

April 19, 1912.

**IN RE INVESTIGATION OF ACCIDENT ON THE CLEVELAND,
CINCINNATI, CHICAGO & ST. LOUIS RAILROAD,
March 12, 1912.**

On March 12, 1912, there was a head-end collision on the Cleveland, Cincinnati, Chicago & St. Louis Railroad at Greencastle, Ind., between a passenger train and a freight train, resulting in the death of the engineer of the freight train, the fireman of the passenger train, and one trespasser, and injuries to eleven employes, thirteen passengers and two trespassers.

This accident was reported by telegraph by the Cleveland, Cincinnati, Chicago & St. Louis Railroad on March 13, and after investigation, the Chief Inspector of Safety Appliances reports as follows:

At the place of the accident the Cleveland, Cincinnati, Chicago & St. Louis Railroad is a double track line running east and west over a sixteen-foot fill. The track is laid with 90 pound, 33-foot, steel rails, on oak ties, laid in gravel ballast, and is well maintained. The point where the collision occurred is on a tangent, with an unobstructed view for more than a mile approaching from the west. The grade is nearly level, being slightly uphill toward the east.

A manual block signal system, under standard code rules, is used for the operation of trains. The switches and signals at the place of the accident are controlled from an interlocking tower, which is also a block signal and telegraph station, where train orders are issued and a record is kept of all passing trains, the office being open continuously day and night.

On the date of the accident extra freight train west bound, hauled by engine No. 6702 and consisting of 42 empties, 3 loaded cars and caboose, with conductor Gilchrist and Engineer Milan in charge, left Brightwood Yards, near Indianapolis, its eastern terminal, at 5:05 p. m., using the west bound track. On arrival at Reno, a station 27 miles west of Indianapolis, at 8:10 p. m., extra No. 6702 received an order to use the east bound track to Delmar, the next station west, with rights over opposing east bound trains. On arrival at Delmar at 8:55 p. m., this train received another order to use the east bound track to siding at Greencastle, with rights over opposing east bound trains. On arrival at this siding the train did not enter the siding, but continued westward on the main track a distance of about 3,000 feet to the home signal at Greencastle crossover, at which place it arrived at 9:10 p. m., and stopped on the main track.

Train No. 20, known as the "New York Central Limited", hauled by engine No. 8930 and consisting of one buffet car,

two sleepers, one dining car and one observation car, with conductor Cunningham and Engineer Donaldson in charge, left St. Louis on time at 8:00 p.m. This train passed Alma, the first telegraph station west of Greencastle, at 9:38 p.m., 16 minutes late, and ran from Alma to Greencastle, a distance of 9.3 miles, in 10 minutes, colliding head-on with extra No. 6702 at 9:48 p.m. The estimated speed of the passenger train at the time of collision was 50 miles per hour. Both engines were badly damaged but remained upright on the fill. The buffet car was thrown down the embankment on the north; the two Pullman sleepers following were derailed but were only slightly damaged. The force of the collision drove the freight train back about 150 feet from the point of impact.

Greencastle block tower, where this accident occurred, is 39 miles west of Indianapolis and is located on the north side of the two main tracks. It has 39 working levers that control two crossovers connecting the east bound and west bound main tracks, as well as the switches which lead from the east and west bound passing tracks, storage track, and house track, to the main tracks, and all signals and derails connected therewith. The operator also electrically controls the lock on the outlying switches leading to the passing tracks, so that before a train can enter or leave these sidings the towerman must unlock the switches from the tower. A telephone box is located near the passing track switches so that telephone communication can be had with the towerman. Trains wishing to enter the passing track are required to call the towerman, who electrically unlocks the switch so that it can be used. After the train is clear the conductor is required to notify the towerman.

Conductor Gilchrist stated that when his train arrived at Reno he received an order to use the east bound main track with right over opposing trains from Reno to the crossover at Delmar. Upon arrival at Delmar they got coal and water and then came down to the telegraph office. The signals were lined up for the east bound main track, and they received an order giving them right over east bound trains to the siding at Greencastle. It was snowing hard when the train arrived at Greencastle, so that the conductor could not see the signal indication at the block station. However, the train did not stop and enter the siding as directed, but continued on the main track past the siding and stopped with the engine at the home signal near the crossover on the east bound main track. The conductor then put out a flag for rear protection, and had been standing there he thought about five minutes when No. 87 went by. In nine or ten minutes train No. 95 passed, and he then started for the forward end of the train, inspecting the cars as he went toward the engine. He arrived at the engine about the time No. 20's headlight showed up on the eastbound main track. He then ran four or five car lengths ahead of his train and flagged No. 20 with his white light. The engineman on train No. 20 answered

this signal but was unable to stop his train before the collision. Conductor Gilchrist was unable to say whether or not the headlight on the freight train was covered, because he did not look back after passing it. He stated that he heard the enginemen's voice when he passed the engine but could not make out what he said. He said that he knew that they were on the main track, but supposed the operator had worked the block for their train to bring it down the main line for another movement, which was often done.

Head brakeman Kelsey stated that he had had only six or seven weeks' experience as a brakeman, and that he had never been examined or instructed on the rules. His statement on this point was as follows:

- Q. How long have you been in our service as brakeman?
A. Since the 22nd day of January, was hired on the 22nd day of December.
Q. You were hired December 22nd and have been working regularly since January 22nd?
A. Yes sir.
Q. Do you have a copy of the book of rules?
A. Yes sir.
Q. Who employed you?
A. Mr. Lamport.
Q. Have you been examined on the rules?
A. No sir, I have not.
Q. Were you instructed with respect to the rules, or any of them when you were employed?
A. No, I do not remember that I was, I know I was not. I didn't know what a "highball" was, nor a stop signal or anything else when I started out.
Q. Were you employed as a student brakeman?
A. Yes sir.
Q. Have you read the rules?
A. Some, yes, but I have been working pretty steady and have not had much of a chance. I have read some in different places in the book.

He said he did not know of the orders giving his train right of track to the siding at Greencastle, and when the train came down the main track and stopped at the home signal he went up to the tower and asked the operator, "What are we doing over there?", and in reply as to when they arrived he stated that they got there at 9:10. After No. 95 passed he stated that the operator said to him, "Looks like you are on main track", and soon after also told him that as soon as No. 20 went they could go, and he said "All right"; that the operator then said something about the headlight not being covered, and he told him that he had nothing to do with the headlight but would go down and mention it. He stated that he then went down to the enginemen's side of the engine and called four or five times and the fireman arose and he said

something about covering the headlight for No. 20; the fireman jumped down and started to cover the headlight and he heard the engineman say, "Don't cover the headlight". He then saw No. 20 coming and asked the engineman for a fusee and tried to flag the train. Just at that time the conductor came up from the rear of the train and ran past him, flagging train No. 20 with his white light. Kelsey stated positively that he did not tell the operator that the train was in the clear.

Fireman Ball of Extra No. 8702 stated that he had been firing since July 10, 1911, and had had ten months' previous experience as a fireman. He had not been examined on the rules. He did not read the order the engineman had leaving Delmar, but while he was putting in a fire he heard the engineman read the order and thought it read to the crossover at Greencastle. On arrival at Greencastle when they stopped on the main track, he remained in the cab and attended to his fire. They stood there about 30 minutes, during which time trains No. 27 and No. 95 went by. All at once he saw a headlight show up, and the brakeman came to the engineer's side and called to cover the headlight as No. 20 was coming. Ball stated that he evidently lost his head, and had some trouble getting the headlight covered. He had covered it just prior to the time of the collision and was only about 30 feet away from the engine when the collision occurred.

Flagman Davis of extra 8702 stated that when they arrived at Greencastle he said to the conductor that the train had pulled by the siding and that the conductor said, "Surely not". He then went back to flag and was back flagging when the collision occurred.

Telegraph operator Johnson at the interlocking tower had been in service about 8 or 9 months. He had had seven years' previous experience. He stated that he received order No. 150 for all trains east, and when extra No. 8702 arrived at 9:10, the head brakeman came into the tower and he asked him if he was in the clear and he said, "Yes, at 9:10". The towerman so notified the dispatcher, who then issued an order annulling order No. 150. Johnson also stated that from the tower he could not see whether the train was on the main track or siding, as there were five tracks there. He said that he unlocked the passing track switch when extra No. 8702 left Delmar so that they could head in on the siding on their arrival, and he did not receive notice from the conductor, as was required by the rules, that the train was in the clear. He also stated that while conductors are supposed to call him up from the telephone box and notify him that they are in the clear, they do not always do it, and that he did not know whether or not the telephone connection with the box

near the east passing track switch was in working order that night. He said it had been customary when trains are in the siding to take the word of the brakeman as to when trains were in the clear, and that generally no questions were asked. He said that if he had wanted this train on the main track he would have worked the board or given a lantern signal, but that he did not give them any signal on this occasion. Johnson further stated that it is customary to run trains against the current of traffic and that there is never a night that they do not do it at that station. He was certain the brakeman understood his question as to whether or not his train was in the clear, and he reported the train in the clear to the dispatcher after being told by the brakeman that it was in the clear. The brakeman left the tower to tell the engineer or fireman to cover the headlight after train No. 20 had been reported by Alma.

Rule No. 326 of the rules governing employees of the Cleveland, Cincinnati, Chicago & St. Louis Railroad reads as follows:

When a train takes a siding the signalman must know that it is clear of the block before giving 2, or displaying a clear signal for that block.

The signalman must obtain control of the block before permitting a train on a siding to re-enter the block.

The towerman's remark to the brakeman that the "train looks like it is on the main track", and his knowledge of the rule that the headlight uncovered indicated that the train was on the main track, as well as the fact that the conductor had not reported the train clear to him as required, shows conclusively that he did not comply with this rule.

The train dispatcher handling trains on this division is located at Terre Haute, Ind., 34 miles west of Greencastle. On the night of the accident trains were being handled by dispatcher Allen. He stated that when extra No. 6702 arrived at Reno, he issued order No. 147, at 8:10 p.m., reading as follows

"Engine sixty-seven naught two (6702) run extra and has right over opposing trains on eastward track, Reno to Crossover at Delmar."

This order was issued so that train No. 27, a west bound express, and train No. 95, a fast merchandise freight, could continue west on the west bound main track and pass extra No. 6702 without delaying the latter train. When No. 6702 arrived at Delmar, trains 27 and 95 not having passed, order No. 150 was issued at 8:53 p.m., reading as follows:

"Engine sixty-seven naught two (6702) run extra and has right over opposing trains on eastbound track, Delmar to siding at Greencastle."

At 9:13 or 9:14 the operator at Greencastle block station reported to the dispatcher on the telephone that extra No. 6702 was in the clear at 9:10. The train dispatcher (although he afterwards admitted that he thought it rather short time for this train to clear at Greencastle when it did not leave Delmar, 6.5 miles away, until 9:59) then annulled order No. 150, which was addressed to all trains east at Greencastle to the operator at that tower. He stated that it was the practice in cases of this kind to accept the word of the operator that the train was in the clear at a given time to constitute the fulfillment of an order, without requiring any message from the conductor, or having him sign the annulment order.

The dispatcher stated further that after train No. 20 passed Greencastle at 9:42, the operator at Greencastle asked him if he should let extra 6702 cross over to the west bound track and go to the advance signal located west of the interlocking tower, and he instructed the operator to hold them in the siding until after No. 20 had gone and then he would probably handle them on the east bound main track to Alma. At 9:59 the operator at Greencastle called the dispatcher up over the telephone and stated, "We have a bad wreck here; No. 20 has run into extra No. 6702." Dispatcher Allen further stated that it was the practice to handle trains on either track on this division, and that the movement directed in order 150 was seldom used, as it was customary in handling trains against the current of traffic to run them to the crossover instead of the siding at Greencastle.

Rules 751 and 752 governing employes of the Cleveland, Cincinnati, Chicago & St. Louis Railroad read as follows:

751. When the movement of a train carrying passengers is affected, train orders fixing meeting points between opposing trains; or containing time orders; or giving right to a train over an opposing train, must be on form 31 to the superior train; and, except at initial stations, must be received by the superior train before its arrival at the station

- (a) at which it is to meet the opposing train, or
- (b) which is first named in a time order, or
- (c) which is last named in an order giving right.

Train orders restricting the superiority of any train, if addressed to it at the station where it is to meet or wait for an opposing train must be on Form 31.

752. On portions of the road where the manual block system is used, the middle order, provided for in rule -

208, must be used when the movement of a train, carrying passengers, is affected by a train order, except when the meeting or waiting point is the initial station of the superior train on the division (or subdivision).

These rules were not complied with.

This accident was caused primarily by the conductor and engineman of extra 6702 failing to put their train on the siding at Greencastle, as they should have done, and allowing it to occupy the main track without authority or proper protection. A contributing cause was the mistake of the towerman in accepting the word of the brakeman that the train was clear of the main track, and so notifying the dispatcher without knowing that the train was clear.

The conductor, engineman and operator at fault were experienced employes with good records. The operator had been on duty five hours and 48 minutes; the conductor and engineman had been on duty six hours and three minutes, following a rest period of ten hours and 45 minutes.

Had automatic block signals been used on the line where this accident occurred train No. 20 could not have received a clear signal while Extra 6702 was occupying the main track, (if had this interlocking plant been equipped with electric track circuit protection, the towerman could not have given train No. 20 clear signals while Extra 6702 occupied the main track.