

In re Investigation of an accident that occurred on the Chicago, St. Paul, Minneapolis & Omaha Railway at Sydney, Wis., on April 16, 1917.

April 26, 1917.

On April 16, 1917, there was a derailment of a passenger train on the Chicago, St. Paul, Minneapolis & Omaha Railway, at Sydney, Wis., which resulted in the death of the engineer and the injury of the fireman and baggage-master. After investigation of this accident this Chief of the Division of Safety submits the following report:

The branch on which this accident occurred is a single-track line. No block signal system is in use, trains being handled by time-table and train orders. The track is laid with 60-pound rails, 30 feet in length, with about 20 cedar and oak ties under each rail, single spiked, and ballasted with sand and gravel, varying from two to four feet in depth. Approaching the point of derailment from the west, there is about one-half mile of tangent, followed by a curve to the right of 4 degrees 30 minutes, this curve being about 1,700 feet in length. The point of derailment was on this curve, about 70 feet west of its eastern end. Approaching Sydney the grade is ascending for nearly two miles, but from Sydney eastward to the point of derailment, a distance of about 800 feet, the grade is about one per cent descending. The weather was clear.

Eastbound passenger train No. 8 consisted of 1 baggage car, 1 smoking car, 1 chair car and 1 Pullman sleeping car. The last car was of all-steel construction, while the others were of wooden construction. This train was hauled by locomotive 382, and was in charge of Conductor Lyons and Engineer Burns. It left Merrillan, which is the last open telegraph office, at 11.34 p. m., and at 12.03 a. m. was derailed just east of Sydney, which is 8.7 miles east of Merrillan, while traveling at a speed of about 25 miles an hour.

The locomotive ran on the ties a distance of about 190 feet until it came in contact with the switch rail at the east end of the siding; this turned it to the left, after which it ran off the ends of the ties on the left side of the track and turned over on its side at a point 310 feet beyond the initial point of derailment. The baggage car and the forward truck of the smoking car were derailed, but the other cars remained upright.

Fireman Valaska stated that the speed was about 25

miles an hour when he felt the locomotive leave the rails, and at the same time the engineman applied the air brakes. He thought the locomotive would have remained upright if it had not struck the switch rail and thus been diverted to the left, causing it to tip over when it ran off the fill, which varied in depth from three to eight feet.

Examination of the track in the vicinity of the point of derailment, resulted in the discovery of an iron nut, 2 inches square and 1-1/8 inches thick, this nut being found at a point about 3 feet from the first mark of derailment and about 6 inches from the end of a tie. This nut was battered and flattened, the bottom having been battered into a curved shape, the contour of which fitted exactly the contour of the top of the rail at that point. A spot was found on the outside rail of the curve, and also on the left lead wheel of the engine truck, which looked as if they had been caused by the nut being run over while it was on the rail. These spots were carefully examined by the aid of a magnifying glass and confirmed this opinion. While the marks on the nut, from being run over, were new, the threads on the inside were badly corroded, and indicated that it had not fallen from any part of the machinery of the locomotive, but that it apparently had been along the track for some time, exposed to the weather, and had been picked up and placed on the rail by some unknown party. Further examination of the track for a distance of one mile back from the point of derailment failed to disclose anything which could have caused the derailment.

This accident is believed to have been caused by an iron nut having been placed on the rail on the outside of the curve, resulting in the derailment of the locomotive when the nut was encountered by the left leading engine-truck wheel. The investigation did not develop who was responsible for this nut being placed on the track.