Ottohison ATTE COMMERCE COMMER

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURREDCENT THE MICHIGAN CENTRAL RAILROAD, NEAR CLARENDESSMICH & MARCH 5. 1920.

SP S S Street

May 3, 1920

On March 5, 1920, there was a derailment of a passenger train on the Michigan Central Railroad near Clarendon, Nich., which resulted in the death of 1 employee and the injury of 6 passengers. After investigation of this accident the Chief of the Bureau of Safety reports as follows:

This accident occurred on the Air Line Division of the Michigan Central Railroad, a single-track line, extending between Jackson, Mich., and Niles, Mich., a distance of 104.3 miles. Trains are operated by timetable and train orders, no block signal system being in use. West of the point of accident the track is tangent for several miles, the grade is .23% ascending for eastbound trains. The track is laid with 100 pound rails, with 19 hardwood ties to the rail, ballasted with gravel and cinders. The weather was glear.

Eastbound passenger train No. 62 consisted of engine 8194, I combination mail and baggage car. I express car, I smoking car and I coach, in charge of Conductor Hickman and Engineman Fick. It left Niles at 6.20 a.m., on time, passed Tekonsha, the last open telegraph station west of the point of accident, at 9.00 a.m., 42 minutes late, and at 9.10 a.m. was derailed at a coint about one fourth of a mile west of Clarendon while traveling at a speed estimated to have been from 30 to 35 miles an hour.

The engine and first two cars were not derailed. The smoking oar was derailed but remained coupled to the express car.

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inclined at an angle of about 45 degrees. The day ocach came to rest on its right side, about 15 feet south of the track and nearly parallel withit. The employee killed was the brakeman.

Examination of the track after the accident disclosed a broken rail on the south or right side of the track. For about 10 feet at the receiving end the rail was broken into small pieces, many of which were not more than three inches in length. About 21 feet of the leaving end of the rail remained intact, secured by one bolt to the adjoining rail on the east end. West of this coint there were no signs of anything having been dragging on the track or of any wheels having been derailed.

Eastbound freight train extra 7913 passed over this portion of the track shead of train No. 62, having massed Tekonsha at 7.30 a.m., the engineman of that train did not notice anything wrong with the track. The engine crow of train No. 62 did not notice anything indicating a broken rail or low joint, their first intimation of anything wrong being when the air brakes were applied in emergency by the derailment of the train. The baggage master riding in the first car, heard a click and felt a jar which he recognized as being due to a broken rail.

Investigation developed that after the section foreman had renewed two rails at another point on his section he had noticed that this particular rail needed changing, the rail having a battered end. He obtained a rail to put in its place, and after completing his preparations for making the change

work had been completed. At this time train No. 62 was in sight, and as he considered the rail safe for the passage of the train he gave instructions to the flagman who was starting west to let train No. 62 pass and then to stop any other train which might approach. The section foremen thought that when the rail failed under the train the rear car was the first to be derailed and that it pulled the smoking car off the rails.

In preparing to change the rail the section foreman had drawn two-thirds of the spikes on the inside of the rail, leaving every third spike in place, and had removed one-half of the anglebar bolts; none of the arikes on the outside of the rail had been disturbed. This was the usual method followed in reparing to change rails and it was considered safe provided the rail to be changed was in such condition that it could be passedrover by a train without danger of breaking under the train. particular case the receiving end of the rail was battered, but not enough for the section foreman to consider it asngerous. while the roadmaster, who was a passenger on the train said he was satisfied that there had been no visible break in the rail: the reason it was being changed was to avoid damage to the rail edjacent to the battered ent. It was the nolicy to change rails having defects before they had an opportunity of developing to the point where they would be dangerous; about 50 rails had been changed on this section during the winter.

The rail which failed was a 100-pound rail, rolled in 1904, and laid in main track in the same year. In 1913, it was removed to be reclaimed by sawing off the ends, which reduced its length from 35 feet to about 21 feet. It was laid in the track on the Air Line Division in 1913, remaining there until its failure under train No. 62, making a total of appreximately 16 years' mervice

This accident was caused by a broken rail. This rail probably was fractured under the engine hauling train No. 62, but the reason for its failure was not definitely ascertained.

All of the employees involved were experienced men, and none had been on duty in violation of any of the provisions of the hours of service law.