

IN RE INVESTIGATION OF ACCIDENT WHICH OCCURRED ON THE AHNAPPEE
& WESTERN RAILWAY NEAR FORESTVILLE, WIS., ON MARCH 29, 1915.

On March 29, 1915, there was a derailment of a freight train on the Ahnapee & Western Railway near Forestville, Wis., which resulted in the death of the engineer and the injury of the fireman and a trespasser. After investigation of this accident, the Chief of the Division of Safety reports as follows:

The train involved in this accident was westbound second class train No. 15, consisting of 8 cars and a caboose, hauled by locomotive No. 36, and was in charge of Engineer Buttrick and Conductor Richards. It left Maplewood, Wis., at 11.20 a. m., on time, with the locomotive being operated backing up, and at about 11.30 a. m. was derailed at a point about 3 miles beyond Maplewood, while running at a speed believed to have been about 25 miles per hour.

The locomotive and first four cars were derailed, the locomotive being derailed to the right and turned around in the direction opposite from that in which it was headed at the time of the accident, coming to rest nearly 250 feet beyond the initial point of derailment.

This part of the Ahnapee & Western Railway is a single track line. No block signal system is in use, trains being operated by train orders and time-card rights. The accident occurred on straight track, at the foot of a descending grade of 1 per cent, more than half a mile in length. The track is laid with 70-pound rails, 33 feet in length, single spiked to 16 or 13 untreated ties under each rail, ballasted with about 1 foot of gravel. No tie plates are used. The speed of locomotive when backing up is limited to 15 miles per hour.

Examination of the track showed that the first indication of the derailment was a flange mark made by the tender wheels on the right rail, the flange mark being slightly over 13 feet in length from its eastern end to the point where the wheel dropped off on to the ties. The derailment of the tender was followed by the derailment of the locomotive, which ran along on the ties for a distance of about 237 feet and came to rest on its side at the bottom of the fill, turned end for end. Careful examination of the wheels of the derailed tender found them to be in good condition and no defect in the tender was discovered that could have contributed to the accident. An examination of the track for a distance of about three-fourths of a mile approaching the point of derailment found the gauge to be good, but the surface was found to be irregular in spots due to the frost coming out of the ground.

Conductor Richards stated that his train left Maplewood practically on time at 11.30 a. m., although it might have been a minute or two before or after that time, and while he did not look at his watch at the time the accident occurred, he was sure that it was about 11.30 a. m. His first intimation of the accident was when he felt the air brakes applied in emergency; the speed at the time was about 25 miles per hour. He had never seen any bulletin or rule limiting the speed of trains while backing up over this part of the road, but understood from what engineers had said that there was a bulletin limiting the speed under such conditions to 15 miles per hour. He stated, however, that during the five years he had had this particular run he had had many different engineers and that the practice had been to run about 25 miles per hour, this speed sometimes being exceeded. He stated further that on the day before the accident the general manager of the railway had been talking with him and had told him that the speed limits must be observed.

Fireman Ferris stated that about two years previously he had seen in the roundhouse a bulletin providing that the speed of locomotives when backing up should be restricted to 15 miles per hour. He said that the practice when backing up was to run at the rate of 15 miles per hour and sometimes 20 miles per hour.

Brakeman Reiter was riding in the caboose at the time of the accident and estimated the speed at that time to have been from 20 to 25 miles per hour.

No copy could be found of the bulletin which had been issued restricting the speed of trains when backing up to 15 miles per hour. From the statements of the employees, however, it clearly appeared that such a bulletin had been issued and that employees fully understood that when trains were being operated with the locomotive backing up, the speed was not to exceed 15 miles per hour.

This investigation developed that this particular train had been operated from Maplewood to Algona, a distance of 11.2 miles, with the engine backing up, for the past 9 years, indicating that movements of this character were customary, and in view of this fact the statement of the conductor that the practice when backing up was to run at a speed of 25 miles per hour would make it appear that the speed restriction had not been properly observed nor enforced.

This accident was caused by the derailment of the tender of the locomotive which was hauling train No. 15, while backing up, uneven and irregular track conditions and speed inconsistent with safety being the direct cause of the derailment.

On account of the frost coming out of the ground the track was more or less uneven and heaved under the weight of passing trains. This condition, together with the fact that the engine was backing up at a speed of 25 miles per hour, caused the tender to rock and sway violently and resulted in one of the wheels mounting the rail.

As Engineman Buttrick was killed in the accident, there was no way of knowing definitely whether or not he knew of the bulletin which had been posted in the roundhouse 2 years previously, limiting the speed to 15 miles per hour when backing up, yet from the statement of the conductor it appears that other enginemen knew of such a speed restriction, and from the statement of the fireman it appeared that notice of such a speed restriction had been placed in all roundhouses where all enginemen could see it.

The failure properly to observe speed restrictions has been the subject of comment in several previous reports and until such restrictions as are provided to insure safety when trains are backing up, or where irregular and uneven track conditions exist, are observed, such accidents as this may be expected to occur.

All of the employees involved in this accident were experienced men with clear records and at the time of the accident had been on duty 6 hours and 30 minutes.