## In re Investigation of Accident on the Lehigh & Hudson River Railway at Hamburg, N. J., on January 5, 1914.

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January 23, 1914.

On January 5, 1914, there was a resr-end collision on the Lehigh & Hudson River Railway at Hamburg, N. J., resulting in the death of 1 trespassor and the injury of 2 trespassors.

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

Eastbound freight train No. 24, en route from Phillips-burg, N. J., to Warwick, N. Y., consisted of 12 loaded and 9 empty cars and a caboose, hauled by locomotive No. 32, and was in charge of Conductor Canfield and Engineman Bittner. On the day of the accident this train left Phillipsburg at 6.24 a.m., Franklin Junction at about 1.30 p.m., and at about 1.44 p.m., while standing at Hamburg, was struck from the rear by east-bound freight train No. 32. It the time of the collision a box cer was being hauled beniud the caboose of train No. 24.

Eastbound freight train No. 32, on route from Port Morris, N. J., to Maybrost, .. Y., consisted of 51 cars and a cuboose, hauled by loca other No. 59, and was in charge of Conductor Daley and Engineman Dossert. On the day of the accident this train left fort Morris at 11.55 a.m., Franklin Junction at 1.38 p.m., and while running at a speed of

about 4 miles per hour struck the rear end of train No. 24, as above stated.

The Lehigh & Hudson River Railway was a single-track line and train movements were governed by automatic block signals except that portion between Andover, N. J., and Warwick, N. Y., which included the point of accident, where the automatic block signal system was practically completed but not yet in operation on account of the testing not having been completed. Trains were operated over this particular section by train orders with a ten-minute time interval provided at open telegraph offices for following movements.

Approaching Hamburg there was a 5° curve leading to the right about 500 feet in length. This curve was followed by about 200 feet of straight track, then there was a curve of 5° 40° leading to the left about 1,000 feet in length. On the inside of the 5° curve there was a high embankment which saterially obscured the view. Beginning at a point about 100 feet from the eastern end of the curve of 5° 40° there was a deep cut which extended eastward to the station, a distance of about 350 feet. At the time of the collision the rear end of train %0. 24 was standing at the beginning of this cut, or about 100 feet west of the eastern end of the curve. The force of the collision crushed the box car on the rear of the caboose of train %0. 24 and partially crushed the caboose in which the three passengers were riding. The weather at the time of the accident was clear.

Flagman Enfford, of train No. 24, stated that his

train stopped at the Hamburg Paper Will switch to do some switching and he went back eight or ten car lengths, put down two torpedoes, and then returned to his train, although he had not been called in. When the engineman of train No. 24 signaled off brakes he boarded the box car behind the caboose. Train No. 24 then moved toward Hamburg station but when Flagwan Hufford saw the train order board at the station in the stop position he dropped off his train, started walking back. and had reached a point about five car lengths from the rear of his train when he saw train No. 32 coming around the curve. He immediately gave that train stop signals, and thinking that it would be able to stop in time to avoid a collision, turned and walked in toward his own train. Although he knew train No. 32 was somewhere benind his train and was already overdue. he stated that when his train stopped at the order board he walked back, instead of running, because he did not hear train No. 32 approaching. It was his outnion that the accident was due to his failure to go hic. for enough and the failure of the engineman of train 10. 32 to control the speed of his train.

Enginesan Bossert of train No. 32 stated that when his engine struck the torpedoes the speed of his train was about 20 miles per hour. He hasediately shut off steam and looked shead but could not see the flagman. However, within a short time, when coming around the second curve, the conductor, who was riding on the left hand side of the engine, and therefore was on the inside of the curve, saw the flagman.

Enginesan Bossert at once made a service application of the brakes. Just after this some one saw the rear end of train No. 24 and called it to his attention; he then made an emergency application, but the wheels locked and his train slid into the rear of train No. 24.

Fireman Carey, of train No. 32, stated that his train was running at a speed of 25 or 30 miles per hour when it struck the torpedoes.

Brakeman Savacool, of train No. 32, stated that he was riding on the engine at the time of the accident and shortly after striking the torpedoes he saw the flagman of train No. 24. He called to the engineman and thought the latter unde a service application of the brakes, ismediately followed by an emergency application. When the speed of train No. 32 had been reduced to about 4 miles per hour he stepped off the engine.

Rule No. 15 of the operating rules of the Lehigh & Mudson River Railway provided as follows:

"The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 feet apart is a signal to reduce speed, and to look out for a stop signal."

It clearly appeared from the statements of the employees that as soon as his engine exploded the torpedoes Engineeran Bossert shut off steam and began locking for a flagman with stop signals.

Examination showed that the first torpedo was put down at a point about 1,685 feat from the rear end of train

No. 24 as it stood at the station, and that the point at which Flagman Hufford claimed to have stood when he flagged train No. 32 was only 350 feet from the rear end of his train, while Engineeran Bossert apparently made the first application of the brakes when about 250 or 300 feet from the flagman, or when from 600 to 650 feet from the rear end of train No. 24.

This accident was caused by the failure of Flagman Hufford properly to protect his train.

Rule No. 99 of the operating rules of this railroad read as follows:

"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. When recalled, he may return to his train, first placing two (2) torpedoes on the rail when the conditions require it."

When his train first case to a stoo Flagman Hufford went back only a distance of about 400 feet and then returned to his train without being recalled, while when it stopped at the station he only went back a distance of about 350 feet, notwithstanding the fact that we knew that the view of the enginessen of any approaching train would be obscured by the sharp curve at this point. The crew of this train consisted of a conductor and three branessen, the sole duty of one of whom was to protect the rear end of the train. Under the rules of this railroad freight train conductors were required to ride on the engine. Under this rule Conductor Canfield was on the head end of train No. 24, while Flagman Rufford was on the rear end, where his sole duties were to protect

his train from just such an accident as occurred, and it is believed that had he made any real effort properly to protect his train Engineman Bossert would have seen his stop signals in ample time to have enabled him to stop train Wo.

32 and avoid this collision. There is no excuse whatever for the negligence displayed by Flagman Hufford in the performance of his duties.

Flaguan Hufford was employed in January, 1910, as a praceum, and on September 14, 1912, was promoted to conductor, and at the time of this socident was a qualified conductor.

All the employees involved were experienced men with good records, and none of them had been on duty in violation of any of the provisions of the hours of service law.