No. 117

February 8, 1913.

In re investigation of accident on the Wabash Railroad near Detroit, Michigan, on January 2, 1913.

On January 2, 1913, there was a derailment of a freight train on the Wabash Railroad, near Detroit, Mich., resulting in the death of the engineer, the fireman and the head brakeman. After an investigation of this accident and of the circumstances in connection therewith, the Chief Inspector of Safety Appliances reports as follows:

The derailed train, consisting of 41 loaded cars and a caboose, hauled by engine No. 2042, in charge of Conductor Treacy and Engineer Nicholson, left Toledo, Ohio, at 9:40 a.m., eastbound, for Delray Yard, Detroit, Mich., and at the time of the derailment, which occurred at 10:17 p.m., was running at a speed of 18 to 20 miles per hour. It had then arrived within 3½ miles of its destination.

The engine and tender and the first 8 cars behind the tender were derailed, the five cars next in order remaining on the rails, while the 7 following cars, the 14th to the 20th, inclusive, left the track. The engine and tender turned over on their sides in a ditch running parallel with the main line, and both were considerably damaged. Of the 15 cars derailed, 7 were demolished and the remaining 8 were badly damaged.

That portion of the Wabash Railroad on which this accident occurred is a double track line. The track is practically level and straight for several miles leading to the point where the derailment occurred. It is laid with 80-pound rails, 33 feet long, with 17 or 18 oak ties to the rail, and is rock ballasted. The rails are joined with 4-bolt rail splices and are spiked under the staggered method. No block signals are used, and there are no distant signals to protect the switches and crossovers at the point of the derailment.

An examination of the track after the accident showed that the throw rail of a trailing crossover switch was broken squarely off 17 feet 9 inches west of the switch point. From marks on the ties it is evident that the engine left the rails about 4 inches east of the point of fracture. The engine ran 160 feet before turning over. Both main track rails were turned outward.

The break in the rail was new and there was no indication of a flaw. The inside corner of the top of the rail, however, was chipped as if it had been struck by the flange of a wheel.

East-bound passenger train No. 4 passed over this track at 9:05 p.m., about one hour and twelve minutes previous to the derailment, but no evidence of anything wrong with this switch point was noticed by the employees on that train.

The switch rail was laid in March, 1911. The roadbed and ties were at the time of the accident in good condition and the track was well maintained.

An examination of the truck and driving wheels on the locomotive showed that they were in good condition, and there was nothing to indicate that any part of the engine had dropped down and caused the derailment.

This accident was evidently caused by a broken throw rail on a trailing point switch. What caused the rail to break, and whether it was broken by the engine of the derailed train, or by train No. 4, which was the last train that passed over the track previous to the derailment, was not determined.

None of the employees was at the time of the accident on duty in violation of the Hours of Service Act.