No. 150

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In re Investigation of Accident on the Duluth & Iron Range Railroad, near Colby, Minn., on July 22, 1913.

On July 22, 1913, there was a head-end collision on the Duluth & Iron Range Railroad near Colby, Minn., which resulted in the death of three and the injury of four employees.

After investigation of this accident the Chief Inspector of Safety Appliances reports as follows:

That part of the Western Mesaba Branch on which this accident occurred was a double-track line extending from Allen Junction, Minn., to McKinley, Minn. At Allen Junction it branches off from the main line extending from Two Harbors, Minn., to Tower, Minn., and thence to Winton, Minn. From Two Harbors to Allen Junction, the main line was double tracked, and portions of it were equipped with automatic block signals. On the Western Mesaba Division, however, trains were operated under the train-order system, no block signal system being in use. The book of rules provided in part that "In the use of double track, all trains must keep to the left, unless otherwise directed." Allen Junction was a junction of three divisions of the Duluth & Iron Range Railroad. At the station the tracks ran almost east and west. The most northerly track was called siding No. 4. The first track to the south of it was the Western Mesaba Branch northbound main line, the next track being the southbound main line. Parallel to this track was the main line extending from Two Harbors to Tower and Winton, followed by a number of sidings. For the purpose of handling engines and cars from the Tower-Winton main line to the Western Mesaba Branch main lines and to track No. 4, there were two crossovers, one connecting the Tower-Winton track with the Western Mesaba Branch southbound main track, the other connecting the two Western Mesaba Branch main tracks. At the time of this accident all of the switches were worked by hand, and were not equipped with switch locks.

The trains involved in this collision were two ore trains. Southbound extra 203 consisted of 34 loaded steel ore cars and a caboose, hauled by locomotive No. 203, and was in charge of Conductor Forgy and Engineman Blake. It left Aurora, its initial terminal, at 2:35 a.m., and had proceeded to a point about half a mile beyond Colby, the first station from Aurora and 8.9 miles distant therefrom, when it collided with northbound extra 207. At the time of the collision it was estimated to have been running at a speed of about 15 miles an hour.

Northbound extra 207 consisted of 35 empty steel ore cars and a caboose, hauled by locomotive No. 207, and was in charge of Conductor Gallagher and Engineman Foote. It left Two Harbors at 12:01 a.m., en route to the mines, and after cooling at Allen Junction left that station at 2:52 a.m. The switches at Allen Junction had been left set for the southbound main line by the crew of an extra southbound log train, and as none of the crew of extra 207 noticed their position, that train departed using the southbound main line, and ran on that track for a distance of about 4-1/2 miles before colliding with extra 203 at 3:10 a.m. It was estimated that extra 207 was running at a speed of about 20 miles per hour at the time of the collision. It was raining at the time of the accident, which occurred on level track on a 4-degree curve.

Both engines were badly damaged, 8 loaded and 11 empty ore cars were derailed and more or less badly damaged. About 300 feet of the southbound main line were torn up.

On the morning of the accident, before northbound extra 207 reached Allen Junction, the southbound log train previously mentioned had come in with cars to set out on track No. 4. In order to leave the cars on this track it was necessary to use the two crossovers described above. Engineman Pope of the log train stated that after stopping at Allen Junction Brakeman White cut off behind the first four cars. The brakeman was on the engineman's side and cut off the cars and gave signals on that side. These cars were then set out on track No. 4; the brakeman set the brakes on them and rode the engine from the point where the cars had been set out back to the switch, and threw it back to the main line position before the engine went up over the crossover leading to the southbound track. After throwing this switch, the brakeman gave a signal to back up the southbound main line, the engine backing by the brakeman, who rode to the crossover switch leading to the Tower-Winton main track. The brakeman threw this switch and the engine passed the brakeman and continued on down the southbound main line to the coal chute to take coal, the brakeman stopping and throwing the switch back again. After taking coal the engine returned to the standpipe and found the brakeman there, who threw the standpipe around so as to take water. Engineman Pope further stated that he did not know in what position the east end of the crossover switch was left by the brakeman, as he had lost sight of him when he went to take coal. While at the coal dock extra 207 came in and both engines were at the dock at the same time. After taking water Engineman Pope backed up his engine to the train, coupled on, and the train proceeded on its way.

Head Brakeman White of the log train stated that on the arrival of his train at Allen Junction he cut off behind the

four loaded cars that were to be placed on siding No. 4, and said that in taking these cars to that siding it was necessary to use both crossovers and the switch leading into that track. After placing the cars on that track, the engine was cut off and brought back to the same track on which the rear end of the train was left standing. He further stated that he left all the switches set as he found them, and that the switch at the east end of the crossover was left for the northbound track. He stated that if this switch had been set wrong, he would have noticed it, as the lights from his lantern and from the depot were shining on the rails. When he stepped across the track all the switch lights were burning brightly, and he noticed this switch light showed green. He then went to the depot lunch room, and when he returned the engine of extra 207 obstructed any further view of the switch light.

Neither Conductor Smith nor Flagman Rhetherby of the log train assisted in setting out these cars and neither of them noticed the position of any of the switches.

Conductor Smith of the log train stated that he and the rear brakeman looked over the train, one on either side, on its arrival at Allen Junction, and on reaching the head end of his train he found the engine of his train at the coal dock. The setting out of the four cars he left to the head brakeman, he himself knowing nothing whatever about the position of the switches; neither did he notice the position of the switch between the time the log train engine came over and the time 207 arrived.

Engineman Foote of extra 207 stated that when his train arrived at Allen Junction it was stopped at the coal chute. The head brakeman cut off the engine, and after taking coal the engine was run forward to the standpipe to take water. As it was raining hard, he closed all the windows in the cab of the locomotive, and neither he nor anyone on the engine noticed the switch light or the position of the switch points. Approaching the switch from the west the view of the switch light was obstructed by the standpipe and could only be seen by the engineman for a distance of 550 feet. He further stated that the head brakeman was on the engine while taking coal and water, and did not handle the switch. After coupling to the train at the coal dock the brakeman again got into the locomotive cab and was riding on his side of the engine when leaving Allen Junction.

Conductor Gallagher of extra 207 stated that on arrival at Allen Junction he went toward the head end of the train while the engine was being coaled. The train was moving before he arrived there and the engine was taking water when he reached the station. He went into the station to look at the train

register and did not notice the position of any of the switches. The train was at Allen Junction about seven or eight minutes, and as it was raining hard he went to the caboose after the train started. He mounted the moving train about 500 feet from the crossover. He stated that he gave no thought to the question of whether or not his train was on the proper track, was not on the rear platform of the caboose and did not observe any of the switch lights. The switch being on the opposite side of the train from him he could not have noticed it unless he had been on the rear of the train. After going into the caboose he sat down at his desk and busied himself with his reports. While so engaged the rear brakeman was sitting behind him. He stated that neither he nor the brakeman went to the cupola of the caboose to observe the train, but had the brakeman looked out of the cupola the fact that the train was on the wrong track would probably have been noticed. He stated further that it was the rule always to set switches for the main line.

Rear Brakeman Zahn stated that as it was raining hard he remained in the caboose at Allen Junction. The train was there about eight or nine minutes, the conductor returning to the train as it started. He did not know that the train was on the wrong track until he stepped out to flag after the collision. He stated further that had he been in the cupola watching the train after leaving Allen Junction he could have noticed the absence of the track on the right hand side of the train by the flare of the engine when the fireman fired up, even though the windows of the caboose had been closed because of the rain.

This accident was caused by the crew in charge of northbound extra 207 disregarding the switch and switch-light indications and running their train on the southbound main track leaving Allen Junction. Conductor Gallagher and Engineman Foote are primarily responsible. Brakemen Fortman and Zahn and Fireman Carlson are also to blame, as all were experienced men familiar with the road and the rules, and should have known that their train was on the wrong track before traveling a distance of 4-1/2 miles. It is inexplicable that experienced employees should have been so neglectful of their own safety as to permit their train to run against the current of traffic without any authority whatever for a distance of 4-1/2 miles without discovering their mistake.

While Brakeman White is positive that he left the switch properly set for the northbound main track, its normal position, he was the last person to handle it, and it is believed that when the engine returned from side track No. 4 and the switch was set to back onto the southbound main line, Brakeman White left the switch in the last named position, failing to throw it to its normal position.

This investigation further developed the fact that during the ore season more than 80 trains a day use these tracks and switches. To provide adequate safety all of these main track switches should be equipped with switch locks and they should be kept locked for main track movements.

As previously stated, all the employees responsible for this accident were experienced men, and none of them had been on duty in violation of any of the provisions of the hours of service law. The records of all were good, although it is noted that Engineman Foote had been suspended on two occasions in 1904 for responsibility in connection with accidents, once for 60 days and once for 30 days, the latter suspension afterward being reduced to 15 days.