INTERSTATE COMMERCE COMMISSION

WASHINGTON

INVESTIGATION NO. 3089

CHICAGO & EASTERN ILLINOIS RAILROAD COMPANY

REPORT IN RE ACCIDENT

AT THORNTON, ILL., ON

MARCH 23, 1947

SUMMARY

Railroad:	Chicago & Eastern Illinois	
Date:	March 23, 1947	
Location:	Thornton, Ill.	
Kind of accident:	Collision	
Equipment involved:	Passenger train	: Automobile
Train number:	91	:
Engine number:	1904	:
Consist:	4 cars	:
Estimated speed:	55 m. p. h.	: Standing
Operation:	Timetable, train orders and automatic block-signal and automatic train-stop system	
Tracks:	Double; tangent; 0.02 percent ascending grade southward	
Street:	Tangent; crosses track at angle of 90°; 1.15 percent ascending grade westward	
Weather:	Raining	
Time:	11:05 p. m.	
Casualties:	2 killed	
Cause:	Automobile becoming stalled on railroad-street grade crossing	

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3089

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

CHICAGO & EASTERN ILLINOIS RAILROAD COMPANY

April 25, 1947

Accident at Thornton, Ill., on March 23, 1947, caused by an automobile becoming stalled on a railroad-street grade crossing.

REPORT OF THE COMMISSION[1]

PATTERSON, Commissioner:

On March 23, 1947, there was a collision between a passenger train on the Chicago & Eastern Illinois Railroad and an automobile at a grade crossing at Thornton, Ill., which resulted in the death of two train-service employees.

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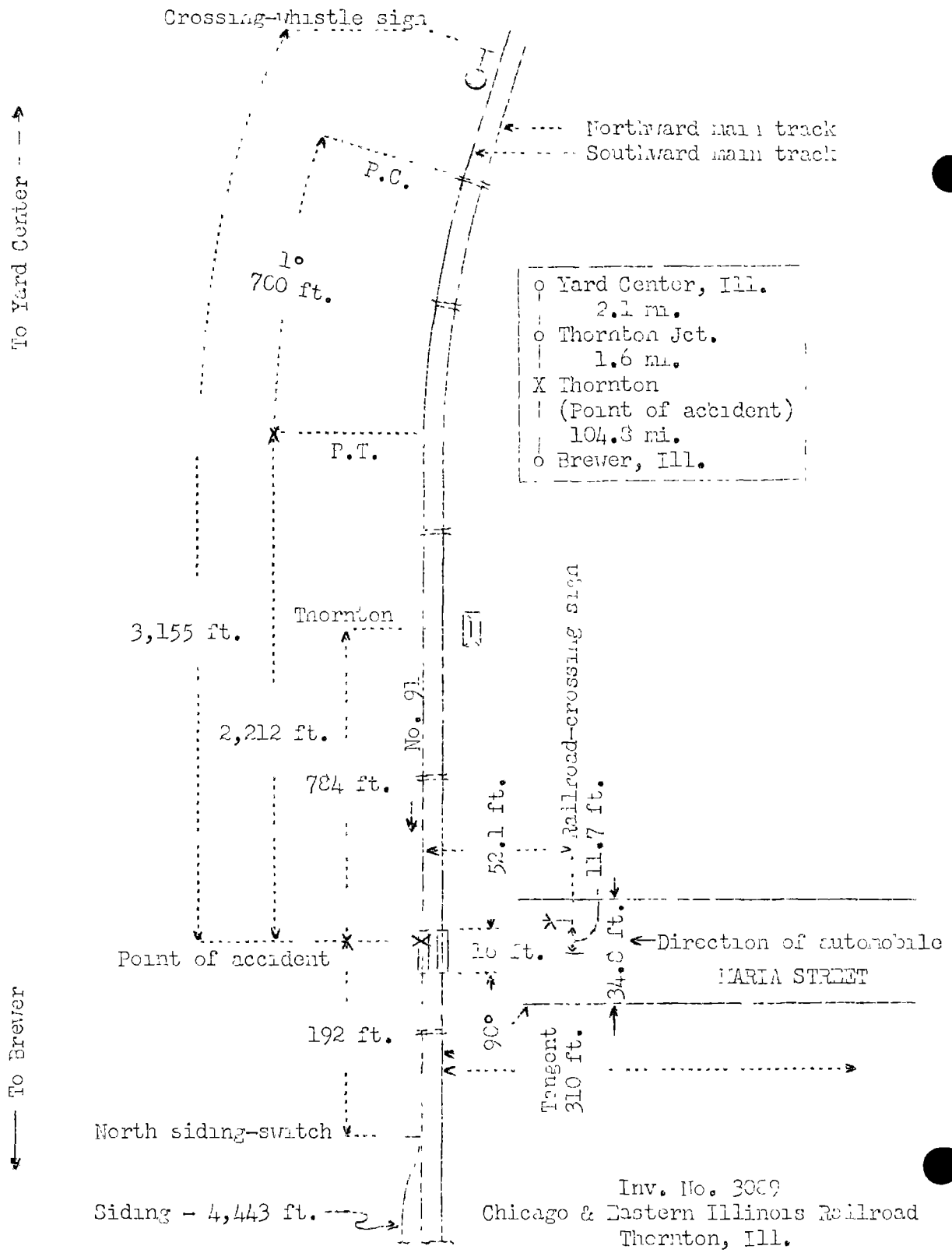
[1] Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3089
Chicago & Eastern Illinois Railroad
Thornton, Ill.
March 23, 1947

Location of Accident and Method of Operation

This accident occurred on that part of the railroad extending between Yard Center and Brewer, Ill., 108.5 miles, a double-track line in the vicinity of the point of accident, over which trains moving with the current of traffic are operated by timetable, train orders and an automatic block-signal system and an automatic train-stop system. The accident occurred on the southward main track 3.7 miles south of Yard Center, at a point 784 feet south of the station at Thornton, where the railroad is crossed at grade by Maria Street. From the north on the railroad there is a 1° curve to the left 700 feet, then a tangent 2,212 feet to the crossing and a considerable distance southward. The grade is 0.02 percent ascending southward.

Immediately south of the crossing a siding 4,443 feet long parallels the southward main track on the west. The north switch of this siding is 192 feet south of the crossing.

Maria Street intersects the railroad at an angle of 90°, and is surfaced with asphaltum to a width of 34.8 feet. The street is tangent throughout a distance of about 310 feet east of the crossing and some distance westward. The grade for westbound vehicles varies between 1.6 percent and 8.4 percent ascending throughout a distance of 75 feet, then it is, successively, 2.52 percent ascending 12 feet to the center-line of the northward main track, 1.15 percent ascending 13 feet to the centerline of the southward main track and 4.9 percent descending 26 feet westward. The distance between the track centers of the main tracks is 13.1 feet. The crossing is 16 feet wide. Planking 6 inches by 8 inches by 16 feet is located immediately inside and outside each rail of the southward main track. The area between the rails of the northward main track is surfaced with about 2 inches of gravel on an asphaltum base. The areas between the main tracks, between the inside planks of the southward main track and immediately west of the southward main track are surfaced with asphaltum. Flangeways 2-1/4 inches wide are provided.

A standard cross-buck railroad-crossing sign is located to the right of the direction of westbound traffic, 52.1 feet east of the centerline of the southward main track and 11.7 feet north of the centerline of Maria Street. This sign is mounted on a mast 9.7 feet above the level of the surface of the street, and bears the words "RAILROAD CROSSING" in black letters on a white background. A crossing-whistle sign for south-bound trains is located 3,155 feet north of the crossing.

There are four street crossings between Maria Street and the crossing-whistle sign.

Time-table special instructions read in part as follows:

* * *

Locomotive whistle and bell signals for highway crossings at grade must begin when engine is opposite whistle sign and be continued until engine has passed over crossing.

STANDARD WHISTLE SIGNAL FOR HIGHWAY CROSSINGS SHALL BE NOT LESS THAN TEN SECONDS DURATION AND CONSIST OF TWO LONG, ONE SHORT, AND ONE LONG BLASTS, THE LAST BLAST TO END WHEN ENGINE HAS PASSED OVER CROSSING.

* * *

The maximum authorized speed for the train involved was 55 miles per hour.

Description of Accident

The automobile involved was a 1935 Dodge four-door sedan, which bore 1946 Illinois license No. 1187095. The automobile was occupied by the driver and one other occupant. This vehicle, moving westward on Maria Street, entered upon the crossing, passed over the northward main track and was passing over the southward main track when the automobile stalled. Immediately afterward the automobile was struck by No. 91, and was demolished.

No. 91, a south-bound first-class passenger train, consisted of engine 1904, a 2-8-2 type, three baggage cars and one coach, in the order named. All cars were of steel construction. This train passed Thornton Jct., the last open office, 1.6 miles north of Thornton, at 11:02 p. m., on time, and while moving on the southward main track at an estimated speed of 55 miles per hour it struck an automobile on a grade crossing 784 feet south of the station at Thornton. The engine-truck wheels were derailed immediately south of the crossing, and these wheels continued in line with the track to the north siding-switch, where all wheels of the engine and the cars were derailed.

The engine and tender, remaining coupled, stopped on their left sides and across the tracks, with the front of the engine 537 feet south of the crossing. The first car stopped at the

rear of the tender and at an angle of about 45 degrees to it, and leaned to the east at an angle of about 15 degrees. The second, third and fourth cars stopped practically upright and in line with the track. The engine and the first car were badly damaged, and the remainder of the equipment was slightly damaged.

The engineer and the fireman were killed.

It was raining at the time of the accident, which occurred about 11:05 p. m.

During the 24-hour period beginning at 12:01 a. m., March 31, 1947, 7 automobiles, 1 truck and 43 trains passed over the crossing.

Discussion

No. 91 was approaching the crossing at a speed of about 55 miles per hour, in territory where the maximum authorized speed for this train was 55 miles per hour. The brakes of this train had been tested and had functioned properly en route. The members of the train crew were in the fourth car. The first these employees knew of anything being wrong was when the brakes were applied in emergency immediately prior to the accident. The engineer and the fireman were fatally injured in the accident, and it could not be determined when they first observed the stalled automobile on the crossing. A person who was in the vicinity of the crossing heard the engine-whistle signal sounded for the crossing.

The driver of the automobile and the other occupant said that the gear-shift mechanism was in position for forward low-gear movement when the motor stopped as the automobile was moving over the southward main track. An attempt was being made to start the motor when the occupants saw the headlight of the approaching train a few hundred feet distant. They alighted from the automobile just before the collision occurred.

Part of the wreckage of the stalled automobile became lodged under the engine truck, and the wheels of the engine truck became derailed immediately south of the crossing. The general derailment occurred when the derailed wheels of the engine truck encountered the frog of the north siding-switch.

Cause

It is found that this accident was caused by an automobile becoming stalled on a railroad-street grade crossing.

Dated at Washington, D. C., this twenty-fifth day of April, 1947.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,

Secretary.