

In re investigation of an accident which occurred on the Greenville & Western Railroad near Altamont, S. C., on November 24, 1916.

December 16, 1916.

On November 24, 1916, there was a derailment of a passenger train on the Greenville & Western Railroad near Altamont, S. C., which resulted in the injury of 1 passenger, 1 employee on duty and 1 employee off duty. After investigation of this accident the Chief of the Division of Safety reports as follows:

The Greenville & Western Railroad is a single track road, extending from Greenville, S. C., northward to River Falls, S. C., a distance of 23 miles. Train movements are governed by time-table and train orders. The accident occurred on what is known as Edwards Trestle, approaching which from Altamont, a station about one-half mile south, the track is straight. The grade for about 1,500 feet from Altamont is 1.6 percent descending for northbound trains, and it then reduces to about .06 percent to the point of accident. Edwards Trestle is about 450 feet in length, extending over a ravine, its greatest height being about 40 feet. The weather at the time of the accident was clear.

The train involved was northbound passenger train No. 2, consisting of locomotive 15, 1 coach and 1 combination coach and baggage car, and was in charge of Conductor Veron and Engineman Armstrong. This train left Greenville, en route to River Falls, at 7:30 a. m., 30 minutes late, and for the first several miles it was unable to make schedule time on account of slippery rails. It made its last stop prior to derailment at Altamont station and, at about 8:50 a. m., was derailed one-half mile north of Altamont while running at a speed estimated to have been from 15 to 20 miles an hour.

The track is laid with 60-pound rails, 30 feet in length. There are about 12 to 16 assorted soft and hardwood ties to the rail and no tie plates are in use. The ballast consists of red clay. The rails and roadbed were in fair condition; the surface of the track was rough, the alignment was bad, and in some places it was as much as 2 inches out of gauge. The ties at the place of accident were so decayed that only 15 of the old ties were used out of a total of 93 ties needed in rebuilding the track after the derailment.

The locomotive was not derailed, but when the first coach was about 1-1/2 times its length on the trestle it tipped over to the left or west and came to rest bottom side up in the ravine.

Both trucks remained in place, while the body of the car was crushed almost flat. All of the injured were in this car and their escape from death was due to a depression in the ground at the point at which the car came to rest, the floor of the overturned car forming a bridge over them. The rear car was derailed, coming to a stop with the front end just on the end of the trestle, while the rear truck swung around to the left, carrying the track several feet to the west of the roadbed. This car remained upright on its trucks with both platforms and trucks slightly damaged.

A careful examination was made of the equipment involved, but no defect was found which could have contributed to the derailment.

The first wheel marks were found about 220 feet south of the trestle, indicating that one of the right hand wheels left the track on the inside of the right hand rail and ran along close to the rail for a distance of more than 100 feet, the flange of the wheel marking the ties, and the rim marking the base of the rail. These marks were then lost in the general destruction of the track caused by the derailed cars. It is believed that the rear truck of the leading coach was the first to leave the track, and that approaching the trestle this truck veered off to the left over and beyond the guard on the outer ends of the ties, turning over as it fell from the trestle.

Conductor Veron stated that when the accident occurred he was engaged in sweeping and cleaning the interior of the second car and that the first intimation he had of the impending accident was a jar. He did not believe that this jar was caused by the car in which he was riding and upon looking ahead he discovered that the car ahead was missing, the car in which he was riding being derailed immediately thereafter. He made an attempt to get to the emergency brake but did not succeed in applying it before the train stopped. He stated that he made no examination of the track or equipment following the accident and was therefore unable to give any information concerning its condition, but stated that prior to the accident he thought the track was in fair condition. He admitted, however, that his train has been derailed a number of times on account of the bad condition of the track. Conductor Veron said that he was paying no attention to the speed of the train at the time it was derailed, but thought it was 15 or 20 miles an hour, and he did not think that this rate of speed was unusually high.

Engineman Armstrong stated that after leaving Greenville on the morning of the accident he made several stops before reaching Altamont and the brakes were working properly. On leaving Altamont he gave his train a start and then shut off steam, allowing the train to drift to within a short distance of the trestle. When he again began to use steam, and as he opened the throttle, he felt an unusual pull from behind, and upon looking back saw that the first car was derailed. He then saw the car break away from the locomotive and fall to the west over the side of the trestle. He stated that he reached for the brake valve but the brakes had been applied by the parting of the air hose, which brought his train to a stop a short distance north of where the car went over the trestle. Engineman Armstrong further stated that he made a close examination of the track following the accident and found where the wheel had dropped inside the right hand rail, and he thought the derailment was caused by spreading track. He also made a close examination of the derailed cars in search of a loose wheel, but found no defect in the equipment. He stated further that the speed of his train at the time of the derailment was from 15 to 18 miles an hour, and that the maximum speed allowed was 15 miles per hour.

Fireman Davis stated that the first intimation he had of the derailment was a little jerk and when he looked back he saw the first car turning over. He immediately told the engineman to stop the train. He thought the speed at the time was about 15 miles an hour.

Superintendent Oglesby stated that he made a personal inspection of the track about 10 days prior to this derailment, and in his opinion it was in fair condition at that time. On the completion of his trip of inspection he instructed the roadmaster to go over the entire line and inspect the ties and gauge the track. He also stated that there were quite a few derailments in July of this year, due to heavy rains, but he believed two of the derailments were caused by spreading rails due to rotten cross-ties. He further stated that he had personally instructed the conductor and engineman not to exceed a speed of 12 miles an hour over any portion of the road, but that at the time of the accident no special slow order was in effect over the portion of the track where the derailment took place.

Roadmaster Rembo stated that he was riding in the first car when it was derailed and that the speed at the time was about 20 miles an hour. He also stated that he had not inspected the track at this point lately, but that the track had been gauged about 2 weeks previously and he thought it was in fair condition.

The cause of this accident was undoubtedly spreading rails, due to the decayed condition of the cross-ties. While the Greenville & Western Railroad is only a small railroad, 23 miles in length, and operates but 2 trains each way daily, the existence of such track conditions as existed at the point of derailment is a menace to the traveling public, and, in order to provide proper safety, vigorous measures toward remedying such conditions should be taken at once.

The total collapse of the car which went over the side of the trestle was due to its age and frail wooden construction.