File Copy 31

January 6, 1912.

MEMORANDUM TO COMMISSIONER McCORD:

Re: Accident on the Pennsylvania Railroad, December 6, 1911.

Draft submitted by the Chief Inspector of Safety Appliances as a basis for the report of the Commission.

On December 6, 1911, the Pennsylvania Railroad reported by telegraph an accident occurring at 7:40 that morning at Manor, Pa. Inspectors Gibbons and Duffy were instructed to make an investigation, and a synopsis of their report is given below.

West-bound extra freight train No. 2934, consisting of 70 empty coal cars and a caboose, and hauled by engine No. 2934, with engine No. 1993 acting as a pusher, left Altoona, Pa., at 11:47 p. m., December 5, in charge of Conductor H. Boughamer and Engineman J. A. Gettys. At 6:40 a. m., December 6, this train reached Manor, at which point there was some switching to be done. When the train came to a stop, the caboose was about 350 feet west of a signal bridge located about one-half mile east of Manor station, and Flagman Knepper went about 800 feet east of the signal bridge to flag approaching trains on west-bound track No. 3, which was the track occupied by this train.

West-bound extra freight train No. 3078 left Youngwood, Pa., 16 miles east of Manor, at 6:37 a. m., bound for the Pitcairn Yard, near Pittsburgh. This train consisted of 4 empty refrigerator cars, 43 cars of coal and coke, and a caboose, all equipped with air brakes, and was hauled by engine No. 3078 with engines Nos. 3041 and 2396 acting as pushers. This train was in charge of Conductor A. L. Fahey and Engineman G. H. Myers, and was using west-bound freight track No. 3. When near Manor extra No. 3078 collided with the pusher engine on the rear end of extra No. 2934. This collision occurred at 7:41 a. m. Besides damaging the tender of the pusher engine on extra No. 2934, this collision caused the derailment of the engine and tender of extra No. 3078, as well as the four empty refrigerators cars on the front end of the train. The tender of engine No. 3073 and two of the derailed cars fouled west-bound passenger track No. 4, while the other derailed cars fouled east-bound tracks Nos. 1 and 2. In this collision no one was injured. The speed of extra No. 3078 at the time of the accident was estimated to be from 6 to 8 miles per hour, and the shock of the collision was so slight that the crews of the pusher engines on the rear of the train did not know that there had been an accident.

West-bound train first No. 17, an Adams Express train, made up of seven express cars and hauled by engine No. 2986, in charge of Conductor C. B. Borden and Engineman F. Daly, left Altoona, Pa., its last stopping point, at 5:15 a. m., and was due at Manor at 7:42 a. m., using west-bound passenger track No. 4 This train collided with the wreckage of extra No. 3078, which had fouled track No. 4, causing the death of the engineman of the

train, No. 17, an express messenger in the first car of train No. 17 and the four men who were taking care of the horses carried in the first car. The engineman of engine No. 3078 and the fireman of engine No. 2988 were seriously injured, while the fireman of engine No. 3078 was slightly injured. Engine No. 2988 was thrown down a 20-foot embankment on the north side of the tracks, as were also the first two express cars of train No. 17. The third express car was slightly damaged, while the remaining seven cars escaped damage. When the first express car went down the embankment, it was thrown against engine No. 2988 in such a way that the five men in it were killed by escaping steam. The speed of train No. 17 at the time of the accident was between 40 and 45 miles per hour.

This division of the Pennsylvania Railroad is a four-track road. Automatic block signals are used, the semaphores being located on signal bridges which extend over all four tracks. When the signal on the signal bridge east of Manor station indicates danger, instead of having one distant signal indicating caution, two caution signals are provided, the distant caution signal being located 6,654 feet east of the signal bridge, while the second caution signal, known as an advance signal, is located 2760 feet east of the signal bridge. In other words, a block which would ordinarily be 6,654 feet long is here sub-divided into two shorter blocks, each over a half mile in length. From Grapeville to Manor, a distance of 3-1/ 2 miles, there is a descending grade of about one per cent except at Penn, where there is a slight ascending grade.

The Inspectors interviewed Engineman Myers in the hospital at Greensboro, Pa., and he stated that his train stopped at a signal tower just after leaving Youngwood, and also at Grapeville for the purpose of taking water, and that when making both of these stops the air brakes worked properly and were in good condition. At Grapeville, Engine No. 3078 was uncoupled from the train in order to take water. After coupling up a test was made of the air brakes before starting, and a running test was also made after starting. Both tests were satisfactory. Engineman Myers further stated that he did not use steam from Grapeville to Manor on account of the descending grade, but drifted along, using the air brakes now and then to properly regulate the speed of the train. When he passed the first caution signal, indicating that the signal on the signal bridge near Manor was at danger, he reduced the speed of the train, and was running at a speed of about 16 miles per hour before reaching the advance signal. This signal was also set at caution, and Engineman Myers made a further reduction in speed. When he saw the flagman of extra No. 2934, just before reaching the danger signal, he applied the air brakes in emergency, but on account of the slippery rails, the train drifted along until it struck the tender of Mosher engine No. 1993. Engineman Myers did not see the flagman until he was only a few car lengths distant. The statements made by Engineman Myers were corroborated by Fireman Miller of engine No. 3078, whom the Inspectors interviewed as he was leaving for his home.

Flagman Knepper of extra No. 2934 claims to have seen the

headlight of engine No. 3078 just after it passed over the slight ascending grade at Penn, and says that at that time he began to swing his red flag, his lanterns having been left on the end of a tie near the signal bridge. He continued to flag the train until it passed him, prior to which he stepped over on track No. 3 and called the fireman's attention to the fact that he was passing a flag. At about this time Engineman Myers answered to signals to the flagman. The train was going so slow when it passed the flagman that he could have boarded the engine without any difficulty. When he heard the noise of the collision, he started west for the purpose of flagging the east-bound tracks.

Brakeman Roach and Milliron of extra No. 3078 testified that they were on top of the train at about the 9th car from the engine when the collision occurred. They at once left the train, Brakeman Roach going forward. When he saw that tracks Nos. 1 and 2 were blocked, he took the flag from the hands of Knepper, who had just reached the scene of the accident, and ran west to flag tracks Nos. 1 and 2. In the meantime Brakeman Milliron ran east on track No. 4 for the purpose of flagging a proaching trains on that track. Before he had going more than 6 or 7 car lengths, however, he saw train No. 17 approaching and waved his hat in an attempt to stop the train. Engineman Daly saw him and at once blew the whistle and applied the air brakes, but was unable to prevent the accident. The trainmen and engine crew on the rear end of extra No. 3078 stated that train No. 17 passed them on track No. 4 just as extra No. 3078 came to a stop. This is borne out by the fact that the watch of engine Daly, who was killed, stopped at 7:42 a. m., while the collision between the two freight trains occurred at 7:41 a. m.

The weather at the point of the accident was extremely foggy, it being impossible to see a distance of more than 5 or 6 car lengths. It was a very frosty morning, and this contributed to make the rails very slippery.

All of the employees involved had had the required amount of rest, and none of them had been on duty in excess of the statutory period.

This accident was caused by the failure of Flagman Knepper of extra No. 3034 to comply with that part of Rule No. 99 of the Pennsylvania Railroad Book of Rules providing that when a train stops or is delayed, under circumstances in which it may be overtaken by another train, the flagman must go back immediately with stop signals a sufficient distance to insure full protection. A contributing cause was the failure of Engineman Myers of extra No. 3078 to have his train under proper control.

Respectfully submitted,

Chief Inspector of
Safety Appliances.