

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ATLANTA, BIRMINGHAM & ATLANTIC RAILWAY NEAR WOODBURY, GA., ON MARCH 28, 1922.

April 19, 1923.

To the Commission:

On March 28, 1922, there was a derailment of a freight train on the Atlanta, Birmingham & Atlantic Railway near Woodbury, Ga., which resulted in the death of 3 employees and the injury of 1 employee.

Location and method of operation.

This accident occurred on that part of the Birmingham Division extending between Atlanta and Manchester, Ga., a distance of 78.2 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 speed of fast freight trains, one of which is involved in this accident, is restricted to 30 miles an hour. The accident occurred at a point about 51 feet west of the west end of Mill Creek Bridge, which is a 41-foot plate girder structure. Approaching this point from the west, there is a 4-degree curve to the left 2,562 feet in length, the accident occurring on the curve about 600 feet from its leaving end. The grade is descending eastward for a considerable distance, the maximum being 0.34 per cent. In the immediate vicinity of the point of accident the track is on a fill with a maximum depth of 21 feet. It is laid with 80-pound rails, 33 feet in length, single-spiked to an average of about 21 ties to the rail-length, ballasted with from 6 to 10 inches of slag. Some of the ties are treated, while tie plates are used on curves. The gauge and elevation are maintained in good condition. The weather was clear when the accident occurred, which was at about 11.28 p.m.

Description.

The train involved in this accident was eastbound freight train No. 92. At the time of accident it consisted of 30 cars and a caboose, hauled by engine 112 and was in charge of Conductor Coulter and Engineman Greene. This train left Bellwood Yard, Atlanta, according to the train sheet, at 7.45 p.m., on time, left Woodbury, about $3\frac{1}{2}$ miles from the point of accident, at 11.30 p.m., on time, and was derailed at about 11.28 p.m., while traveling at a speed estimated to have been about 25 miles an hour.

The engine was derailed to the right, ran across the bridge on the ties, and then went down the embankment and turned over on its right side, the front end of the engine being 193 feet from the point of derailment. The first 12 cars were derailed and piled up within this distance, some going off the bridge, which sustained only slight damage except for the destruction of the bridge ties. The employees killed were the engineman and fireman.

Summary of evidence.

Examination of the track showed that the receiving end of a rail on the outside of the curve had been loosened. The tie plates were still in place on five of the first seven ties under this end of the rail, being held in position by the outside spikes, and there were numerous flange marks on these tie plates where wheels had run over them after dropping off the end of the preceding rail. All the inside spikes had been drawn, while there were fresh claw bar marks on the under sides of the spike heads, as well as plain marks on the ties of the heel of the claw bar, adjacent to the spike locations. The threads of the angle-bar bolts also showed that the nuts had been recently removed and the nuts bore marks of the wrench used in removing them. The spikes and nuts which were removed were found down the embankment on the outside of the curve. When the receiving end of this rail was loosened, it was moved inward towards the center line of the track. The first mark on the rail was a flange mark on the end, at the outside edge of the running surface, while about a foot from the end there were marks on the outside of the head where it apparently had been struck in knocking it loose prior to the occurrence of the accident. Flange marks were present on the outside of the web and base of the rail, apparently made when the rail was thrown out of the track after some of the equipment had been derailed.

Examination was made of the track for a distance of half a mile approaching the point of accident, and while a few defective ties and loose spikes were found, they were so distributed that the track could be considered in good condition for the traffic and rates of speed at which trains are operated. This examination failed to disclose any marks on the rails or ties to indicate that there had been any dragging equipment.

Head Brakeman Stewart was unable to attend the investigation on account of injuries, but in a signed statement said he was shoveling down coal in the tender, and that at the time of derailment it seemed to drop off the end of a rail. Engineman Greene was conscious immediately after the occurrence of the accident, and told him he had seen the

opening in the rail, but that it was then too late to stop. Conductor Coulter made no examination of the track, while the flagman went back to protect the rear of his train. Eastbound passenger train No. 4, due to leave Woodbury at 11.28 p.m., arrived shortly after the occurrence of the accident. Engineman Cosby and Conductor Ross, in charge of train No. 4, examined the tracks and found plain evidence that a rail had been disconnected, the engineman said the outside angle bar was still in place, while the inside angle bar and some of the bolts were between the rails near the joint. Superintendent Whittaker also talked with Engineman Greene before the latter's death, and said the engineman told him he saw a man run down the embankment near where the engine was derailed, also that the engine seemed to drop down on the ties. Statements by the assistant superintendent, road foreman of engines, roadmaster and section foreman, as well as by deputy sheriffs and several citizens who came to the scene of accident, were to the effect that there was plain evidence of the track having been tampered with.

Engine 112 had been inspected before it departed from Atlanta and found to be in good condition. Careful examination of the engine after the accident showed it to be in good condition, and failed to disclose anything which could have contributed to the accident.

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Conclusions.

This accident was caused by malicious tampering with the track.

The evidence is clear that spikes and angle-bar bolts had been removed, and a rail displaced so that when train No. 92 approached, the engine and cars dropped off the end of the preceding rail, while careful examination of the track and equipment failed to disclose anything which could in any way have contributed to the accident.

The employees involved were experienced men. At the time of the accident they had been on duty about 4 hours after about 28 hours off duty.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.