

**Collision on the New York, Chicago & St. Louis  
R.R. at Crayton, Pa., June 22, 1912.**

Inv-70

August 2, 1912.

On June 22, 1912, there was a rear-end collision on the New York, Chicago & St. Louis Railroad at Crayton, Pa., which resulted in the death of 2 employees and the injury of 3 other employees. After investigation of this accident the Chief Inspector of Safety Appliances reports as follows:

West-bound train No. 55 is a fast freight. On June 21 this train left Tift Yard, Buffalo, N.Y., in four sections. The third section of this train consisted of 15 empty cars, 15 loaded cars, and a caboose, hauled by engine No. 438. This train was in charge of Conductor Lytle and Engineman Gray. It left Tift Yard at 10:35 p.m., and reached Crayton at 3:50 a.m., June 22. Believing that he did not have time to go to Conneaut, 4.4 miles beyond, in time to clear east-bound passenger train No. 4, scheduled to leave Conneaut at 4:05 a.m., the engineman of the third section stopped his train at Crayton for the purpose of taking the siding at that point. The brakeman had gone forward to open the switch leading to the side track when the rear end of the train was struck by the fourth section.

The fourth section of this train consisted of 24 loaded cars and a caboose, hauled by engine No. 417. This train was in charge of Conductor Fenton and Engineman Curtiss. It left Tift Yard at 10:40 p.m., and collided with the rear of the third section at about 3:50 a.m.

Engine No. 417 was badly damaged, while 15 freight

cars and a caboose were destroyed by fire which broke out after the collision.

This division, with the exception of about 8 miles in the State of New York, is a single track line. No block signal system is in use where this accident occurred. Trains are operated under the train order system, and are spaced five minutes apart at open stations. Three position upper quadrant semaphore signals are installed. When in a horizontal position a signal indicates stop; when at an angle of  $45^{\circ}$  it indicates stop for orders, and when in a vertical position it indicates clear. The track at the point of the accident is straight, and in clear weather there is a good view of about two miles in either direction. The grade is slightly descending toward the west. The train dispatching is done by means of the telephone.

The scheduled running time of train No. 55 between Crayton and Conneaut is 13 minutes. Engineman Gray, of the third section, stated that he had intended going to Conneaut for train No. 4, but on arrival at Crayton he did not have scheduled running time by three minutes, and on account of the fog did not think it wise to attempt to reach that point in 10 minutes, which he would have had to do in order to clear train No. 4 by five minutes, as required by the rules. Engineman Gray's statements as to when he slowed down approaching Crayton were conflicting; at one time he stated that his train was running slowly for 10 car lengths before it stopped for the switch, while in another place he stated that the flagman could have dropped off at any place within two train lengths

of where the train finally stopped. He did not whistle out a flag, saying that it is not customary to do so when stopping to take a siding.

Flagman Lamb stated that the stop at Crayton was made very suddenly. He was thinking that the train would go to Conneaut for No. 4, and when the sudden stop was made the emergency brakes were used. He immediately took red and white lanterns and opened the door of the caboose, intending to go back to protect his train. It was very foggy and he heard the fourth section approaching and called to the conductor to jump, at the same time getting off himself just prior to the collision. He was injured in the collision, while the conductor was killed.

Fireman Sinclair corroborated the flagman by saying that the train did not slow down until very near Crayton, when the stop was made suddenly. In his judgment it would have been impossible for the flagman to have dropped off prior to this, while the distance traversed by the train after slowing down and before stopping was so short that the flagman would have had no opportunity of protecting the train.

Head Brakeman Prescott corroborated the statements of the fireman. He stated that the flagman possibly could have dropped off about 100 or lengths before the stop was made.

Engineman Curtiss, of the fourth section, stated that it was his intention to go to Conneaut for No. 4. The collision occurred at 3:50 a.m., and he said that he had often passed

Crayton at that time and reached Conneaut in time to clear No. 4. This had been done, however, in clear weather. He estimated the speed of his train to have been 35 miles per hour at the time of the collision. When passing Thornton Junction, 5.6 miles east of Crayton, the signal was set at clear, indicating that the third section had passed that station at least five minutes ahead of his train, and as he reached Crayton at 3:50 a.m., and was going to Conneaut for No. 4, he supposed of course that the third section, having five minutes additional time, would also go to Conneaut. He further stated that the operator at Thornton Junction gave him a signal with his hands which he understood to mean that the third section was just five minutes ahead of him at that point.

The conductor of the fourth section stated that when he looked at his watch at a point about a mile east of Crayton it was 3:43 a.m., and he thought his train would have time enough to go to Conneaut. He estimated that after the brakes were applied the train did not run more than five or six car lengths before the collision occurred. As in the case of Engineman Curtiss, when the signal at Thornton Junction indicated clear, he supposed that the third section would go to Conneaut for No. 4. His statements were practically agreed to by Flagman Mulligan.

Conductor Peters, of the second section, stated that he would not have attempted to come to Conneaut for No. 4 unless his train passed Crayton at 3:45 a.m., while Engineman Dooley,

of the same train, stated that while on previous occasions he had passed Crayton at 3:50 a.m. and cleared No. 4 at Conneaut, he would not have attempted to do so with the weather conditions prevailing at the time of this accident. The fact remains, however, that the second section made the run from Crayton to Conneaut in 10 minutes on the date of this accident, under the same weather conditions as those prevailing a few minutes later when the collision occurred, and with the first section but five minutes ahead of it. The conductor and engineman of the first section stated that on this same morning their train made the run from Crayton to Conneaut in 10 minutes, although the fog was not thick in all localities.

Operator Sanner, at Thornton Junction, stated that the third and fourth sections of train No. 55 passed his station five minutes apart. The weather at the time was very foggy, and had been for about an hour. When he reported to the dispatcher that the third section was coming, he notified him of the fog and said that he expected a message telling him to block all trains 10 minutes apart. He did not receive any such order. He further stated that on previous occasions he had reported the presence of fog, but had never received a message to block trains 10 minutes apart and had no authority to do so unless instructed by the dispatcher.

Dispatcher Dolhaen denied that he received any notice of fog from any operator. He stated that the station at Thornton Junction was not a weather reporting station and he did not

think it would have been the duty of the operator at that point to report weather conditions. The dispatcher further stated that he did not know of any instructions relative to getting reports of the weather conditions; that he was usually governed by the weather around Conneaut, where his office was located, although once in a while an operator would report anything unusual happening. Under further questioning he recalled that there was a notice requiring trains to be blocked 10 minutes apart in foggy weather or stormy weather. He did not know whether the operators along the road had similar instructions. He further stated that he thought the four sections of train No. 55 would reach Conneaut in time for train No. 4, there being no doubt in his mind but what they would be able to do this.

The question of whether or not the operator at Thornton Junction notified the dispatcher about the fog is a matter of veracity between the operator and the dispatcher. The statements of the dispatcher, however, would make it appear that the instructions about spacing trains 10 minutes apart in foggy weather were not enforced.

On December 11, 1901, a bulletin order was issued reading as follows:

In foggy weather, or a blinding snow storm you will block all freight trains ten (10) mins. apart and under no circumstances permit them to pass your block in less than this time. You will report at intervals of 30 mins. the condition of the weather during foggy or snowy weather. Post this where all operators will see it.

This order has never been superseded or annulled.

Many of the employees stated at the investigation that it was not an uncommon thing for these fast freight trains to run from Crayton to Conneaut in 8 minutes. The engineman of the third section of train No. 55 had 10 minutes in which to bring his train to Conneaut and clear No. 4 by five minutes, as required by the rules. Under the existing conditions he decided that this was not enough time and stopped at Crayton for the purpose of taking the siding at that point. This stop was made suddenly, and before the flagman had an opportunity of protecting the rear end of the train it was struck by the fourth section, which was traveling at a high rate of speed, as the engineman of this train intended to go to Conneaut for No. 4. The third section evidently traveled at a lower rate of speed between Thornton Junction, the last station previous to the point of collision, and Crayton than did the fourth section, thus enabling the fourth section to overtake the third section when the latter stopped at Crayton.

The employees involved in this accident were all experienced men, with good records, and had been on duty about six hours.

This investigation discloses the fact that the operator at Thornton Junction had no knowledge of the bulletin requiring trains to be spaced 10 minutes apart in stormy and foggy weather, and for this reason permitted four fast freight trains to pass his station in 18 minutes; that the engineman of fourth No. 55 knew that the weather was extremely foggy at Thornton Junction

and that the third section of train No. 55 was but five minutes ahead of his train at that station, yet he ran his train a distance of 5.6 miles in 7 minutes, or at an average speed of 48 miles per hour, and intended to go 4.4 miles farther in less than 10 minutes against an opposing passenger train.

The practice of running fast freight trains at five-minute intervals is a condition favorable to the occurrence of accidents. Should one section travel at a higher rate of speed between two stations than the section just ahead of it, it would be a comparatively easy matter for the trains to be brought into such proximity that there would be danger of a collision should the first section stop for any reason whatever. Until such conditions are changed and trains are properly spaced so as to give opportunity for protection in case a train stops, such accidents are apt to occur.

Many railroads, for the purpose of affording protection when trains stop for the purpose of taking siding, provide fusees which may be thrown from a moving train by the flagman in stormy or foggy weather under such conditions as prevailed at the time of this accident. The New York, Chicago & St. Louis Railroad does not provide flagmen with fusees. It is believed that had such fusees been provided and used that this accident would not have occurred.