

June 23, 1913.

In re investigation of accident on the Pennsylvania Lines West of Pittsburgh, at Beanna Tower, near Niles, Ohio, on May 27, 1913.

On May 27, 1913, there was a head-end collision between a freight and a passenger train on the Pennsylvania Lines West of Pittsburgh at Beanna Tower, near Niles, Ohio, which resulted in the death of the engineer of the passenger train and the fireman of the freight train, and the injury of 10 passengers and 3 employees.

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

Eastbound freight train extra 9044 consisted of 40 cars and a caboose, hauled by locomotive No. 9044, and was in charge of Conductor Pirtschu and Engineer Willey. This train left Cleveland, Ohio, for Niles at 3:30 p.m., and stopped at Beanna Tower at about 9:08 p.m. When the train came to a stop on the eastbound main line the locomotive was about 225 feet east of the home signal of the interlocking plant which is located at this point, this home signal being in the stop position. A few minutes after the train had come to a stop at this point, westbound passenger train No. 215 collided with it.

Passenger train No. 215 consisted of 1 baggage car and 3 coaches, all of wooden construction, and 1 steel sleeping car, hauled by engine No. 7080, in charge of Conductor Fyle and Engineer Wagon. This train left New Castle, Pa., at 7:15 p.m. on time, bound for Alliance, Ohio. At Avon, about 4 miles east of Beanna Tower, the crew in charge received a copy of train order No. 533 reading as follows:

"No. 215, Eng. 7080, has right over opposing trains on eastward track Avon to Beanna."

Under this order train No. 215 used the eastbound track from Avon to Beanna, running against the current of traffic, and collided with extra 9044 standing on the eastbound track a distance of about 650 feet beyond Beanna Tower. The collision is believed to have occurred at about 9:12 p.m.

The baggage car and one freight car were destroyed. The passenger engine was badly damaged and one of the coaches, the freight engine, and one of the freight cars were slightly damaged. The speed of the passenger train at the time of the collision was estimated to have been about 20 miles per hour. A slight rain was falling at the time but there was no fog.

The Erie and Ashtabula division, on which this accident occurred, is a double-track line, trains being handled by train orders. A manual block signal system is in use. A single-track line, known as the Alliance branch, leads off from the eastbound main track at a switch located about 50 feet west of Boarna tower, and for some distance west of the tower runs parallel with the eastbound main line. East of the tower there is a crossover leading from the westbound to the eastbound main line. A short distance east of the tower is a dwarf signal located between the two main tracks governing movements on the eastbound main line against the current of traffic. The normal position of this dwarf signal is red, indicating stop; when set at green trains may proceed. About 35 feet beyond the switch leading to the Alliance branch is a manual block signal governing train movements on this branch. The crossover and signals governing the same are operated by a mechanical interlocking plant.

Under ordinary circumstances train No. 215 would have approached Boarna Tower on the westbound track, crossed over to the eastbound track at the crossover located east of the tower, then continued past the tower on the eastbound track until it reached the Alliance branch switch. It would have left the eastbound main line and proceeded westerly on the branch. On this date, however, on account of running on the eastbound track from Avon to Boarna Tower, it was unnecessary to use the crossover and the only signals governing the movement of the train were the dwarf signal and the manual block signal, no signal being provided to indicate to approaching engineers the location of the Alliance branch switch. The evidence shows that the manual block signal was set in the clear position for some minutes prior to the arrival of train No. 215 and that when that train approached Boarna Tower the towerman set the dwarf signal at green, which indicated to the engineer of train No. 215 that his train could proceed. After displaying this green signal, however, the towerman forgot to throw the switch for the Alliance branch, leaving it set up for a main line movement, and as previously stated, on account of there being no signal to indicate its position the engineer undoubtedly supposed it to be correctly lined up when he received the green signal indication at the dwarf signal. When it was discovered that the eastbound passenger train was still proceeding on the eastbound main track, beyond the switch leading to the branch, it was too late to avert the collision with the freight train, which was standing on that track at a point only 575 feet east of the switch.

In his statement made at the investigation Towerman Sager admitted that he failed to set the switch for the Alliance branch at the time he placed the dwarf signal in the clear position, stating that he did not notice that it had not been thrown. He added that the light over the levers was bad, on account of the wick being improperly trimmed, and that this fact accounted for his failure to see that the switch was not set for the Alliance Branch. These lamps are attended to by a lampman, but if they should need atten-

tion during the night it would be the to erman's duty to take care of them. He estimated the speed of train No. 215 when passing the tower to have been from 35 to 40 miles per hour. Towerman Sager had been employed at this tower for more than 7 years. His reputation and character were good, and he was considered to be a reliable man. He had not been on duty in violation of any of the provisions of the hours of service law.

The speed restrictions contained in the time-card in paragraph No. 6 under the heading "Permanent instructions" limit the speed through main track turnouts to 10 miles per hour. From the statements of all employees, as well as from the damage caused to equipment, it is believed that train No. 215 was running at a speed of about 35 miles per hour, and consequently was being operated in violation of the speed restrictions referred to above.

Towerman Sager stated that the speed limit at this point was not always observed, and that he had once reported the matter, upon which an employee was sent to this point to check the speed of trains. He further stated that he had known Engineman Wasson to violate the speed limit of 10 miles per hour.

This accident was caused by the failure of the to erman to properly set the switch leading to the Alliance Branch, for which failure there is no excuse whatever. Towerman Sager had been stationed at this point as towerman for more than seven years, and was thoroughly familiar with the switches and the route which should have been set up for train No. 215. He was considered to be a reliable man, and his character and reputation were good.

While not directly responsible for the collision, the speed at which engineman Wasson was operating his train, in violation of the speed limit referred to previously, undoubtedly contributed to the severity of the collision.

None of the employees connected with this accident had been on duty in violation of any of the provisions of the hours of service law.