

The  
**VIRTUAL MUSEUM**  
of the  
**LANCASHIRE & YORKSHIRE RAILWAY**

Accident Reports.

21 November 1874

BoT Report into Accident at  
Liverpool Exchange.

(2 Pages).

the down main line signal at A, as he knew that the fast trains usually stopped at the south end of the down platform; he said that it was 95 yards from his box to where the front carriage of the 3.30 p.m. train from London stood, and that owing to the fog he could not see it, and did not know of what it consisted. He admitted that the station master had asked him where the Chester engine was, and he answered that it was on the turntable, but that he did not hear him say that he wanted the Chester engine backed to the train, neither did he understand the station master to say that the two engines had come off the train; that some horse-boxes were required to be put into the bay, and he told the shunter and foreman that they could not move them until he saw the pilotman, in consequence of the single line, which was necessarily used for both up and down traffic after the collision at the Cannock Road junction: that he gave the signal for the engine to go off No. 4 line and over No. 23 points, in order to put the horse-boxes into the dock, and by some mistake he turned the Chester engine into where the horse-boxes should have gone, and the horse-boxes where the engine was required.

In the meantime the signalman in A box got notice from Priestfield station, that the 2.15 p.m. down train from London was coming, 18 minutes after the 3.30 p.m. train ran in, and he rang the bell to B signal box for the slot to be taken off, and it was taken off immediately by the signalman in B box. He states that

the tail of the 3.30 p.m. train was standing just the length of the 2.15 p.m. train that ran into it, from his box, but he could not see the 3.30 p.m. train as the fog was so dense. He further states that the 2.15 p.m. train ran into the 3.30 p.m. train, at a speed which he estimated at about 8 or 9 miles an hour, while the driver named 6 miles an hour, as the rate at which he was running, when his engine struck the other train.

The 3.30 p.m. train consisted of two engines and tenders, six carriages, and two break-vans, while the 2.15 p.m. train consisted of an engine and tender, seven carriages, and two break-vans. Both buffers and buffer-planks of the engine of the 2.15 p.m. train were broken, as well as the link-motion on one side; and two carriages at the tail of the 3.30 p.m. train were thrown off the rails, but there was very little damage done to the rolling stock.

The collision occurred about 8.55 p.m., and it was evidently caused by a misunderstanding between the station master and the signalman in B box, during a very dense fog, while the traffic in and through the station had been deranged by the previous collision at the Cannock Road station on which I have already reported.

*The Secretary,  
(Railway Department),  
Board of Trade.*

I have, &c.,  
W. YOLLAND,  
Colonel.

Printed copies of the above report were sent to the Company on the 25th January.

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,  
(Railway Department),*

SIR, *Whitehall, 26th December 1874.*

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in your minute of the 27th ultimo, the result of my inquiry into the circumstances which attended a collision that occurred on the 21st ultimo between two passenger trains on the Lancashire and Yorkshire Railway, near the Liverpool station: Ten passengers have complained of injuries received on this occasion.

The approach to the Exchange station on the Lancashire and Yorkshire Railway at Liverpool is protected by a series of signal-boxes provided with telegraphic instruments, commencing with the signal-box at the entrance of the station yard: 336 yards further out from the station signal-box A signal-box is placed, and 189 yards beyond A signal-box B box is fixed, while C signal-box is 220 yards beyond B. Another signal-box, D, is still further away from the station.

The traffic on this part of the Lancashire and Yorkshire Railway is worked on the block system, and the trains are signalled forward from D to C, C to B, and B to the station signal-box. The box at A is not a block-telegraph station, but repeats the signals given from the station signal-box to B. Again the down home-signal at C box is slotted from B signal-box, and thus becomes the down distant-signal for that box, while the down home-signal at B is slotted from A box, and thus acts as a second down distant-signal for the station signal-box.

The day on which this collision occurred was very foggy between Sandhills, which is two miles from Liverpool, and Liverpool itself, and some men were out on the line and employed as fog men.

The driver of the 8.15 a.m. down passenger train from Southport to Liverpool informed me that his train consisted of an engine and tender, 12 carriages, including breaks with two guards, and that he saw fog men here and there between Sandhills and Liverpool, but did not run over any fog signals: that it

was very foggy, but he was not signalled in by fog men, but ran in cautiously: that the signals at C box were off for him to proceed, but he found the home-signal at B box was on at "danger" against him, and he was only enabled to see it as he passed it, when the signalman showed him a green light, and he pulled up as quick as he could, and brought his train to a stand opposite to A box, because the signalman then showed him a red light: that he stood there about 4½ minutes before his train was run into by a following train from Ormskirk to Liverpool.

On the other hand, the driver of the 8.30 a.m. train from Ormskirk to Liverpool stated that his train consisted of a tank engine, seven carriages and one break-van at the tail of the train, and that this break-van was continuously coupled to the three adjacent carriages by means of Newall's breaks: that the whole of the signals were taken off for him on leaving Sandhills station: that he did not see any fog men between Sandhills and Liverpool, and did not run over any fog signals, and was not running at any greater rate than ten miles an hour between those stations: that he had shut off the steam when near D signal-box, and he found the main signal at C box off for him to proceed, and he was quite sure that the main-signal at B box was also off for him to go on, and after passing B box he was looking ahead for the station distant-signal, but could not see it, and the first thing that he did see was the rear end of the Southport train in front, not more than a carriage length distant, as he could not see it at a greater distance on account of the fog, and he then reversed the engine, but had not time to turn on steam the reverse way; the fireman just got the engine break on, and he, the driver, whistled for the guards' break, and he thinks they were running about six miles an hour when the collision took place at from 10 to 12 minutes past 9 o'clock.

Scarcely any damage was done to the rolling stock, and nothing was thrown off the rails.

This driver's statement as to the home-signal at B signal-box being off for him to proceed is not confirmed, and I think it is not correct. The signal-

man in B box distinctly states that it was on at "danger" against the Ormskirk train, and that he had no power to take it off, as it was slotted, and thus controlled by the signalman in A box. This statement is confirmed by a man employed as a point cleaner who was in B box at the time the Ormskirk train passed, for the purpose of learning how to work the block system, and further by the evidence of the signalman in A box.

The whole of the men who were concerned with this collision all agree as to the density of the fog.

The collision was evidently due to a want of care on the part of the driver of the Ormskirk train in running towards the Exchange station at Liverpool without having his train under proper control and at too high a rate of speed during a very thick fog: in conjunction with the fact that proper arrangements had not been made, or the requisite instructions been given to the platelayers who had been sent out to act as fog men.

A platelayer stood somewhere between B and C signal-boxes, where he could see C's main-signal but not B's main-signal, and he stated that he had ob-

served that C's main-signal was off, but could not see the other: that he had been a platelayer four months, but had never received any instructions as to what he was to do when out "fogging": that since the collision took place he has understood that he was intended to signal in accordance with B's main-signal, but did not know this at the time, and he had never received any copy of the "Regulations to be observed during Fogs and Snowstorms," but had heard them read out.

But the main cause of this collision may be broadly stated to be due to the insufficient amount of accommodation provided at the Exchange station for the number of trains that make use of it. I understand that the Lancashire and Yorkshire Railway Company have obtained the necessary powers to enable them to enlarge this station, and the sooner this is set about the better for the public who make use of it.

I have, &c.  
W. YOLLAND,  
Colonel.  
*The Secretary,*  
*(Railway Department),*  
*Board of Trade.*

Printed copies of the above report were sent to the Company on the 8th January.

## LONDON AND NORTH-WESTERN RAILWAY.

*Board of Trade,*  
*(Railway Department),*

SIR, *Whitehall, 21st November 1874.*

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in your minute of the 14th instant, the result of my inquiry into the circumstances connected with the collision between two passenger trains, which occurred on the 10th instant, at Heaton Norris junction, near Stockport, on the London and North-Western Railway.

In this case, the 5.15 p.m. passenger train from Manchester to Crewe overran the junction-signals, and came into collision with the 4.45 p.m. passenger train from Staleybridge to Stockport, for which train the junction-signals were lowered.

Ten passengers (nearly all in the Manchester train) were slightly injured.

The coal bunk and side frame of the engine of the Manchester train were damaged, and this engine (a tank engine) was thrown off the rails.

The break van at the front of the Staleybridge train had its side partly knocked in, and its leading wheels thrown off the rails; two of the carriages had their foot boards damaged.

At Heaton Norris junction, about 5 miles from London Road station, Manchester, and on the main line to Crewe, the branch from Staleybridge joins the main line. The junction point and signal levers are properly interlocked in a raised cabin in the fork between the two lines; as regards up trains, the main line is protected by an up distant-signal, about 800 yards from the cabin, and by two up home signals (both worked by the same lever) one, a high one at the junction-points, and the other, a low one, outside the fouling point of the up main and down branch lines. The up branch line is also protected by a distant and two home-signals similarly arranged to those on the main line. These signals can all be seen for considerable distances. Close to the signal-cabin and on the up branch line are a set of facing-points leading to a loop line.

The main line rises from Manchester towards the junction for about two miles on a gradient of 1 in 377, and the branch falls towards it on a gradient of 1 in 132.

The traffic between Heaton Chapel and Reddish (the stations next on the down side of the junction on the

main line and branch respectively) and Heaton Norris junction is worked upon the absolute block system as regards trains following each other, though not as regards those approaching the junction simultaneously; between the junction and Stockport (a distance of rather more than half a mile, which is more or less of a station yard, it is worked on the permissive block system. Heaton Norris Station is about 300 yards on the Stockport side of the junction.

On the evening in question, a signalman named Potter, of nearly three years service in that capacity, was on duty in the junction cabin; at 5.25 he took the up branch train in block from Reddish (1½ miles distant), and pulled off his up branch signals about a minute afterwards; at 5.27 he took the up main line train in block from Heaton Chapel (about ¾ mile distant) but necessarily (the signals being interlocked) kept his up main line signals at danger. He states that he was watching for the branch train (which a curve in the line prevented from being seen from the cabin for any great distance), and that it was passing the cabin before he had noticed that the main-line train (which he had not heard whistle) was also close to the junction; that it passed through his mind to turn the branch train through the facing-points into the loop, but that the engine was on the points before he had time to throw the branch home signals to danger and thus set these points free to move; that he knows rule 26, which states that "when two trains are seen approaching a junction from different lines, the signalman must keep his signals on at danger to both trains, and not allow either to pass until one of the trains has been brought to a stand," but that being occupied in watching for the branch train, he was not aware that the main line train was approaching till it was too late to make compliance with the rule of any use; that the trains came into collision at slow speed at 5.29; that the main line driver was doing his best to stop.

The branch train from Staleybridge to Stockport consisted of engine and tender (running tender first), a break van, and three coaches. It started at 4.55 ten minutes late (waiting for a train from Yorkshire) and was detained by signals six minutes outside Guide Bridge station. The driver, a man of 16 years service as such, states that on coming into sight of the Heaton Norris junction signals he found them all off;