

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFETY IN RE
INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
ATCHISON, TOPEKA & SANTA FE RAILWAY NEAR CONGRESS,
ARIZ., ON MARCH 7, 1924.

March 25, 1924.

To the Commission:

On March 7, 1924, there was a derailment of a passenger train on the Atchison, Topeka & Santa Fe Railway near Congress, Ariz., which resulted in the death of 1 employee and the injury of 1 employee.

Location and method of operation.

This accident occurred on the Fourth District of the Albuquerque Division, a single-track line extending between Ash Fork and Phoenix, Ariz., a distance of 194 miles, over which trains are operated by time-table and train orders, no block-signal system being in use. The point of accident was about 1-2/3 miles north of Congress, approaching this point from the south there are several curves and tangents, followed by a tangent of 750 feet, a curve of 2° to the left 428 feet in length, and about 125 feet of tangent extending to the point of accident. There is a heavy ascending grade for more than 1 mile, then a vertical curve 300 feet in length at the top of the grade, and a descending grade of 1.40 per cent to the point of accident, a distance of about 700 feet. The track is laid with 85-pound rails, 33 feet in length, with about 22 ties to the rail-length, tie-plated, and ballasted with decomposed granite; it was maintained in good condition.

The weather was clear at the time of the accident, which occurred at about 8.55 p. m.

Description.

Northbound passenger train No. 42 consisted of one baggage car, one smoking car, one chair car and one Pullman sleeping car, hauled by engine 1276, and was in charge of Conductor Shaw and Engineman Tarney. It left Wickenburg, the last open office, at 8 20 p.m., nine minutes late, left Congress at 8.48 p.m., 10 minutes late, and was derailed north of Congress while traveling at a speed estimated to have been about 25 miles an hour.

The engine ran on the ties a distance of 114 feet before turning over on its right side down an embankment and came to rest with its head end 207 feet beyond the point of derailment and 35 feet from the center of the track. The first two cars were also derailed and partly overturned. The employee killed was the engineman.

Summary of evidence

Conductor Shaw and Brakeman Priest were both riding in the smoking car, and neither of them noticed anything wrong until they felt the train derailed, there being apparently no application of the air brakes prior thereto, they estimated the speed to have been about 25 miles an hour. These employees also stated that W F Martens, assistant general foreman of the Bridge and Building Department, who was a passenger on the train, pointed out to them where the train had derailed, Conductor Shaw saying spikes had been removed from the rail and the bolts removed at a joint, apparently having been done with a wrench

Mr. Martens said he first looked at the engine, then examined the track, found that a rail joint at the receiving end of a rail on the right side of the track had been disconnected, 10 spikes removed from the inside, and the rail moved inward toward the center of the track, forming a derail, the tie plates were bent, indicating that wheels had passed over them. Several of the spikes which had been drawn were found lying between the rails, while Mr. Martens found sections of the Weber joint down the embankment on the left side of the track, all of the nuts which had been taken from the bolts were on the right side of the track, and further search resulted in the discovery of various tools which probably had been used in tampering with the track, these consisting of a crowbar, wrench and adz.

The last train to pass the point of accident was south-bound passenger train No 49, at about 6.22 p.m., at which time nothing wrong was noticed.

Conclusions.

This accident was caused by malicious tampering with the track.

The investigation showed that a rail joint had been removed, as well as several spikes on the inside of the rail, after which the receiving end of the rail had apparently been pried inward toward the center of the track, thus forming a derail. At the time of this investigation it was not known when or by whom this rail was moved.

At the time of the accident the employees involved had been on duty about 3 hours, previous to which the train crew had been off duty $20\frac{1}{2}$ hours and the engine crew about $44\frac{1}{2}$ hours

Respectfully submitted,

W. P. BORLAND,
Director.