Inv-2194

INTERSTATE COMMERCE COLLISSION

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WASHINGTON

REPORT OF THE DIRECTOR

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BUREAU OF SAFETY

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ACCIDENT OF THE

LEHICH VALLEY RAILROAD

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VEXIT JUNCTION, PA.

AUGUST 9, 1937

INVESTIGATION NO. 2194

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# SUMMARY

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Railroad:	Lehigh Valley
Date:	August 9, 1937
Location:	Vexit Junction, Pa.
Kind of accident:	Derailment
Train involved:	Freight
Train number:	Extra 429 East
Engine number:	429
Consist:	27 cars, caboose
Speed:	10-15 m.p.h.
Track:	ll <sup>0</sup> curve; 0.5 percent ascending grade
Weather:	Dark, cloudy
Time:	10:20 p.m.
Casualties:	2 killed: 1 injured
Cause:	Block of wood on rail

September 28, 1937.

To the Commission:

On August 9, 1937, there was a derailment of a freight train on the Iehigh Valley Railrona near Vexit Junction, Pa., which resulted in the death of two employees and the injury of one employee.

#### Location and method of operation

This accident occurred on the Ebervale Branch of the Mahanoy and Hazelton Division, extending between Harleigh Junction and Pink Ash Junction, Pa., a distance of 7.64 miles; in the vicinity of the point of accident this is a single-track freight line over which trains are operated by timetable and train orders, no block-signal system being in use. The derailment occurred at a point about 1/2 mile west of Vexit Junction and 25 feet eact of the center line of a state highway crossing known as Harleigh crossing. Approaching the point of accident from the west the track is tangent for a distance of 534 feet, then there is a compound curve to the left 1,056 feet in length with a maximum curvature of 14, the accident occurring on this curve at a point 846 feet from its western end, where the curvature is 11°. The prevailing grade is 0.5 percent ascending eastward.

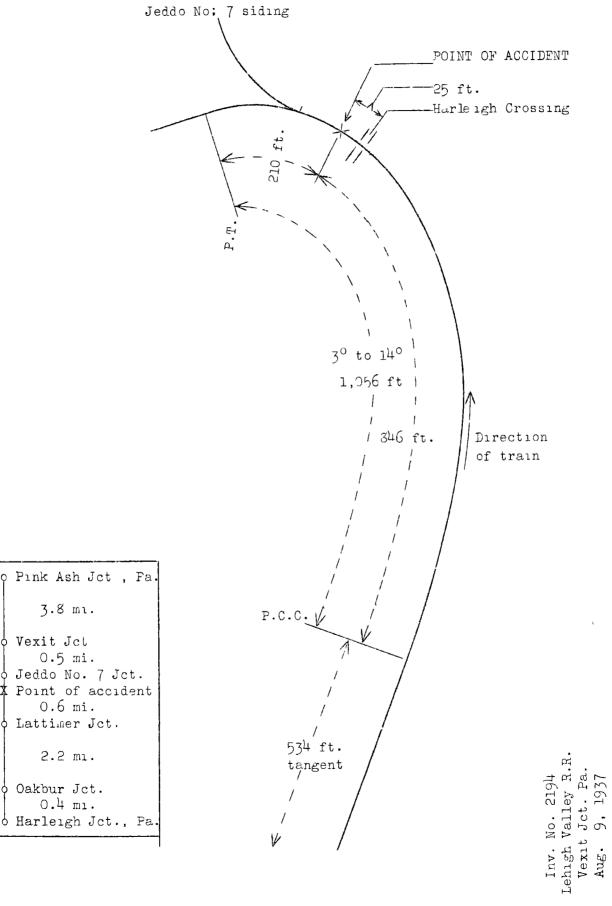
At the point of accident the track is laid with 136-pound rail, with an avorage of 18 ties to the rail length, fully tieplated, double-spiked, equipped with anti-creepers and ballasted with ashes; the track is foirly well maintained. The maximum authorized speed is 20 miles per hour.

At a point 46 feet east of the center line of Harleigh public-road crossing there is a facing-point switch for eastward movements leading off the main track toward the southeast to Jeddo No. 7 colliery siding.

A drizzling rain had been falling and it was dark and cloudy at the time of the accident, which occurred about 10:20 p.m.

#### Description

Extra 429 East consisted of 27 loaded cars and a caboose, hauled by engine 429, and was in charge of Conductor D. J. Dolan and Engineman Kreiger. This train left Harleigh Junction at 9:30 p.m., according to the train sheet, doubled the hill between that point and Oakbur Junction, 0.4 mile beyond, passed Lattimer Junction, 2.2 miles farther on, and was derailed just after passing over the Harleigh public-road crossing while traveling at a speed estimated to have been between 10 and 15 miles per hour.



3.8 mi. • Vexit Jct 0.5 mi. Jeddo No. 7 Jct. X Point of accident 0.6 mi. o Lattimer Jct. 2.2 mi. o Oakbur Jct. 0.4 m1. o Harleigh Jct., Pa -11-

Engine 429 stopped on its left side nearly reversed with its forward end on Jeddo No. 7 siding and its rear end on the main track, 176 feet east of the initial point of derailment; the tender remained coupled to the engine and stopped on its left side north of and parallel to the main track. The first car was derailed, but remained upright, and the forward truck of the second car was derailed. The employees killed were the engineman and head brakeman, and the employee injured was the fireman.

### Summary of evidence

Fireman Cassler stated that while ascending the grade approaching Harleigh road crossing the speed was between 10 and 15 miles per hour. He was on his seat box looking ahead, the head brakeman was sitting in front of him and the engineman was on the seat box on the right side of the cab. On reaching the crossing the driving wheels slipped, following which the engine lurched, was dorailed and turned over. Fireman Cassler did not know whether steam was being used at the time or whether the engineman had applied the brakes, or what action was taken, nor could he see any obstruction on the rail although the headlight was burning. The engine was in good condition and he did not notice anything unusual with the way it handled or its riding cualities en route prior to the accident. He did not notice any trespassers in the vicinity.

Conductor D. J. Dolan, Trainman Troy and Flagman Flexer wore in the caboose approaching the scene of the accident; the train was moving at a speed of about 15 miles per hour and the first they knew of anything wrong was when it suddenly stopped. The conductor at first thought that the train had parted on the ascending grade; he and the trainman walked ahead and found the engine overturned. Shortly thereafter Flagman Flexer went forward and found a block of wood, lying on the south side of the track, parallel to and outside the high rail of the curve, about half-way between the highway crossing and Jeddo switch No. 7; the block was crushed, as though it had been run over, and there were splinters on both sides of the rail. The conductor also saw the block of wood and described it as being about 15 by 5 by 2 1/2 inches. In the opinion of the conductor and flagman the block of wood on the rail caused the derailment.

Trainmaster Brewer arrived at the scene of the accident at 10:36 p.m., 16 minutes after its occurrence and examined the track in company with Road Foreman of Engines J. L. Dolan and Conductor D. J. Dolan. The trainmaster saw the block of wood lying between the crossing and Jeddo No. 7 switch parallel to and about 3 or 4 inches outside the high rail of the curve. There were splinters on each side of the high rail where the block was knocked off the track and marks on the spike heads outside the high rail of the curve appeared a few feet east of where the block was found. Examination of the engine and derailed cars disclosed no condition that would have caused or contributed to the accident. The switch was properly lined and locked for the main track with the tumbler or safety lock in proper position. Trainmaster Brewer was of the opinion that the derailment was caused by the block of wood on the outside rail of the curve.

Supervisor of Track Shimer stated that the small pieces and splinters of wood on the ground 25 feet east of the center line of Harleigh road crossing plainly indicated where the block had been, and the indications were that it was run over by the pony truck wheels; 5 fect east of that point there were indications on the outer edge of the high rail which showed where the wheel had dropped off. For a distance of several feet beyond that point, the spike heads were struck by the flange of the wheel. At a point 15 feet east of the switch point of Jeddo No. 7 switch, or 36 feet east of the point of derailment, marks on the right-hand switch rail showed where the pony truck wheel was pulled across that rail and then dropped to the inside of the rail. Flange marks appeared on the switch ties inside the lead rail. Beyond the frog the rails on both main line and siding were torn out. A check of the gauge and superelevation on the curve at the point of accident showed them to be in accordance with the requirements of the railroad. It was the opinion of Supervisor of Track Shimer that the derailment was caused by the block of wood placed on the high rail of the curve.

John Rodgers and Tony Tramma, automobile bus drivers, stated that bus passengers are often picked up at Harleigh crossing when the required crossing stop is made. On numerous occasions the bus drivers had observed passengers sitting on blocks of wood, placed upon the rails to avoid sitting directly on the rail. Occasionally some of the passengers would get up and start toward the bus, following which they would hastily return to the track and remove from the rail whatever object they had been sitting on.

Inspection of the track by the Commission's inspectors disclosed conditions to be practically as described by Supervisor of Track Shimer. There was no evidence of dragging equipment or any marks of derailment west of the initial point of accident. The block of wood involved was a piece of hemlock, 15 inches long, 4 inches wide and  $2\frac{1}{2}$  inches thick; it was plainly evident that it had been run over by a wheel. Inspection of engine 429 subsequent to the accident foiled to disclose any condition that would have caused or contributed to the derailment.

## Discussion

The investigation disclosed that track conditions were all right in the vicinity of the point of accident, and the superclevation and gauge of the curve involved were in accordance with the requirements of the railroad. No indication of dragging equipment or any marks of derailment were found west of the initial point of accident. Nothing was found about the condition of the engine that would have any bearing on the accident. No trespassers were observed in the vicinity. After the accident a block of hemlock wood, measuring 15 by 4 by  $2\frac{1}{2}$ inches, was found lying about 3 or 4 inches outside of and perallel to the south or high rail of the curve and it was plainly evident that this block of wood had been run over by a wheel, there being solinters on each side of the rail. Two automobile bus drivers tostified that passengers board the bus when the required stop is made for the crossing and on numerous occasions the bus drivers had seen passengers sitting on plocks of wood placed on the rail while awaiting the arrival of the bus.

#### Conclusion

This accident was caused by a block of wood on the high rail of a curve.

Rospectfully submitted,

W. J. PATTERSON

Director.