INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE LINE OF THE DELAWARE & HUDSON COMPANY AT NORTH ALBANY, N. Y., ON OCTOBER 31, 1921.

December 3, 1921.

To the Commission:

On October 31, 1921, there was a side collision between a train of empty passenger equipment and a light engine at North Albany, N.Y., resulting in the death of 1 employee and the injury of 3 employees. This accident was investigated in conjunction with representatives of the Public Service Commission of the State of New York.

Location and method of operation.

This accident occurred on the Saratoga Division, which in the vicinity of the point of accident is a double-track line over which trains are operated by time-table, train orders, and an automatic block-signal system. The accident occurred at a main-track switch, located about 2½ miles north of Albany, within yard limits. This switch leads from the northbound main track to the right to yard track 1, extending to Breaker Island yard, 97 feet north of this switch, on the yard track, there is a switch leading from yard track 1 to yard track 2. There is no lead track for these two yard tracks, and switch engines have to use the main track, under flag protection. An engine

standing between the main-track switch and the switch connecting yard tracks 1 and 2, will not clear cars passing on the northbound main track.

The signals involved are of the three-position, upper-quadrant type, normally displaying stop indications; the night indications are red, yellow, and green, for stop, caution, and proceed, respectively. Signal 1.3 is located approximately 1,355 feet south of the point of accident, while 4,582 feet farther south is signal 1.1. Approaching the point of accident from the south, beginning at signal 1.1, there is a tangent about 4,100 feet in length, followed by a 1-degree curve to the left 675 feet long, and then a tangent extending to the point of accident, a distance of about 1,100 feet, the grade is slightly ascending for northbound trains. The weather was clear at the time of the accident, which occurred at about 5.40 p.m.

Description.

After passengers are discharged, and all station work completed, a back-up movement, northbound, is made of the empty equipment of train No. 2, hereinafter referred to as extra 603. Back-up movements of this character are in charge of the regular engine crew, and a train crew known as a back-up crew, consisting of a conductor and brakeman. Extra 603 consisted of 1 cafe car, 3 coaches, 1 baggage car, and engine 603, in the order named, and was in charge of Conductor Crammond and Engineman Ashton. The cars were of all-steel construction with the exception of the cafe

car, which was of steel-underframe construction. This train backed out of the station at Albany, en route to the shops at Colonie, a distance of 4.8 miles, passed signal 11, which was displaying a caution indication, and approached signal 1.3, which was displaying a stop indication, this indication changed to proceed before the train reached it, however, and while passing the switch leading to Breaker Island yard, at a speed estimated to have been between 15 and 18 miles an hour, the leading car was struck on the east side, near the north end, by engine 38.

Engine 38 had been using the main track under flag protection while switching movements were being made on the yard tracks, but the flagman had been called in when the engine went in on yard track 1; some cars were left on this track, then the engine was backed up, at an estimated speed of 5 miles an hour, for the purpose of entering yard track 3; in making this movement the tender fouled the main track, colliding with extra 603.

Engine 38 came to rest on its right side, with its head end across yard tracks 1 and 3. The cistern was torn from the tender frame, coming to rest diagonally across the northbound main track, with the tender frame to the rear of the engine. The two leading cars of extra 603 were derailed, the first coming to rest to the left of the engine, in an upright position, diagonally across both main tracks. A part of the wreckage struck a freight train passing on the southbound main track, but no further damage resulted. The employee killed was the fireman of the light engine.

Summary of evidence.

The switching being performed by engine 38 prior to the occurrence of the accident had consisted of backing out on the main track with three cars from yard track 1 and switching one of them in on yard track 2, after which the flagman, who had protected the engine while it was thus occupying the main track, was recalled and the engine pushed the remaining two cars back on yard track 1. The engine was then backed a sufficient distance to clear the switch connecting the two yard tracks for the purpose of moving it on to yard track 2. While there was sufficient distance for the engine to clear the yard-track switch without it being necessary to open the main-track switch, yet it could not clear the yard-track switch without fouling the main track. It was while engine 38 was backing clear of the yard-track switch that it fouled the main track and collided with extra 503.

Brakeman Jones, of extra 503, was on the leading car controlling the back-up movement, while Conductor Crammond was inside one of the cars; Fireman Flynn was handling the engine, with Engineman Ashton riding on the left side of the cab. On account of injuries sustained no statement could be obtained from Brakeman Jones. The statements of the other employees were to the effect that a caution indication was received at signal 1.1, and that as the train approached signal 1.3 its indication changed from stop to proceed, this apparently being due to the

main-track switch being closed by the flagman of engine 38 when he was recalled. The next thing they noticed was the shock of the collision. On examining the main-track switch immediately afterwards they found that the points were lined for the main track, with the switch light displaying a clear indication.

Engineman Fitzpatrick, of engine 38, said that after one car had been switched in on yard track 3, Conductor Jarvis told him to call in the flagman, after which he was to push the two cars on yard track 1. While this was being done, Fireman Murray, who was a qualified engineman, asked Engineman Fitzpatrick to let him handle the engine, and the latter said he then turned over the engine to the fireman, at the same time warning him to be on the lookout for extra 603, and shortly afterwards went out on the front end of the engine to examine some leaks. He was on the front end of the engine talking with the Conductor when the accident occurred. Engineman Fitzpatrick knew the movement being made would result in the engine fouling the main track, and that as the flagman had been recalled no flag protection would be provided. He said, however, that at the time of calling in the flagman he did not know what the next movement was going to be, also that the view was obscured on account of smoke and steam from a train passing on another track, and that had he been handling the engine himself he would have stopped and not continued the movement until he knew that the way was clear.

When recalled from flagging, Flagman Weaver, on his return to the engine, closed the main-track switch and was standing within a short distance of it when he first saw extra 603 approaching, apparently about 50 yards distant, with Brakeman Jones blowing the back-up whistle. Flagman Weaver said he gave stop signals twice with his lantern, and then called to the members of the crew to jump.

Conclusions.

This accident was caused by engine 38 fouling the main track without proper flag protection, for which Fireman Murray, Engineman Fitzpatrick and Conductor Jarvis are responsible.

Fireman Murray was handling the engine, and was qualified to do so, and it is impossible to say why he allowed it to foul the main track. Engineman Fitzpatrick and Conductor Jarvis were the employees primarily in charge of the engine, they knew that the back-up movement being made by extra 603 was a regular one and had not passed, they were riding on the front end of the engine and were in position to know that it was approaching the main track and knew it would have to foul the main track in order to make the movement desired, and that it would not then have flag protection, the engineman having recalled the flagman upon instructions from the conductor. Under these circumstances they should have taken prompt measures to see that the engine did not foul the main track until provided with the

protection required by rule 93a, which reads in part as follows:

> "***Within yard limits the main tracks may be used clearing first-class trains as prescribed by the rules and protecting against other regular and extra trains.***"

At the time of the accident the crew of extra 603 had been on duty less than 3½ hours, after having been off duty 11 hours or more, the crew of engine 38 had been on duty less than 3 hours, after nearly 18 hours off duty.

Respectfully submitted,

W. P. BORLAND,

Chief, Bureau of Safety.