

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
CHARLESTON & WESTERN CAROLINA RAILWAY NEAR BEECH ISLAND,
S. C., ON MAY 20, 1921.

June 17, 1921.

On May 20, 1921, there was a derailment of an Atlantic Coast Line passenger train on the track of the Charleston & Western Carolina Railway near Beech Island, S. C., which resulted in the death of 1 employee, and the injury of 3 passengers, 1 mail clerk, 1 express messenger and 1 employee. This accident was investigated in conjunction with representatives of the South Carolina Railroad Commission. As a result of this investigation the Chief of the Bureau of Safety reports as follows

Location and method of operation.

This accident occurred on that part of the Charleston & Western Carolina Railway extending between Augusta, Ga., and Robbins, S. C., a distance of 28.8 miles, this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a point about $1\frac{1}{2}$ miles west of Beech Island. Approaching the point of accident from the west the track is tangent for a distance of 1,817 feet, the grade at the point of accident is slightly ascending for eastbound trains. The track in this vicinity is laid with 80-pound rails, 33 feet in length, single-spiked with an average of about 18 to 20 pine, cypress and oak ties to the rail, and ballasted with gravel and cinders. At the point of accident the track is on a small fill located immediately east of a

short pile-bent trestles; the accident occurred at a point about 29 feet east of this trestle. The weather was cloudy at the time of the accident, which occurred at about 3.15 a.m.

Description.

Eastbound passenger train No. 38 consisted of 2 express cars, 1 combination mail and baggage car, 2 coaches, and 2 Pullman sleeping cars, in the order named, hauled by engine 230, and was in charge of Conductor Timmerman and Engineman Temple. Train No. 38 left East Boundary, about 3 miles west of the point of accident and the last open telegraph office, at 3.05 a.m., 15 minutes late, and was derailed near Beech Island while running at an estimated speed of about 20 miles per hour.

Engine 230 was derailed to the right and came to rest down the embankment on its left side, approximately 200 feet beyond the point of derailment. The first two cars and the forward truck of the third car were derailed, the first and second cars turning over on their right sides. The engine and first two cars were considerably damaged. The employee killed was the engineman.

Summary of evidence.

Fireman Josey said the speed had been reduced to 3 or 4 miles an hour over the Savannah River trestle, less than half a mile from the point of accident. The engineman had sounded a road-crossing whistle signal and the fireman was standing up ringing the bell when he felt the engine derail,

at which time the engineman applied the air brakes in emergency. Baggage Master Matthews said the first thing he noticed was the application of the brakes, while Conductor Timmerman first felt a heavy jar, followed by several other jars in quick succession.

Examination of the track by Conductor Timmerman and Baggage Master Matthews, in company with one of the Commission's inspectors who was a passenger on the train, disclosed that the angle bars had been removed from the joints at each end of a rail on the right side of the track, the appearance of the bolts and nuts indicating that they had been removed with a track wrench; it was also found that some of the spikes had been pulled. The loosened rail had been moved forward 10 or 15 feet, but it was not ascertained whether this was done at the time it was loosened or by the derailed equipment. The first wheel mark appeared on the third tie east of the west end of the disconnected rail, while from this point to where the engine came to rest the track was practically demolished.

On the night of May 19, a section tool house of the Southern Railway was entered and a spike claw bar and nut wrench stolen. A few days after the derailment these tools were found on the north side of the track, about 50 yards east of the point of accident, and were identified as the stolen property.

The last train to pass the point of accident was west-bound passenger train No. 37; this train passed the point of accident at about 1.35 a.m., and at that time nothing unusual was noticed by any of the members of the crew.

Conclusions.

This accident was caused by the malicious removing by some unknown party of the angle bars at each end of a rail.

The investigation clearly developed that the angle-bar bolts had been taken out and the angle bars removed, also that some of the spikes had been pulled. After the accident the leaving end of the rail was found to be bent, but there were no flange marks or abrasions on its receiving end, and it is believed it remained in place in the track in a loosened condition until it was struck by train No. 38.

The members of the crew of train No. 38 were experienced employees, at the time of the accident they had been on duty less than 2 hours, previous to which they had been off duty 23 hours or more.