# INTERSTATE COMMERCE COMMISSION

VASHINGTON

INVESTIGATION NO. 2945 THE BALTIMORE AND OHIO RAILROAD COMPANY REPORT IN RE ACCIDENT AT LAWRENCEVILLE, ILL., ON

NOVEMBER 10, 1945

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# SUMMARY

Railroad:	Baltimore and Ohio
Date:	November 10, 1945
Location:	Lawrenceville, Ill.
Kind of accident:	Collision
Equipment involved:	Passenger train : Motor-truck
Train number:	122 :
Engine numbers:	5207-5205 :
Consist:	.7 cars :
Estimated speed:	75 m. p. h 3 m. p. h.
Operation:	Timetable, train orders and automatic block-signal system
Track:	Single; tangent; 0.18 percent descending grade eastward
Street:	Tangent; crosses track at angle of 76°43'; level
Weather:	Cloudy
Time:	12:20 p. m.
Casualties:	2 killed; 15 injured
Cause:	Motor-truck being driven upon high- way grade crossing immediately in front of approaching train

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## INTERSTATE COMMERCE COMMISSION

## INVESTIGATION NO. 2945

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

THE BALTIMORE AND OHIO RAILROAD COMPANY

December 26, 1945

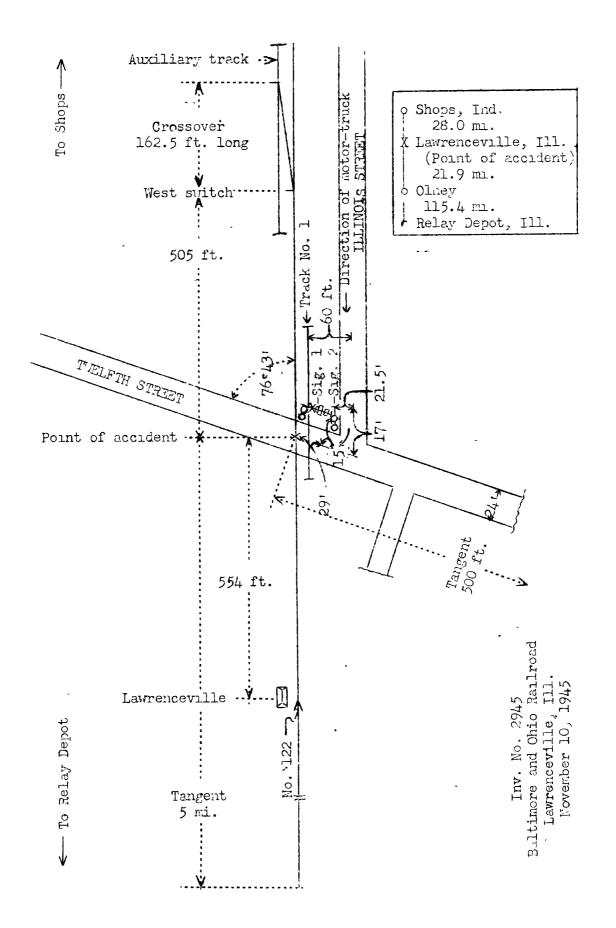
Accident at Lawrenceville, Ill., on November 10, 1945, caused by a motor-truck being driven upon a highway grade crossing immediately in front of an approaching train.

REPORT OF THE COMMISSION

PATTERSON, <u>Commissioner</u>:

On November 10, 1945, there was a collision between a passenger train on the Baltimore and Ohio Railroad and a motor-truck at a highway grade crossing at Lawrenceville, Ill., which resulted in the death of the truck driver and one train-service employee, and the injury of seven passengers, two dining-car employees, five train-service employees and one train porter.

<sup>1</sup>Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



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Location of Accident and Method of Operation

This accident occurred on the Illinois Sub-Division, which extends between Relay Depot, near East St. Louis, Ill., and Snops, near Washington, Ind., 165.3 miles, a single-track line in the vicinity of the point of accident, over which trains are operated by timetable, train orders and an automatic blocksignal system. The accident occurred 137.3 miles east of Relay Depot, at a point 554 feet east of the station at Lawrenceville, where the railroad is crossed at grade by Twelfth Street. The main track is tangent throughout a distance of about 5 miles west of the crossing and a considerable distance eastward. The grade is 0.18 percent descending eastward.

Twelfth Street intersects the railroad at an angle of 76°43'. The street is tangent throughout a distance of about 500 feet south of the crossing and a considerable distance northward. The grade for north-bound vehicles is 7 percent ascending throughout a distance of about 60 feet immediately south of the crossing, then it is level over the crossing. At the crossing an auxiliary track, hereinafter referred to as track No. 1, parallels the main track on the south. The west switch of a facing-point crossover 162.5 feet long, which connects the main track and an auxiliary track located on the north side of the main track, is 505 feet east of the crossing. South of the crossing Twelfth Street is surfaced with brick to a width of 24 feet. The crossing is 24 feet wide and the distance from the north rail of the main track to the south rail of track No. 1 is 15 feet. The area between the north rail of the main track and the south rail of track No. 1 and between the rails of each track is surfaced with asphaltum. Illinois Street intersects Twelfth Street at a point 30 feet south of the center-line of track No. 1 and parallels the railroad on the south eastward from the intersection.

A standard cross-buck railroad-crossing sign is located to the right of the direction of north-bound traffic, 29 feet south of the center-line of the main track and 15 feet east of the center-line of Twelfth Street. This sign is mounted on a mast and bears the words "RAILROAD CROSSING" in black letters on a white background. A horizontal bracket is mounted on the west side of the mast immediately above the cross-buck sign, and two hooded lamps are attached to the bracket in horizontal position. The distance between the centers of the lenses is 2 feet 6 inches, and the center of the lens of each lamp is 16 feet 10 incnes above the level of the street. This signal is hereinafter referred to as signal 1. Immediately below the cross-buck sign there is a sign bearing the words "2 TRACKS" in white and in colorless reflector buttons on a black background. Immediately below this sign there is a sign bearing the words "STOP ON RED SIGNAL", in white and in colorless reflector buttons on a black background. A warning signal for vehicular traffic en route westward from Illinois Street thence northward on Twelfth Street is located 21.5 feet north of the center-line of Illincis Street and 17 feet east of the center-line of Twelfth Street.

This signal consists of two hooded lamps mounted in vertical position on a mast. The centers of the lenses of these lamps are, respectively, 11 feet 8 inches and 6 feet 4 inches above the level of Illinois Street. This signal is hereinafter referred to as signal 2. When an east-bound train is occupying any portion of the main track within a distance of 3,419 feet west of the crossing, the lamps of signal 1 flash red lights alternately, the top lamp of signal 2 flashes a yellow light, and the words "NO RIGHT TURN" in yellow are continuously displayed by the lower lamp of signal 2.

Operating rules read in part as follows:

14. Engine Whistle Signals.

Note.--The signals prescribed are illustrated by "o" for short sounds; "\_\_\_" for longer sounds. \* \* \*

Sound. .Indication. \* \* \* (1) \_\_\_\_\_o \_\_\_\_ Approaching public crossings at grade. To be prolonged or repeated until crossing is reached. \* \* \* (p) Succession of Alarm \* \* \*

\* \* \*

short sounds.

Article XII, of the 1941 Revised Motor Vehicle Laws of Illinois, read in part as follows:

84. Certain Vehicles Must Stop at all Railroad Grade Crossings.--(a) The driver of any motor vehicle \* \* \* carrying explosives or flamable liquids as a cargo or part of a cargo, before crossing at grade any track or tracks of a railroad, snall stop such vehicle within 50 feet but not less than 10 feet from the nearest rail of such railroad and while so stopped shall listen and look in both directions along such track for any approaching train, and for signals indicating the approach of a train, \* \* \* and shall not proceed until he can do so safely.

\* \* \*

The maximum authorized speed for the train involved was Sumiles per hour.

## Description of Accident

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No. 122, an east-bound first-class passenger train, consisted of engines 5207 and 5205, two express cars, one passengerbaggage car, two coaches, one cafe-club car and one coach, in the order named. All cars were of steel construction. This train passed Olney, the last open office, 21.9 miles west of Lawrenceville, at 12:03 p. m., 13 minutes late, and while moving at an estimated speed of 75 miles per hour it struck a motortruck on a grade crossing 554 feet east of the station at Lawrenceville. Part of the wreckage lodged under the enginetruck wheels of the first engine, which were derailed 315 feet east of the crossing. These wheels continued in line with the track 190 feet to the west crossover-switch, where the general derailment occurred.

The motor-truck involved consisted of a tractor and a semitrailer, and was owned and operated by Girton Bros., Inc., of Brazil, Ind. The driver, who was the sole occupant, held Indiana Chauffeur's license No. 155805. The tractor was a 1942 International XS6 model, and bore Indiana license No. 3609. It weighe 5,400 pounds, and was equipped with dual tires on the rear wheels, hydraulic brakes on all wheels, and was provided with an enclosed steel cab. The semi-trailer was a Fruenauf 1940 model, and bore Indiana license No. ST-3740. It was equipped with dual tires on its wheels, vacuum brakes on all wheels, and was provided with a steel tank. The overall length of the two units was 41 feet. At the time of the accident the cargo of the semitrailer consisted of 3,800 gallons of gasoline. This vehicle moved westward on Illinois Street, turned sharply to the right on Twelfth Street and while moving northward at an estimated speed of 3 miles per hour it crossed track No. 1 and was passing over the main track when it was struck by No. 122.

The tractor was torn loose from the semi-trailer and was demolished. The semi-trailer was demolished, the tank was punctured and escaping gasoline became ignited. The engines of No. 122 stopped on their right sides across the track, with the front end of the first engine 1,036 feet east of the crossing. The first three cars overturned and stopped in various positions. The fourth to the seventh cars, inclusive, stopped practically upright and in line with the track. The engines and the first five cars were badly damaged. None of the equipment was damaged by fire.

It was cloudy at the time of the accident, which occurred about 12:20 p. m.

The engineer of the first engine was killed. The engineer of the second engine, the fireman of each engine, the conductor and the flagman were injured.

During the 30-day period preceding the day of the accident, the average daily movement over the crossing was 26.8 trains. During the 24-hour period beginning at 7 p. m., November 14, 1945, 90 trucks and 1,130 other vehicles passed over the crossing,

#### Discussion

No. 122 was approaching the crossing at a speed of about 75 miles per hour in territory where the maximum authorized speed was 80 miles per hour. The members of the train crew were in various locations throughout the cars of the train. The first these employees were aware of anything being wrong was when the brakes were applied in emergency immediately prior to the collision. The brakes of this train had been tested and hed functioned properly en route. It could not be determined when the enginemen of the first engine became aware that the motor-truck had entered upon the crossing, as the engineer was killed in the accident and the fireman was so seriously injured that he could not be questioned during this investigation. The engineer of the second engine said that he first saw the motortruck as it entered upon the crossing when the first engine was about 250 feet west of the crossing, then he observed the gauge indicate that the brakes were applied in emergency. Apparently a lookout was being maintained from the first engine as the enginemen of the second engine and several residents in the vicinit of the crossing heard the whistle signal sounded for the crossing

The driver of the motor-truck was killed in the accident. He was an experienced driver, but he had made no previous trip in this territory. At the time the accident occurred visibility was unimpaired by weather conditions and the driver could have seen the approaching train throughout a considerable distance immediately south of the crossing. Witnesses stated that the warning signals were functioning properly immediately prior to the accident.

The laws of the state of Illinois governing the operation of motor vehicles require that a vehicle transporting explosives or inflammable liquids must stop before it proceeds upon a railroad track, and must not proceed unless it is safe to do so. Considering the speed of No. 122 and the length of the controlling circuit of the warning signals, the signals would be actuate about 30 seconds before the accident occurred. From this it is evident that the highway signals were displaying warning of the approach of a train before the front of the motor-truck passed the warning signal governing north-bound traffic over the crossing.

#### <u>Cause</u>

It is found that this accident was caused by a motor-truck being driven upon a highway grade crossing immediately in front of an approaching train.

Dated at Masnington, D. C., this twenty-sixth day of December, 1945.

By the Commission, Commissioner Patterson.

M. P. BARTEL, Secretary.

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