

IN AN INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE
ATLANTIC COAST LINE RAILROAD NEAR ALROD, N. C.,
ON DECEMBER 6, 1918.

January 10, 1919.

On December 6, 1918, there was a derailment of a passenger train on the Atlantic Coast Line Railroad near Alrod, N. C., which resulted in the death of 3 passengers and the injury of 1 employee and 38 passengers. After investigation the Chief of the Bureau of Safety reports as follows:

This part of the sub-district of the Fayetteville district of the First Division on which this accident occurred is a single-track line extending between Parkton, N. C. and W. H. Lower, S. C., a distance of 59.2 miles, over which train movements are governed by time-table, train orders and a manual block system.

The train involved was southbound passenger train No. 89, consisting of engine 440, one steel box express car, three steel underframe coaches, two steel sleeping cars, one steel baggage car, two steel underframe express cars and one wooden express car, in the order named, and was in charge of Conductor Simpson and Engineman Harbour. This train left Fayetteville, N. C. at 6.12 p.m., 32 minutes late, passed Pembroke, N. C., the last station north of point of accident at 6.22 p.m., 33 minutes late, and at 6.30, while running at a speed variously estimated at from 25 to 40 miles an hour, was derailed at a facing point switch at the north end of the passing track at Alrod, about 40 or 45 car lengths north of the station. The weather at the time was dark but clear.

The engine derailed about 10 feet from the point of the switch and, guided by the rail, began taking the turn-out. It ran with the wheels of one side on the ties of the main track, and the wheels of the other side on the ties of the side track, until it finally came to rest on its left side at an angle of 45 degrees a distance of 330 feet from the point of derailment. The express car immediately behind the engine came to rest on its left side almost diagonal with and clear of the side track; the second car, a coach, came to rest on its left side with the south end resting on the express car ahead and its north end resting on the ground, its left side torn out about half its length by telescoping a corner of the express car. All the fatalities occurred in this coach. The next coach continued its course along the roadbed of the main track and came to rest about opposite the car ahead but leaning to the right against some freight cars on the storage track. The next three cars, a coach and two Pullman sleeping cars, were entirely derailed but remained upright. The baggage car immediately behind these cars had its front trucks derailed while the rear trucks remained on the track. This car stopped with its center about over the switch where the derailment began. The three remaining cars were not derailed. The main and passing tracks were torn up for a distance of about 350 feet.

Approaching the scene of the accident from the north the track is straight and practically level for a distance of

about a mile. The system of tracks at Alred consists of a storage track located on the west side and a passing track located on the east side of the main track, both tracks paralleling the main track.

The main track at and adjacent to the point of derailment is laid with 85-pound rails 33 feet long with 18 untreated pine ties under each rail. The rails are single spiked and ballasted with sand and gravel. The track is in good condition, except that the ties are considerably rail out, due to lack of tie plates. The switch at the north end of the passing track was laid with a No. 10 frog, and the switch points were tied with four tie bars. The switch stand was an old model Lamage 3 1108, having a throw rod with a clevis jaw, into which the extension of the primary tie bar was inserted and held by a 7/8 inch bolt, with a nut arranged for use of a cotter key.

Engineman Harbour stated that the engine was derailed at the northbound passing track switch when it went in sliding. He estimated the speed at about 30 miles an hour and stated that he applied the brakes three or four hundred feet north of the point of derailment in order to comply with a slow order of 20 miles passing Alred station. He stated that he saw the switch lights burning and that the first intimation he had that anything was wrong was when he saw fire fly when the engine struck the switch and felt the engine leaving the track. He said the engine immediately began turning and

he had no opportunity to apply brakes again. The engine plowed in the ground and tore up the track from the point of derailment to the point where it came to rest. He stated that he had inspected the engine before leaving Rocky Mount and found it in good condition and that the brakes were working exceptionally well.

Fireman Lawrence stated that as his train was approaching Elrod he was sitting on the seat box, had just opened the blower and was about to open the door when the engine jumped. He said that he did not see the switch point but that he did notice that the target was white. The first indication he had of a derailment was fire coming from underneath the engine. He stated that he believed the pony truck was derailed first, and that the train was running about 25 or 30 miles an hour at the time.

Conductor Simpson stated that at the time the derailment occurred his train was traveling about 40 miles an hour. He was in the fourth car from the engine and had just called the station when he felt the car jump the track and then a grinding crash two or three times and thought the car was going to turn over. As soon as the car stopped he tried to get out of the front door but found it jammed. He then went through the car and quieted the passengers. After rendering what assistance was necessary, and about an hour or an hour and a half after the accident, he and baggage-master Andrews examined the switch and found it set and locked for the main track,

but the throw rod was disconnected. They found a rusty bolt which showed much wear under the throw rod and looked for a cotter key but found none. The switch point on the east side was in position and all right but the west side point was missing. They found a piece of the switch which looked as if it had been broken off about three feet from the end of the point. Conductor Simpson stated that it was a fresh break and that he believed the engine broke it, but said that he was unable to determine positively. He stated that he believed the accident was due to a coked switch.

Baggage-master Andrews stated that he was in the baggage car as the train came into Alred and the first intimation he had of trouble was when he felt what he thought was an emergency application of the air brakes. He estimated the speed of his train at about 25 or 30 miles an hour at the time it was derailed. He stated that he and the conductor went back to the switch about an hour afterwards and examined it. He found the lever and lock both intact. He looked under the rail and found that the throw rod was disconnected from the lever that controls the switch point and picked up a bolt which had the appearance of having come out of the rod where connection is made. He stated that the bolt was old and worn but had not been broken. It was arranged for use of a cotter key, but they could not find the cotter key. The bolt, he stated, was broken where the hole goes through it, but this break was old and rusty. The bolt looked as if it had not

ion, come out of the rod connection. The switch was locked in the proper position. He further stated that the switch point on the east side was there all right but on the west side was torn out and the track was badly torn up for some distance.

Flagman Borden stated that the train was approaching Elrod at a speed of about 36 or 40 miles an hour when at the north switch of the east passing track he felt several sudden lurches of the train and was knocked down in the car. He got up and braced himself and as soon as the train came to a stop he went back to flag.

Headmaster Andrews stated that he arrived at the scene of the accident between 11 and 12 o'clock and found that none of the equipment had been disturbed. He stated that he found about 350 feet of both main and passing track torn up, the switch torn up, the throw rod disconnected from the switch points, and the right hand point broken in three parts. Number one tie rod had the appearance of being bent or sprung and all the tie rods were broken. The tie bar was disconnected from the throw rod and the bolt was missing, but there was no indication that the disconnection was a result of the accident. The tie bar that was connected to the throw rod was broken about four feet from the outside rail as a result of the accident. The first indication of derailment was about 15 feet south of the switch. He stated that he did not know what caused the derailment but that it looked as if something struck

the right hand switch point and caused the other point to jar off, broke the right hand point and pulled it open from the rail. He could not account for the throw rod being disconnected from the switch. He stated that his last inspection of this switch was made on the third day of December at which time the switch was in good condition. On that occasion the connecting bolt between the throw rod and tie bar was in place but he did not look underneath to determine if it contained a nut and cotter key. On the morning of the day of the accident, he was on the rear of a train that entered the passing track through this switch and saw flagman throw switch to main track and saw that it worked all right.

Section Master Davis stated that he examines the switches twice each week and that at about 4.45 p.m. on the day of the derailment he had inspected this switch and found it in good condition. The bolt was in the throw rod, head up, and there was a nut on the bolt, but he did not think there was a cotter key in it. He further stated that on the morning of December 6 he saw a through freight take the switch going north and about 11 or 12, noon, saw a southbound freight use the switch and a little later a local used it. He stated that he arrived at the scene of the derailment about an hour and ten minutes after it occurred and found a piece of iron lying in a quarter of the rail and two holes at the switch point. He examined the switch and found the throw