TNTERSIATE COLMERCE COLTISSION

REPORT OF THE DIRECTOR OF THE BUREAU OF SAFDTY IN REINVESTIGATION OF AN ACCIDENT WHICH OCCUPRED ON THE LOUISVILLE & MATTVILLE HAIDPOAD HEAR FLAT LICK, KY., ON FEBRUARY 18, 1925.

May 4, 1925.

mo the Commission

On Tebruary 18, 1925, there was a rear-end collision between a work extra and a freight train on the Louisville & Nashville Pailroad near Flat Lick, Ky., which resulted in the death of one employee and the injury of two employees.

Location and method of operation

This accident occurred on that part of the Cumberland Valley Division which extends botween Corbin, Ky., and Norton, Va., a cistance of 118.2 miles, which in the vicinity of the point of the alcident is a doubletrack line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred at a point about 1 1/2 miles north of Fist Fick; approaching from the south there is a 50 30' curve to the left having a total length including spirals of 1.217 feat, and then a tangent extending some distance beyond the point of accident. The accident occarred on this tangent, 697 feet from the north end of the curve. The grade is slightly ascending for northbound trains for a distance of several thousand feet and then slightly descending from a point 1,000 feet south of the point of accident and for a considerable distance beyond.

The weather was foggy at the time of the accident, which occurred at about 6.55 a.m.

Description

Forthbound freight train extra 1538 consisted of 50 cars and 1 cahoose, hauled by engine 1538, and was in charge of Conductor Watkins and Engineman Goins. It left Pineville, the last open office, 6.85 miles south of Flat Lick, at 4.45 a.m., and at Wallsend, about 1 mile from Pineville, was delayed by northbound freight train second No. 82. It finally departed from Wallsend

at 6.10 a.m. and was stopped a second time by the flagman of train second No. 82 at about 6.40 a.m. at a point about 1 1/2 miles north of Flat Lick, and it was still standing at this point when its rear end was struck by work extra 458.

Fork extra 458 consisted of engine 458, an extra engine tender, two dump cars, one ditcher, one spreader, and a caboose, in the order named, and was in charge of Conductor Lusk and Engineman Pennington. The train was being operated backing up, with the caboose in the lead. If left Pineville at 6.15 a.m., stopped at Vallsend, and also at Four Mile, the last-mentioned point being about 3.35 miles south of Flat Lick, and then proceeded northward, colliding with the rear end of extra 1538 while traveling at a speed estimated to have been about 10 or 12 miles an hour.

The caboose of extra 1538, which was of steel-underframe construction, telescoped the caboose of work extra 458, which was of wooden construction, demolishing the superstructure of the last-mentioned caboose. With the exception of these cabooses and the spreader located next to the caboose of the work extra, none of the equipment was derailed or damaged. The employee killed was the conductor of the work extra, who was riding in the cupola of the caboose.

Summary of evidence

Engineman Coins, of extra 1538, said he was flagged by the flagman of train second No. 82 when the latter was about 50 car lengths from the rear end of that train, that he stopped to pick up the flagman and then proceeded, finally stopping behind the caboose at about 6.40 a.m. He thought his train had been standing about 10 minutes before train second No. 82 proceeded, and after scunding the whistle signal for his own flagman to return he wanted a few minutes to give him an opportunity In the meantime Conductor Watkins had reached to do so. the engine and after waiting until they thought the flagman had returned to the train Engineman coins reached for the throttle and was about to start the train when the air brakes were applied in emergency as a result of the colli-Engineman coins said that when his train stopped behind the caboose of train second No. 82 he did not sound the whistle signal for the flagman to protect the train for the reason that it was not customary, since with long trains it was difficult for whistle signals to be heard by

the flagman, and also for the reason that Flagman Rogers was an experienced man and he did not think it necessary to signal him to protect the train. The statements of Fireman Davis and head Brakeman McFarland, both of whom were on the engine, brought out no additional facts of importance.

Conductor Watkins said he left the caboose when the train stopped and had gone forward and was on the engine when the accident occurred. On leaving the cabonse he thought the flagman was preparing to go back to flag and therefore did not give him any instructions about the matter. On returning to the rear of the train after the accident Flagman Rogers told him he had thought that there would not be any following train for several minutes and had become engrossed in working on the mileage report.

Flagman Rogers, of extra 1538, said that when recalled from flagging after the stop at Wallsend he had noted that the markers on the rear of the caboose were burning properly. Southbound passenger train No. 21 had nassed his train at Wallsend and shortly afterwards he nad heard it enter the manual-block territory which begins at Pineville and therefore thought there would not be any northbound train until after train No. 21 had cleared the block. As soon as his train bassed Plat Lick the speed was reduced and he said he was going to but down some torpedoes but did not do so as the speed was then ircreased. When the train finally stopped at the point where the accident afterwards occurred the conductor started for the head end and Flarman Rogers said that as he had figured that there would not be any following train cut of Finevills until after 7.15 a.m. he began to work on the mileage report instead of going back to protect his train by flag. He heard the engineen of his train sound the whistle signed rocalling him and in two or three minutes heard the exhaust of an engine which he thought was on the southbound track but almost immediately afterwarls he realized that it was a following train, the collision occurring before he had time to jump from the cabonse.

Flagman Chamley, of work extra 458, was riding on the leading end of the caboose in charge of the backup hose. We said he was keeping a careful watch of the track should and that suddenly he saw a dark object which at the moment scened to be an approaching engine and he said that he at once opened the valve wide, called to the men in the caboose to jump, tried to give some stop signals with his het from the firemen's side of the caboose platform, and then got off at a point about half a car

length south of where the accident occurred. He estimated the speed of his train approaching the point of accident to have been about 15 miles an hour.

Head Brake man Sawell, of work extra 458, had gone to the door of the caboose to ascertain the location of the train and his attantion was first directed to the preceding train by the sound of air escaping from the base-up hose. Fe did not notice the markers on the caboose of the preceding train and estimated that on account of the fog his range of vision was restricted to about three car lengths.

Engineran Pennington, of work extra 458, said he had shut off steam at the top of the grade and then allowed the train to drift, expecting one of the flagmen to get off in that vicinity. Very shortly afterwards the confluctor's value was opened and he at once placed the engineran's brake valve in les position. Engineman Pennington thought his train ran an additional distance of two or three car lengths before he felt it strike something and saw part of the caboose fall over on the southbound track. Fireman Hoskins, who was on the fireman's seathow looking ahead toward the caboose, saw two men jump from the caboose at about the time the brakes Were applied. The sided was then about 10 or 12 miles an hour and he did not think there had been any material reduction in speed prior to the occurrence of the accident.

While the statements of the various employees differed considerably as to the extent of the range of vision they seemed clearly to establish the fact that there was a dense for at the time of the accident. With the exception of the head brakeman of extra 1538, none of them estimated the range of vision to have been more than 10 car lengths.

Conclusions

This accident was caused by extra 1538 standing on the main track without proper flag protection, for which Flagmen Rogers is primarily responsible.

Flagman Rogers had heard the southbound massenger train enter the manual-block territory at Pineville, and therefore assumed that there would not be any train closely following his own train for a considerable period of time, apparently everlooking the possibility of a train

originating at some intermediate point, which was the case in this instance. For this reason he'did not give his train any protection but ramained in the caboose doing some other work. The flagging rule of this railroad is very explicit in its requirements as to what the flagman shall do in case his train stops under circumstances in which it may be evertaken by a following train and there is no excuse for the failure of Flagman Rogers to comply with the rule, particularly in view of the unfavorable weather conditions existing at the time. Had he taken proper sters for the protection of his train it is probable that this accident would not have occurred. Conductor Tatking started for the head end of his train as soon as it came to a stop and did not know that the flagman was not protecting the train. In view of the dense for, however, it is believed he is open to criticism for not warning the flagman to be unusually attentive to the proper verformance of his duties and for not seesing to it that the flagman started back to protect the train before he himself started for the head end.

Not only did Engineman Coins fail to sound the whistle signal for his flagman to protect the train, but the statements of soveral of the employees indicated that for some time past it has been a custom not to obey the rule requiring the sounding of this signal. While there is no assurance that proper obedience to this rule on this occasion on the part of the engineman would have caused Flagman Rogers to act differently, yet the existence of such a condition of non-obedience to the rules is undesirable to say the least. Proper flag protection is one of the most important features connected with the operation of trains, especially in territory which is not protected by block signals, and there can be no excuse on the part of employees for failure strictly to obey all the requirements of the flagging rules.

Had an adequate block-signal system been in use on this line, this accident probably would not have occurred, an adequate automatic train stop or train control device would have prevented it.

Flagmen Chumley had been employed as a brakeman about 3 months, the head brakeman of extra 1538 about 4½ months, and the head brakeman of work extra 458 about 14 months, the other employees involved were experienced men. At the time of the accident the crew of work extra 458

had been on duty about $1\frac{1}{2}$ hours, and the crew of extra 1538 about 8 hours, provious to which all of these employees had been off duty 8 hours or more.

Respectfully submitted,

W. P. Borland,
Director,
Bureau of Safety.