore & Obio Railroad and the Pittsburg & Lake Eric Railroad reported by telegraph a head-on collision on the tracks of the Pittsburg & Lake Eric Railroad about one and one-third miles east of New Castle, Pa., at 6:30 a. m., between Baltimore & Obio passenger train No. 156, and Pittsburg & Lake Eric shuttle train No. 801. Inapedors Craig and Cibbons were assigned to make an investigation, and the following is a synopsis of their report:

Baltimore & Ohio passenger train No. 156, eastbound, runs from New Castle to Allegheny, Pa., in charge of Conductor Ellis and Enginemen Gunnon, and consisted of one combination mail and bagage car and two cosches, haulod by engine No. 848. This train left Union Station, New Castle, Pa., at 6:28 a. m., two minutes late. About half a mile from this station the train headed into the Pittsburg & Lake Erie transfer track through an open switch an continued eastwart upon the west-bound main track of the Pittsburg & Lake Erie Reilroad until it collided lead-on with Pittsburg & Lake Erie shuttle train No. 501 on a 5 degree curse, about 5,400 feet from the point at which they entered upon the Pittsburg & Lake Erie west-bound main track. The estimated speed of this train at the time of the accident was 15 to 18 miles per hour.

Pittoburg & Lake Erie shuttle train No. 501, west-bound, runs from New Castle Juzction to Mr. Castle, Pa., in charge of Conductor J. D. Clark and Engineers R. M. Clark, and consisted of one combination baggage and expiring our and the cosches, hauled by engine No. 9268, and at the time of the collision was running at an estimated speed of 25 miles per hour.

This collision resulted in the death of enginemen, firemen and baggagegan, and injury to conductor, brakemen and mail clerk on Baltimore & Ohio train No. 155, and the death of enginemen and firemen, and injury of conductor, brakemen, baggagemen and express messenger on Pittsburg & Lake Eric shuttle train No. 501; also the injury of four passengers.

The Pittsburg & Lake Eric Railroad operate double track from New Castle Junction to M: Centle, Pa., a distance of 2.9 miles. These tracks run parallel to the bracks of the Baltimore & Chio Railroad, and between the tracks of these railroads is a line of thegraph poles. About 3,500 feet East of Union Station, New-Castle, Pa., near Furnace Street the Pittsburg & Lake Eric Pailroad

orosses the tracks of the "onnoylvania Railroad at right angles. Near this crossing is a was connection, about 400 feet long, leading from Pittaburg & Lake Eris west-bound main line to Pennsylvania Railroad track No. 4, known as Pittaburg & Lake Eris transfer track.

The Beltimore & Ohio Amilroad operate its passenger trains a dist nee of about 3,250 feet over the tracks of the Posseylvenia Railroad from Union Station, New Castle, where they are diverted to their own main line, which is operated as a single track for a distance of about 2,800 feet to the place where their double track begins. This single track parallels the Pittsburg & Lake Erie transfer track its full length, and then runs parallel to the Pittsburg & Lake Erie transfer track its full length, and then runs parallel to the Pittsburg & Lake Erie west-bound main line until the double track of the Baltimore & Ohio Nailroad begins.

Baltimore & Ohio trains are required to stop 2,850 feet east of Union Station for the purpose of allowing trainmen to three the main track switch that diverts their trains to what is known as Pennsylvania & ilroad track No. 4. In order to get on the main line of the Beltimore & Ohio Weilroad. Then they clear the Pennsylvania Railroad main track they come to a full stop. In order to allow the trainment to close this switch, at which time the engine is standing about 185 force est of the switch that leads to the Baltimore & Ohio Railroad main track. Located sixty-five feet cast of this switch is another switch which leads to Pittsburg & L. ke Erie transfer track.

On the morning of the accident Baltimore & Onio train No. 156 left New Castle Junction about 5.55 a.m., and back up to the Un on Station at New Castle, Pa., leaving the switch leading from Pen Lylvania track No. 4 to Baltimore & Ohio main brack open. At this time Pennaulv min Reilread switch engine No. 9202 was standing on the Piutaburg & Lake Brie transfer track, and after train No. 156 had passed rulled out of the transfer track, closed the switch leading to Baltimore & Ohio main track, and left the Pittaburg & Lake Eris transfer track switch open. When train No. 156 left Union Station about fifteen minutes later, it is assumed that the engineeran tough that their main track switch was open, as they had left it in that position when they backed into Union Station.

These switches are handled by trainmen, and the switch stands are of the dwarf type. The switch light on the switch leading to the Baltimore & Obio main line shows white when set for Baltimore & Chio main track, and green then set for Pennsylvania track. The switch light on the switch leading to the Pittsburg & Lake Eric transfer track shows green then set for Pittsburg & Lake Eric transfer track, and white then set for Pennsylvania track. When train No.156 left Union Station on the morning of the accident the critch leading to the Baltimore & Ohio Mailrond was lined up for Pannsylvania track No. 4, and the switch leading to the Pittsburg

A Lake Erie transfer track was open, and both lights showed green. The engineers instead of stapping for the crew to open the switch leading to the Baltimore & Ohio main line ran past this switch, on through the open switch leading to Pittsburgh & Lake Erie transfer track, and continuing on this track ran through a locked switch out on to the west-bound main track of the Pittsburg & Lake Eric Reilroad.

Train No. 156 proceeded east on the west-bound main track of the Pittsburg & Lake Eris Hailroad to Cardner Avenue, a distance of about \$,200 feet, where they came to a full stop to receive and discharge passengers. When the Stop was made at Gardner Avenue, alt ough this train had run approximately cas-balf mile on the tracks of the Pittsburg & Lake Eric Railroad, neither the engineman nor any member of the train crew had discovered that they were on the Pittsburg & Lake Eric tracks, although they knew that the Baltimore & who Hailroad was a single track line to Cardner Avenue. After leaving this point they proceeded east a distance of about 1,200 feet where the collision occurred.

Conductor Ellis on train No. 156 stated that he had been on this run since May 1911. On the morning of the accident the train had an unusually large amount of wall to load at Union Station. He looked after the loading of this mail, then walked down to the engine an exid to the engineman "white block", the ongineman answered "white block", after which the train left the station. He remained on the front end of the smoker until they opened and closed the switch leading to Permsylvania Railroad track No. 4. and then went into the train to be lect tickets. He had not finished this work when the train left Gardner Avenue, and a few minutes after the collision occurred.

Brakernn Forker states that after leaving Union Station when the train stop ed for the switch les ing to Penneylvania Railroad track No. 4. he opened the soltch and remained to close it after the train had cleared the Remaylvenia Railroad main track. He then gave a hand signal to proceed and got on the roar end of the train. No then passed through the train, and on arrival at Cardner Aven e got down on the east is of the train, as is customary, where some passengers got on. At Gordner Avenue, where this train stoplet, are a musbor of parallel tricks belonging to the Baltimore and Ohio and Pictaburg & L he Eric Railreads, the station being located on the west elde of the circular The Brakeman states that on arrival at Carmer Avenus they received and discharged passengers on this tri- from the sem - 4.0 of the train that they or inarily aid, and that he did not corice at that time that they were on the tracks of the Pitteburg & L 2 Brie Railroad. After their station work was done he gave the baggagemen a hand eigned to proceed, and the baggagemen signaled the engineer in by pulling the signal cord, this being the rule of the Bultimore & Ohio Reilroof. The train then proceeded to the point here the aciliator occurred.

Crossing Flagman Daly, the is located at Furnace Street Grossing, at the east end of the transfer tracks there this train case onto

(

the Pittsburg & Lake Erie track, stated that when Beltimore & Ohio train passed him he knew they were on the wrong track, but there was no way in which he could stop them, and when he saw they had run through the looked switch he knew that some mistake had been made.

Targetman Allison, who handles the signals governing the Pittsburg & Lake Eric Relicoat crossing with the Pennsylvenia Relicoat, whose location is about 100 feet from the switches that lead off of Pennsylvenia Relicoat track No. 4, stated that the switch lights were all lighted and burning at the time train No. 156 passed them. When he sew this train go out ever the tracks of the Pittsburg & Lake Eric Railroad he stapped out of his office and called to them as the last our passed, but was unable to astract the attention of any of the crew.

The two switches leading from Pennsylvania Reilroad track
No. 4 are what is known as neutral switches, and are left in the
position last used by employees of either the Baltimore & Orio
Reilroad, Pennsylvania Railroad, or Pittsburg & Lake Eric Reilroad;
all of bem use these tracks. All trains are required to approach
the e switches under control, expecting to find them in either
position, or to find other trains performing work in that territory.

This investigation developed that on several occasions during the past year this train, in charge of other em loyers, had run by the Baltimore & Chio waita line owitch on Pennsylvania track No. 4, nearly fouling the litteburg & Lake Eric crossing, when they sto ea and backed up, and that on one occasion, about alx another ago, this train ran though the Pittsburg & Lake Eric transfer track switch out when the mest-bound main track of the Pittsburg & Lake Eric Bailroad, but stopped when the mistake was discovered. No report of these occurrences was made by the employe a to the Superintendents of either road.

The main track switch light that leads to the Baltimore & Chic main track shows white, and had Engineers Campon properly observed these signal lights he would not have gone on the ground track. Even after running through the switch at the Pittsburg & Lake Erie west-bound main track he should have nown he was on the ground as the absence of his side of the train of the line of telegraph poles separating the bracks should have brought to his abtention the fact that he was on the tracks of the Pittsburg & Lake Erie Railroad.

The switch that leads to the Beltimore & Ohio main line, and the saitch that leads to the Fittsburg & Lake Eric transfer track, livert trains to main lines, and to provide sefety there saitches should have a normal position and be locked in that position. This is avidently apparent from the investigation, which developed that thirty-taree trains of the Beltimore & Ohio Railroad alone daily use their main line switch. This arrangement would necessitate draws making these diverting governors bringing their trains

to a stop in order that the switches might be opened and closed when these movements are made. Proper regard for safety would also require that the east end of the Pittsburg & Lake Erie transfer track be equipped with a derailing device to prevent cars or engines fouling the west-bound main line of the Pittsburg & Lake Erie Railroad.

Enginemen Candon on train No. 158 was an extra passenger engineer, and had been on this run ten days prior to the accident. He had run other passenger trains between New Castle Junction and New Castle at different times, and was familiar with the tracks and switched involved. Conjuctor Ellis was a regular Conductor and had been in charge of this train since May 1911. Brakeman Forker had been brokemen on this train since December 1911.

The weather conditions at the time of the accident were cold, showing a little and dark.

The accident was easied by the engineman of Baltimore & Ohlo train No. 156 disregarding the switches and switch light in lieuting, and running his train out upon the west-bound main track of the Fittsburg & Lake Brie Ruilroad.

Conductor Allis and Brokemon Forker are equally responsible, for the reason that hen they stopped at Cardner Avenue they should have discovered they were not on the tracks of the Baltimore & Ohio Railroad, and at this time could have prevented this accident by properly protecting their train.

As a prevention of accidents of this character it is recommended that all switches a strolling main line movements should be securely looked or all ced in charge of switch tenders. That in this instance a devallin series stolld be placed at the east end of the Pittsburg & Lake Eric transfer track. On account of the large number of trains using this area ing and these switches, to insure enfety, this rail can are size with the switches insectionly a jacent thereto, should be a strelled by an interlocker.

Respectfully adjustment,

Chief Inspector of Safety Appliances.