

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
DELAWARE, LACKAWANNA & WESTERN RAILROAD AT GLENBURN, PA.,
ON JULY 22, 1921.

September 17, 1921.

On July 22, 1921, there was a derailment of a passenger train on the Delaware, Lackawanna & Western Railroad at Glenburn, Pa., which resulted in the death of 2 employees, and the injury of 79 passengers, 3 mail clerks, and 2 employees. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

Location and method of operation.

This accident occurred on that part of the Scranton Division extending between Washington, N. J., and Binghamton, N. Y., a distance of 135.55 miles. It is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at a point approximately 3,000 feet east of the station of Glenburn, near the western end of a 2-degree curve to the left 1,584 feet long, the grade is 0.682 per cent descending westward. The track is laid with 105-pound rails, 33 feet in length, with 18 or 19 treated ties to the rail-length, ballasted with 18 inches of crushed stone. Tie plates and screw spikes are used, the gauge side of the low rail on curves being double-spiked. The track and roadbed were in good condition and well maintained. The weather was clear at the time of the accident, which occurred at about 2.25 p.m.

Description.

The train involved was westbound passenger train No. 3, in charge of Conductor Simrell and Engineman Coolbaugh. It

consisted of engine 1120, 1 mail and baggage car, 3 coaches, 1 dining car, 1 Pullman sleeping car, 2 Pullman parlor cars and 1 Pullman observation parlor car, in the order named, all of steel construction. The train left Scranton, Pa., 9.30 miles east of Glenburn and the last regular stop for passengers, at 2.01 p.m., left Clarks Summit, 2 53 miles from Glenburn, at 2.21 p.m., and was derailed while travelling at a speed estimated to have been about 50 miles an hour.

The leading pair of engine truck wheels were first derailed, after which the train continued a distance of more than 2,600 feet to the point where the derailed wheels came in contact with the trailing switch of a crossover connecting the two main tracks, west of this point the track was torn up and the forward portion of the train was derailed. The engine came to rest on its right side across both main tracks, with its rear end against an engine which was standing on the slow eastbound track, south of the two main tracks. The first four cars were derailed and considerably damaged. The employees killed were the engineman and fireman.

Summary of evidence.

The first knowledge members of the train crew had of anything wrong was when they felt the severe shocks at the time the train was entirely derailed, they estimated that the speed at the time was 45 or 50 miles an hour. On going back to flag after the accident, Flagman Giobons noticed wheel marks on the ties for a distance of about 1/2 mile, and at a point about 4 feet west of where he saw the first wheel mark

he found between the rails a nut which appeared to have been run over.

Examination of the nut, found by Flagman Gibbons, the original dimensions of which apparently had been $3/4$ inch in thickness and $1-3/4$ inches square, showed that the shape of its under side conformed to the curve of the running surface of the right or outer rail of the curve. There was also found on that rail a pronounced stain or impression of the same shape as the nut, which indicated where the nut had been at the time it was struck by the forward engine truck wheels, this point was a short distance east of where the derailed wheels first began to mark the ties. There was no impression on the wheel similar to that made on the rail. The nut was of a softer grade of steel than either the rail or wheel, apparently accounting for the fact that it made no pronounced indentations upon them. The marks on the ties between the point where the nut was found and the crossover switch where the wreckage piled up were not sufficiently severe to necessitate any repairs to the track, those made by the left wheels were more pronounced, while those made by the right wheels were very light, some of the ties not being marked.

Further investigation showed that there was a circular mark on the running surface of the left rail made by a washer; this washer was also recovered. Other nuts, as well as bolts, were found in the vicinity, the appearance of which indicated that at some previous time they had been run over

while on the rails.

Conclusion.

This accident was caused by a 3/4-inch nut being placed on the track by some unknown party.

All of the employees involved in this accident were experienced men. At the time of the accident the engine crew had been on duty about 1-1/2 hours, after more than 34 hours off duty, the train crew had been on duty about 4-1/2 hours, after more than 17 hours off duty.