

Conclusion.

This collision was primarily caused by the objectionable practice of pushing trains from behind into Scarborough station,—a practice which has been the cause of previous collisions both at Scarborough and Hull, and to the danger of which practice the attention of the North-Eastern Company has been frequently directed. Only so recently as at the end of last June, when inspecting the junction of the New Scarborough and Whitby line at Scarborough, I took occasion to allude in my report to the continuance of this bad practice. In the present instance I have no doubt but that had the engine been at the front of the train, instead of at the tail of it, the driver would have stopped before reaching the two empty carriages which were standing against the buffer-stops of the main platform line on which his train was entering the station.

A second cause of the collision was the breach of the rule directing drivers to enter terminal stations at such speed as to be able to stop where necessary with the help of the hand-break only. The driver frankly acknowledged that he had intended to depend on the Westinghouse break for stopping (as he thought) at the buffer-stops, not being warned, he says, in sufficient time that there were empty carriages standing against them. Had he been running at the slower speed which dependence only on the tender hand-break would have necessitated, there would have been ample time to have stopped with the use of the Westinghouse break (which would then have been properly brought into play) short of the empty carriages, even with the short notice which he says he received.

The driver of the mail train is also to blame for not himself having looked out for a hand-signal on entering Scarborough station, and for having trusted to his fireman to do so, the latter being, as the driver knew, a perfect stranger there. This hand-signal was probably first given (judging from the evidence of porter Berryman, who was riding on the foot-step of the middle vehicle) when the front vehicle of the train was about 80 yards from the empty carriages, and the foot-plate of the engine about 85 yards from the man who was giving the signal, though the fireman says he got it when only about 40 yards from him, the driver stating that distance was only 30 yards when the fireman said "Wo!" At any rate the hand-signal appears to have been given in sufficient time, so far as the man who gave it is concerned, had the train been properly handled.

There is no doubt but that the driver had taken some drink the night before the collision, and it is possible that he may not have completely shaken off its effects when the collision occurred. It appears, however, that he was perfectly capable of taking back a train to York at 7.30 a.m., an hour and three-quarters afterwards.

Had the guard been keeping a proper look-out when the train was entering the station he would have seen the hand-signal given when the front of the train was about 80 yards from the empty carriages; in this distance he would have had time to apply the Westinghouse break and stop the train.

The locomotive foreman at Scarborough states in his evidence that he is afraid the rule as to speed in running into terminal stations is not very strictly attended to. When the non-observance of an important rule, such as this, is acknowledged by a superior officer not to be strictly attended to, it betokens a bad state of discipline, sure sooner or later to lead to catastrophe.

The Assistant Secretary,
Railway Department, Board of Trade.

I have, &c.,
C. S. HUTCHINSON,
Major-General, R.E.

Printed copies of the above report were sent to the Company on the 28th October.

NORTH UNION RAILWAY.

Board of Trade, (Railway Department,)
13th November 1885.

SIR,

IN compliance with the instructions contained in your Minute of the 31st ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances, which attended the double collision, that occurred on the 17th ultimo, at the south end of Preston station, on the North Union Railway.

The Lancashire and Yorkshire Company's 5.37 p.m. passenger train from Bolton to Preston, ran into a light engine, that was standing just outside the station home-signal, and the light engine was driven against a pilot engine, which was attached to four coaches and four trucks, and was standing a few yards from the light engine.

Five passengers, the engine-driver, and a permanent way inspector, who were in the passenger train, and the fireman, who was on the light engine which belongs to the London and North-Western Railway Company, are reported to have been injured. The pilot engine also belongs to the London and North-Western Railway Company.

The passenger train consisted of an engine and tender, a third-class, a break-van in which the guard in charge was travelling, and four passenger coaches. The van and four coaches were fitted with Fay's break, which was controlled by the guard.

The passenger train struck the light engine, which was standing about 12 yards outside Preston station down home-signal, at a speed which is variously estimated at 6 to 9 miles an hour.

The buffer-plank was broken, both frame-plates of the passenger train engine were bent, and one carriage in the passenger train was damaged.

The buffer-planks and the buffers of the London and North-Western light engine and of its tender were broken, and the hand rail was damaged.

One buffer-casting and the vacuum pipe of the London and North-Western pilot engine were broken, and the screw coupling was damaged.

No engines or vehicles were thrown off the rails.

Preston station has one cabin, called No. 2, which is situated in the station, about 70 yards from the south end of the station platform; another cabin, called No. 1, is at the south end inside the station; and a third cabin, called Ribble Bridge cabin, is at the south side of No. 1 cabin.

The down home-signal for the Ribble Bridge cabin is 330 yards from the down home-signal for No. 1. The down home-signal for No. 1 is 250 yards south of the cabin. The first collision occurred about 149 yards inside or north of No. 1 cabin, and 12 yards south of the down home-signal for No. 2 cabin. The down home-signal for No. 2 is 178 yards south of the cabin, and it is about 161 yards north of No. 1 cabin. The signals can be well seen in clear weather, but at the time of the collision there was a fog, which appears to have hung in dense patches near the ground at the south side of the station.

This part of the railway is worked on the permissive block system; that is to say, a train should not be permitted by any of the signalmen to pass their cabins without having first been brought to a stand, or very nearly so, at their home-signal, and then allowed to proceed slowly forward, the driver having been first warned that the next section is occupied.

The evidence is as follows :—

James Butterworth, driver of the 5.37 p.m. passenger train from Bolton to Preston on the 17th October, stated: I was running on the fast lines to Preston. On approaching Ribble Bridge sidings cabin I observed the down home-signal for the fast line at danger. When I got near to the signal it was lowered. I was cautioned by a green light when passing the cabin. On approaching the home-signal for No. 1 cabin, that signal was off, and I passed the cabin some short distance before exploding a fog-signal. I was running at about six or seven miles an hour, when my engine exploded the fog-signal. I kept a look-out for the home-signal at the south end of the station, but I ran into collision with a light engine outside the signal at a speed of about six miles an hour. I did not observe the fogman. As I was passing No. 1 cabin on the down line a train was passing on the up line, and if a caution signal was exhibited from the cabin I did not see it. I do not think that I could have seen a caution-signal from the cabin if it had been exhibited, owing to the dense fog. My train consisted of six vehicles, five of which were coupled together with Fay's break. When I first saw the home-signal for No. 2 cabin it was off; this was after the collision. I did not see it before the collision. The continuous breaks were not under my control, but under the control of the guard. Steam was shut off at the time of the collision. My fireman was applying the tender break when my engine struck the pilot engine. I ran up to No. 1 cabin at a speed of

about eight miles an hour, and shut off steam as I passed it. Although the home-signal was off at No. 1, I shut off steam on passing the cabin, as I had plenty of speed to run into the station. I could not observe the distant-signal for No. 2 cabin, which is on No. 1 cabin home-signal post, owing to the dense fog. I could only see the top signal, which was the home-signal. I think the fog-signal that I ran over was about 60, 70, or perhaps 80 yards from the pilot engine that I ran into. I did not see any fogman exhibit a red light. I went on duty at 2 p.m. and left off at 11.30 p.m. the evening previous. I was hurt in the arm and face. My fireman was not hurt. The number of my engine was 654. It had the buffer plank broken, and both frame plates bent in front. The buffer spindle of one of the carriages on my train was also bent. I have been in the service of the Company 30 years, and have been a driver 23 years.

John Dagger, fireman to driver Butterworth, stated: I have been in the service of the Company seven years, and have acted as fireman four years. We were running on the down fast line on the 17th October. On approaching Ribble Bridge cabin I noticed that the down home-signal was off. I saw no caution signal exhibited from the cabin. The distant-signal of No. 1 Preston cabin was on. The home-signal at No. 1 was at "all right." After passing a distance of about three yards beyond No. 1 cabin we exploded a

fog-signal. We were then running at about eight or nine miles an hour, and no steps were taken to stop our train. The home-signal of No. 1 cabin was at "all right." We ran forward at the same speed, and came into collision with a light engine outside the station. I could not have seen a caution signal exhibited from No. 1 cabin, because an up train was passing at the time. It was a foggy night. I could not see above five yards beyond our engine. The distant-signal of No. 2 cabin, which is on same post as No. 1 cabin home-signal, was at danger. The fog was very thick close to the ground. I did not see the fogman at No. 1, or any red light that he exhibited.

Alfred Hardman, guard in charge of the 5.37 p.m. passenger train, Bolton to Preston, on the 17th October, stated: We were approaching Preston about five minutes late. My train was brought almost to a stand at the Ribble Bridge sidings down home-signal, but before it came exactly to a stand the home-signal was lowered, and it proceeded forward. The train passed the home-signal at a speed of about three miles an hour. On approaching No. 1 cabin the home-signal was off, and on passing underneath the signal the distant-signal for No. 2 was also lowered. After passing No. 1 cabin we exploded a fog-signal. I applied my breaks, and got the blocks rubbing before the collision took place. We came into collision, I should think, at about eight or nine miles an hour. I did not see the home-signal for No. 2 cabin until after the collision, when it was off. After the accident I noticed one London and North-Western engine outside the signal, and one inside the signal. The only damage to my train was a buffer spindle slightly bent. None of the passengers complained to me of injury. My train consisted of six vehicles, a third next to the engine, a van, and four other vehicles. The van and four coaches next to it were fitted with Fay's break, which I controlled. I have been a passenger guard 13 years.

Thomas Ashcroft, platelayer, Preston, stated: I have been in the service of the North Union Company for about 12 years, and during that time I have constantly acted as fogman. I was appointed by my Inspector to fog at No. 2 cabin home-signal on the 17th October. About twenty minutes prior to the Lancashire and Yorkshire train approaching, a light engine had passed in the direction of the station. The home-signal of No. 2 cabin was at danger. I put two fog-signals down, and gave the driver of the light engine a red light. In twenty minutes afterwards the Lancashire and Yorkshire passenger train approached, and I had two fog-signals down then. I exhibited a red light to the approaching train. I do not know whether the driver saw the light or not. Both fog-signals exploded. The Lancashire and Yorkshire train passed me at about 10 miles an hour. When the Lancashire and Yorkshire train passed me the home-signal for No. 2 cabin was at danger. I was standing 30 yards within where I had placed the fog-signals, and within sight of the home-signal, when the Lancashire and Yorkshire train passed me. The signal was not lowered until after the collision.

Ralph Haslam, pointsman at Ribble Bridge sidings cabin, Preston, stated: When the Lancashire and Yorkshire train was approaching my cabin, on the 17th October, my distant-signal was at danger. I got the train accepted from No. 1 cabin, and I lowered my home-signal for it to proceed forward; I then gave the driver a green light. No man was fogging at my home-signal. The passenger train passed my cabin at a speed of about five or six miles an hour.

John Swanton, signaller, in charge of No. 1 cabin, Preston, on the 17th October, stated: I have been in the service of the Railway Company 22 years, and have acted as signaller 11 years. I went on duty at 2.0 p.m. to work an eight hours' shift. A London and North-Western light engine passed my cabin at 6.5 p.m., and it went forward in the usual way. At

6.22 p.m. I accepted a Lancashire and Yorkshire train, and it was telegraphed "on line" at 6.27. It passed at 6.29. The down home-signal for the fast line was at danger as the Lancashire and Yorkshire train was approaching, and when I thought the driver had got near to the signal I lowered it. It was very foggy at the time, and I could only see a very few yards. At the time the Lancashire and Yorkshire train was passing towards the station, there was also a train passing my cabin on the up line. I was in the position to give the driver a caution-signal with my hand-lamp as he passed, but it was impossible to do so, because another passenger train was passing on the up line. When I accepted the train from Ribble Bridge sidings cabin, I offered it to No. 2, and No. 2 accepted it. Thomas Smith was the man appointed to fog my home-signal, but he had not come on duty although the fog commenced at 4.50 p.m. I am acquainted with the rules with regard to block-working through Preston station. One regulation says, that in cases of this kind, the train should be brought to a stand at the home-signal, and allowed to draw forward to the cabin, and there brought to a stand, and after the driver had been cautioned, he was to proceed cautiously. I thought I was carrying out this rule in the absence of the fogman when I lowered my home-signal, as I considered that the driver would be at the signal, and it was my intention to give the driver a red light at my cabin; but it being so foggy, and a train passing on the up line, I was prevented from doing this.

Lennard Telford, No. 2 cabin, Preston, stated: I have been in the service of the Company about 30 years, and have been a signaller 25 years. On October 17th I was in charge of No. 2 box. I went on duty at 2.0 p.m. to work an eight hours' shift. After the arrival of the London and North-Western train at 6.1, it was drawn back by the pilot to the south end of the station to allow the Longridge train to depart at 6.17, the Preston and Wyre at 6.29, and London and North-Western at 6.31. About the time the Longridge engine was getting round its carriages, I had a signal given from No. 1 box for a light engine, but this engine I omitted to record in my train book, being busy at the time. I received "be ready" signal for a passenger train at 6.22, and "on line" at 6.28. I acknowledged the "be ready" signal of the Lancashire and Yorkshire train by one stroke on the bell, my outdoor signals being all at danger, and my signals remained at danger until just after the collision took place, at which time I lowered them for the light engine. When the pilot engine drew the four coaches and four trucks back to the south end of the station, I told the driver that there was a light engine standing outside the home-signal, and he was to go back cautiously, and when I was ready for him to come forward I would lower the home-signal; which I did, expecting the light or branch engine to follow. At the time the Lancashire and Yorkshire train was given to me from No. 1 box, my electric indicator showed "Train on line" at No. 1 box. When I took off my signal for the pilot engine and train, I did not give "Line clear" to No. 1 cabin.

Thomas Smith, permanent-way man, Preston, stated: I was appointed to fog the home-signal for No. 1 box. On October 17th, I left duty at 4.0 p.m., and there was no fog on then, nor was I aware of the fog until noticing it about 6.20, when I was about a mile from the station. I at once proceeded to the station on my own account to take duty as a fogman, and arrived at the post at 6.40 p.m. The fog was very bad at this time.

William Kenney stated: On the 17th October I was driver of a light engine (No. 579) that was returning from Manchester after assisting an excursion train to that station. I arrived at No. 1 cabin, Preston, about five minutes past six. The signals were all at danger as I came along. I drew slowly up to the cabin, and got a green light from the signal-

man on duty at No. 1, and I proceeded to No. 2 home-signal, which I also found at danger, and brought my engine to a stand. Whilst standing there, a pilot engine with some coaches attached to it drew down slowly to where my engine was, and came to a stand close to my engine. Whilst standing there my engine was run into by the Lancashire and Yorkshire passenger train, and my engine was knocked against the pilot engine, which was drawn down close to me. My engine was driven forward about two engine lengths. The passenger train ran into my tender, and my engine was knocked against the tender of the pilot engine which was attached to the coaches. I got off just before the collision. My fireman stopped on, but was thrown off and badly shaken. My engine was damaged to the following extent:—

Buffer castings at both ends damaged.

Tender, buffer planks, and buffers broken.

Head-rail damaged, and the buffers between the engine and tender broken.

I have been a driver in the London and North-Western Company's service six years.

John Pye, driver of the London and North-Western pilot engine No. 787, stated: I stood on my engine at the time it was struck by the light engine behind it, and I was not hurt. My engine was driven forward 9 or 10 yards, but neither the engine nor any of the coaches or trucks attached to it were knocked off the rails. My fireman also remained on the engine, and was not hurt. The damage to my engine was one buffer casting and the vacuum-pipe broken. The screw-coupling was also damaged.

Reuben Johnson stated: I was fireman of the light engine on October 17th. Whilst I was standing on my engine the Lancashire and Yorkshire passenger train ran into it. I was in the act of filling the engine with water at the time of the collision, and I was knocked off by the collision, and very badly shaken, but no bones were broken. I have not been to work since. I have been with the Company about three years and nine months, and am an extra fireman.

Conclusion.

It appears that the Lancashire and Yorkshire passenger train was first checked by the signals at Ribble Bridge cabin, and went forward under a caution signal. According to the evidence of the driver, it approached the home-signal for No. 1 cabin at a speed of about 8 miles an hour, and he stated, that as he found that signal at "All right" he ran on, and passed No. 1 cabin without receiving a caution signal from the signalman. He said that his train was running at a speed of about 6 or 7 miles an hour, when he ran over a fog-signal. The fog-signal exploded when his engine was about 50 yards inside of No. 1 cabin. His fireman then applied the tender break. The driver had shut off steam at No. 1 cabin, but the engine of the passenger train was not stopped, before it ran into the light engine, which was standing about 99 yards inside the fog-signal which exploded, and about 149 inside No. 1 cabin.

The down distant-signal for No. 2 cabin is on the same post as the home-signal for No. 1, and this distant-signal was at danger when the passenger train passed it.

The signalman in No. 1 cabin stated, that he kept his down home-signal at danger against the passenger train, until "he thought that the engine-driver of that train had got close to the signal," and that he then lowered it. He failed to give the engine-driver of the passenger train a caution signal as he was passing his cabin, as an up train was passing at the same time, which prevented him from seeing the driver of the Lancashire and Yorkshire passenger train.

The driver of the Lancashire and Yorkshire train stated, that he did not see the down distant-signal for No. 2 cabin, which is on the same post as the home-signal for No. 2, when he passed the signal-post, and observed that the home-signal for No. 1 was at "All right." If this was so, he should have treated it as a danger signal, but he took no steps to stop his train until he ran over the fog-signals after passing No. 1 cabin. The fogman stated that this engine exploded two fog-signals.

Making every allowance for the difficulties attending the working of trains in foggy weather into a busy station like Preston, I cannot acquit the engine-driver of the passenger train of blame. He should have considered the distant-signal for No. 2 cabin, which he said that he did not see, as a danger signal; and if he had been driving carefully, there was sufficient break power on the train to stop it after he ran over the fog-signals, and before he reached the light engine.

The signalman in No. 1 cabin is very much to blame for having lowered his down home-signal before the section in advance was clear. His excuse about the absence of a fogman only makes his act the more reprehensible.

I do not consider it safe to work permissive block, even within the limits of a station, unless the drivers can see the railway clearly for the whole distance between the home-signals at the several block section stations.

The Secretary,
Railway Department, Board of Trade.

I have, &c.,
F. H. RICH,
Colonel, R.E.

Printed copies of the above report were sent to the North Union, Lancashire and Yorkshire and London and North-Western Railway Companies on the 27th November.