

**In Re investigation of accident which  
occurred on the Lehigh Valley  
Railroad, Near Rockport,  
Pa., on November 12,  
1914.**

On November 12, 1914, there was a derailment on the Lehigh Valley Railroad near Rockport, Pa., resulting in the injury of 36 passengers, 2 of whom afterwards died, and 2 employees. After investigation of this accident, the Chief of the Division of Safety reports as follows:

The train involved in this accident was eastbound passenger train No. 2, en route from Buffalo, N. Y., to Jersey City, N. J. It consisted of one coach, one combination baggage and smoking car, one coach, three Pullman sleeping cars and one baggage car, in the order named, hauled by locomotive No. 2019 and was in charge of Conductor Bentley and Engineer Snapp. All the cars were of all-steel construction excepting the first sleeping car and the baggage car, which were of wood. Train No. 2 left Wilkes-Barre, Pa., at 5.37 a.m., 40 minutes late, passed Tannery, the L. & open telegraph office, 32 miles distant from Wilkes-Barre, at 6.40 a.m., 35 minutes late, and at 6.47 a.m. was derailed near, or at its Mud Run station, about five miles beyond Tannery, while running at a speed estimated to have been about 30 miles per hour.

After derailment the engine, which was the first to be derailed, crossed the southbound track and went down the embankment on the left side of the track, the tender stopping at a point about 50 feet beyond the engine on the same side of the track. The first car in the train slid end-wise down the steep embankment on the right side of the track, while the second and third cars went off the track on the left side, one end of each remaining on the roadway. The fourth

car fouled the westbound track, tilted to one side at an angle of about 40 degrees. With the exception of the forward trucks of the fifth car, none of the remaining cars in the train was derailed.

This part of the Lehigh Valley Railroad is a double-track line, train movements being protected by the automatic block signal system. The track is laid with 100-pound rails 33 feet in length, with about 18 or 19 untreated oak ties under each rail, double-spiked on one side and single-spiked on the other. Tie plates and anti-fail creepers are used on all ties. The ballast is of crushed stone about 12 inches in thickness, with about 4 feet of cinder filling underneath. The point of derailment was near the middle of a curve of 10 degrees leading to the right, 1288 feet in length, on a descending grade for eastbound trains of about one-half of one per cent.

The first indications of derailment found on the track were at a point about 185 feet east of the station where the leaving end of a rail on the outside of the curve had been torn loose. The following rail had been torn out while the next three or four rails were bent or broken. The inside rail remained intact throughout.

The track was examined with track gauge and level for a distance of 500 feet west of the point of derailment, while track levels were taken for an additional distance of 2000 feet west thereof. This examination showed the maximum gauge to be 4 feet, 8 15/16 inches, with a minimum of 4 ft. 8 1/2 inches. The track levels varied in proportion to the curvature, the superlevation at the point of derailment being 7 9/16 inches. The section force in charge of the section in which the accident occurred, which is 3 3/4 miles in length, consists of a foreman, assistant foreman, seven laborers and two trackwalkers. The track is patrolled night and day by the trackwalkers. The night

trackwalker stated that at about 5.45 a.m. he passed the point where train No. 2 was afterwards derailed, at which time he found nothing wrong with the track. The Division Engineer, Engineer of Maintenance of Way, and Section Foreman, as well as the Inspectors of the Commission, made careful examination of the track but could find nothing which could possibly have caused the derailment.

The Assistant Superintendent of Motive Power stated that he examined the engine trucks, wheel glances and such other parts as could be found and also made a thorough examination of the driving wheels, trailing wheels, etc., but found nothing which he thought could have caused the derailment, neither did he find anything that dropped from the engine and caused the derailment. From his statement it further appeared that at Sayre, Pa., the point at which locomotive No. 2019 was attached to train No. 2, careful inspection was made before it started out on its run and it was in good condition at that time.

When interviewed at the hospital, Engineman Knapp stated that before starting on this run he examined the locomotive and found it to be in good condition. Starting around the curve approaching the point of derailment the speed of his train was about 30 miles per hour, at which time the engine was not working steam and the air brakes had been applied. As the train proceeded around the curve he thought something knocked off both cylinder cocks and at the same time the locomotive lurched heavily to one side. He at once applied the emergency air brakes; something struck him and he remembered nothing more.

The testimony of the other employees on this train shed no additional light as to the cause of the accident, while the statements of every one concerned indicated that Engineman Knapp was not operating his train in excess of the speed of 30 miles per hour allowed while rounding this curve.

The cause of this accident could not be definitely determined. The track was found to be in good condition and the superelevation of the outside rail of the curve was sufficient for the rate of speed at which the evidence showed this train was running at the time of the derailment. Although nothing was found that could have caused the derailment, yet from the statement of the engineman it would appear that the locomotive must have run over some obstruction on the track, probably on the outside rail of the curve, which caused the driving wheels of the locomotive to raise up enough to clear the outside rail.