

IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
MISSOURI PACIFIC RAILROAD AT ALMONT, ARK., ON MAY 7,
1921.

June 13, 1921.

On May 7, 1921, there was a derailment of a passenger train on the Missouri Pacific Railroad at Almont, Ark., which resulted in the death of 1 employee, and the injury of 1 passenger, 2 mail clerks and 1 employee.

Location and method of operation.

The Memphis District of the Memphis Division, on which this accident occurred, extends between Briark and Bald Knob, Ark., a distance of 87.06 miles, and 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 the north switch of the passing track at Almont. Approaching the point of accident from the north the track is straight and practically level; it is laid with 85-pound rails, 33 feet in length, single-spiked with an average of about 20 white oak ties to the rail, tie plates being used only at switches. The track is ballasted with gravel about 8 inches in depth, the alignment, gauge and surface was maintained in good condition. The switch at the point of accident leads to a passing track to the east or left of the main track, and is a facing-point switch for southbound trains. The weather was clear at the time of the accident, which occurred at about 11:16 p. m.

Description.

Southbound passenger train No. 201 consisted of 1 combination mail and baggage car, 1 coach, 2 Pullman sleeping

cars, 1 chair car, and 1 Pullman sleeping car, in the order named, hauled by engine 7529, and was in charge of Conductor Bell and Engineman Kellogg. The cars were of all-steel construction with the exception of the coach, it being of steel-underframe construction. Train No. 201 left Memphis, Tenn., its initial terminal, at 10.40 p. m., on time, left Briark, 3.09 miles from Almont, at 11.08 p. m., 16 minutes late, and was derailed at the north passing-track switch at Almont while running at a speed estimated to have been between 25 and 35 miles per hour.

Engine 7529, together with its tender, came to rest on its left side about 440 feet beyond the point of derailment, diagonally across the main and passing tracks, the tender was torn from its trucks, but remained coupled to the engine. The first car came to rest in the rear of and at right angles to the engine, its front end diagonally across the spur track, with the exception of the front trucks of the second car the remaining portion of the train was not derailed. The employee killed was the fireman.

Summary of evidence.

Engineman Kellogg said that when approaching Almont he temporarily misjudged his location, the surrounding country being very much the same, but on crossing the trestle a short distance north of the switch he realized his location and leaned out of the cab window to observe the switch target. He saw that the light was out, target obscured, and switch points open, and at once applied the air brakes in

emergency, he thought they took effect just as the switch was reached, but said if they took effect before this time the speed of the train had not been reduced over 5 or 10 miles per hour. He estimated the speed of the train at the time of the derailment to have been about 35 miles per hour. Engineman Kellogg also stated that the headlight gave out a bright light, but was improperly focused. He also said that the fireman was working on the fire at the time of the accident.

The switch stand, which is located 7 feet 8 inches to the left of the east rail, is of the vertical rotating-lever type, having a heavy weight on the extreme end of the lever and provided with a suitable fastener for latching and locking. The mast extends about 7 1/2 feet above the track, on top of which is a lamp, and about 18 inches beneath this are the targets. When the switch is lined for the main track the color indication of the target and light is green, and when lined for the passing track they are red.

An examination of the switch immediately after the accident disclosed that it was set for the passing track, the light extinguished, and some newspaper pasted over the red target. The lock was missing, and there were well-defined hack-saw marks on the latch of the fastener which is used to secure the lever when the switch is lined for the main track and to which the lock is applied after the switch is closed. Hack-saw marks were also plainly visible on the remaining portion of the plunger and upon the cap covering

the key hole. The switch lock was afterwards found hanging in the fork of a bush about 20 feet from the main track, a piece about $5/8$ of an inch long having been sawed out of the plunger. It was a spring lock, so constructed that the plunger when in lock position locked at the hinge as well as in the body.

Inspection of the track disclosed that the first mark of derailment appeared on the head of a spike of the outside turn-out rail, 22 feet south of the end of the switch point, this mark continued on the next 3 spike heads, then skipped 15 ties, and again appeared on the next 5 ties at a point about 8 inches outside of the outer edge of the base of the rail. The first mark of derailment on the inside turn-out rail was a flange mark on a tie at a point 25 feet 4 inches from the end of the switch point on the gauge side of the rail, the next 2 ties were unmarked, while for a considerable distance beyond this point marks appeared on each tie. Apparently only one pair of engine-truck wheels were derailed until the engine passed a spur-track switch located on the passing track 225 feet south of the passing-track switch, at this point the front pair of engine truck wheels struck a joint connecting a 56 and 52-pound rail, causing the lighter rail to cant outward, the wheels mounting it and dropping down on the ties on the outside. These marks gradually extended toward the ends of the ties, continuing for a distance of about 30 feet, beyond which point the track was torn up.

The last train to pass the point of accident was south-bound freight train No. 263, which passed Almont at about 10.35 p. m., nothing unusual was noticed by any member of the crew of that train.

Conclusions.

This accident was caused by the malicious opening by some unknown person of the switch at the north end of the passing track.

That this switch was opened with malicious intent is clearly apparent from the fact that the light was extinguished and newspaper pasted over the red switch target, while the lock had been sawed off.

All of the employees involved were experienced men. At the time of the accident the crew of train No. 201 had been on duty less than 2 hours, previous to which they had been off duty 14 hours or more.