

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,  
(Railway Department),  
Whitehall, 1st February 1873.*

SIR,

IN compliance with the instructions contained in your minute of the 17th 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 collision that occurred on the 13th ultimo at Grindford Bar junction on the Lancashire and Yorkshire Railway.

The Grindford Bar coal branch joins the line from Chorley to Wigan about half a mile east of the Allington station. The coal branch falls on a gradient of 1 in 150 and 1 in 120 towards the main line. The junction is protected by a chock block across the rail, which is worked from the signalman's cabin, but the points and signals are not interlocked. This has been ordered to be done since July last.

The 6.0 a.m. passenger train from Chorley to Wigan, which consisted of a tank engine, a guard's van with a guard, a second-class carriage, a first, and two third-class carriages run into some waggons of a coal train, which came off the Grindford Bar coal branch. Five passengers were seriously hurt; one has since died. The driver, fireman, and guard of the passenger train and the guard of the coal train were also injured.

The coal train, which consisted of an engine, seven empty waggons, and a break-van, arrived at Grindford Bar from Preston at 6.5 a.m. When the guard's van at the tail of the train had been drawn clear of the junction, the guard gave the engine-driver a signal to stop. The fireman unhooked the engine from the waggons, and it moved ahead.

Immediately the engine was unhooked seven empty waggons and the van commenced to move back. The guard stated that on finding that his break would not hold them he jumped out, to try and alter a pair of slip points, so as to turn his train on to the up line, but the van had passed the points before he got there, and he could not do so. He then put down the break of the waggon next to his van, and was in the act of trying to put down the break of the second waggon, when his train was run into by the passenger train. He was knocked down the bank and cut in the head. His van and the waggon next to it were broken to

pieces, and knocked off the rails. The passenger train engine was damaged in the end and side, and the sides of all the carriages of the passenger train were stripped, but no part of the passenger train left the rails. The signals were all right for the passenger train to pass Grindford Bar junction, which it approached at a speed of about 16 miles an hour. The driver did not observe anything to be on the road before him, until he struck the van of the coal train. He was knocked down and stunned, but he jumped up as quick as he could, reversed the engine, and the passenger train was brought to a stand a short distance beyond the point of collision.

The signalman on duty at Grindford Bar cabin, having seen the coal train safely on to the coal branch, lowered the signals for the passenger train to approach, while that train was standing at Adlington station, but he forgot to close the chock block across the branch line. He stated that this chock block was not habitually used.

This man did not become aware that the coal train was running back until the passenger train was close to his cabin. He then held out a red hand lamp to stop the driver of the passenger train, but this was done too late for the latter to see it.

The accident appears to have been caused by the break of the guard's van of the coal train not being in good working order, or by the guard having failed to apply it properly. This man was in charge of the empty coal train as his head guard was absent from sickness, but although he is a young inexperienced guard, he appears to have been using his best efforts to stop the train, when it had commenced to run back, and he received a severe blow in the head while doing so. The accident could not have happened if the signalman on duty at Grindford Bar junction had placed the chock block (which is worked from his cabin) across the rails of the Grindford Bar coal branch before he lowered the signals for the passenger train. When the signals and points are re-arranged and properly interlocked, it will afford additional security at junctions of the kind.

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

I have, &c.,  
F. H. RICH,  
Lieut.-Col. R.E.

Printed copies of the above report were sent to the company on the 22nd February.

## LONDON AND NORTH-WESTERN RAILWAY.

SIR,

*Wigan, 22nd January 1873.*

IN compliance with the instructions contained in your minute of the 8th inst., 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 collision that occurred on the 3rd inst., between Euxton and Coppull stations, on the London and North-Western Railway.

No persons were hurt.

On the day in question, a pilot engine, which had assisted a goods train from Liverpool to Preston, left Preston about 12.40 a.m. on the return journey to Liverpool. It was returning empty with the engine in front of the tender. The driver on leaving Preston was under the impression that all the express trains for the south had gone forward.

When the pilot engine reached Euxton junction, the signals were at "all right" for it to pass. The signalman, on seeing it approach, opened his window to see if the engine-driver wanted to shunt.

The driver of the pilot engine stated that he saw a green hand-lamp in the signal-man's box, which he thought was intended as a caution signal to him. This

green light was not intended for the driver of the pilot engine, as the line from Euxton to Coppull was clear at the time; but it caused the driver to proceed at a moderate speed of about 16 miles an hour towards Coppull.

The express train from the north, which is due to leave Preston at 12.25 a.m., was late, and did not leave that station till 12.48 a.m. The signals at Euxton junction were at "all right" as the express train approached; but the signalman on duty at the junction, showed the driver of the express a green caution signal with his hand-lamp, as the pilot engine had only passed about four minutes previously.

The rules of the London and North-Western Railway Company require the fixed signals to be kept at "danger" for three minutes after a train has passed, and the caution signal is to be given until the section is clear.

The express train passed Euxton junction at a speed of about 30 miles an hour, and ran into the pilot engine about two miles south of the junction, at a speed of about 25 miles per hour. The buffer and buffer-beam on the tender of the pilot engine

were broken, and the passenger engine had its buffer-beam broken, but no vehicle left the rails. The night was dark and stormy, and the tail lamp on the tender of the pilot engine appears to have been giving a bad light.

The passenger train consisted of an engine and tender, five carriages, three brake vans, and one carriage truck.

The driver of the express stated that he shut-off steam on receiving the caution signal when passing the junction; but on getting to a straight part of the line, about half a mile south of the junction, and seeing nothing in front of him, he again put on steam. He did not notice the pilot engine till he was within 50 yards of it, when he immediately shut-off steam, reversed, and whistled for the guards' brakes, but he could not stop his train before the engine of the passenger train struck the pilot engine. Both engines were running up an incline of one in 100 at the time.

The driver of the passenger train stated that the light on the tender of the pilot engine was so dim that he could not see it till he got close to it.

The accident was caused by the engine-driver of the passenger train, who did not exercise sufficient vigilance and caution after passing Euxton Junction, where he received a caution signal to inform him that there was a train in front of him, on the line of rails on which he was travelling, between Euxton and Coppull.

The best means of averting accidents of the kind is to work the line on the absolute block principle. I am informed that the London and North-Western Railway Company are introducing this system as fast as they can on their railway.

I have, &c.,  
F. H. RICH,  
*Lieut.-Col. R. E.*  
The Secretary,  
(Railway Department),  
Board of Trade.

Printed copies of the above report were sent to the company on the 22nd February.

## LONDON AND NORTH-WESTERN RAILWAY.

Sir, *Liverpool, February 14th 1873.*

In compliance with instructions contained in your minute of the 27th ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances connected with the collision that occurred on the 27th ultimo at the Widnes station, on the London and North-western Railway.

Five persons are reported to have been cut, bruised, and shaken.

The engine-driver of the pilot engine, and the guard of the passenger train were slightly hurt.

On the day in question, the pilot engine was standing on the St. Helen's branch, attached to two trucks of coal, which were intended to be brought to the station for station use. While the pilot engine was standing on the branch, another pilot engine with a train of nine loaded waggons came up. The engine-driver of this latter train wanted to get off the branch to proceed towards Warrington. The pilot engine with the two waggons of coal was brought out on to the line from Warrington to Liverpool, and the other pilot engine was also brought out, and was sent across from the line to Liverpool on to the line to Warrington, and went away in that direction.

The signalman at the Widnes station junction then called the pilot engine with the two waggons of coals back on to the branch, so that it might stay there until the 8.55 a.m. passenger train from Stockport and Warrington, which was due, should pass.

As the pilot engine with the two waggons of coals reached the junction of the St. Helen's branch the passenger train was seen approaching. It was only about 30 or 40 yards distant at the time.

The engine-driver of the pilot engine reversed and got his engine into motion in the same direction as the passenger train was running, with the object of trying to prevent a collision; but he failed in doing this, and the passenger train ran into the hindermost of the two waggons, just as it was started.

The passenger train consisted of an engine and tender, a third-class, two composite carriages, and the brake-van with the guard. It left Stockport about its proper time, and was about two minutes late when it reached Widnes, where it was timed to stop.

Widnes station, which is at the junction, is protected with home and distant signals, which are interlocked with each other. The points and signal levers are worked from a raised cabin, exactly opposite to the junction. The signalman is provided with the block telegraph instruments to work to the stations in each direction.

The distant-signal towards Warrington is about 850 yards distant from the junction cabin. The signals were at danger against the passenger train. The engine-driver of the passenger train stated, that, owing to the thickness of the atmosphere, he could not see the distant-signal till he reached it. He was travelling at the rate of about 30 miles per hour at the time.

On finding the distant-signal at danger, he immediately checked the speed of his train, and, after bringing it under control, he proceeded towards the station. As he got close to the Widnes junction cabin, he saw that the station-signal was also at danger; but he saw the signalman waving a green flag, and he was under the impression that he was doing so, for the purpose of calling him on to the station.

The driver stated that the atmosphere was so thick from the steam and smoke from chemical works, which are close by, that he could not see that a coal train was on the road in front of him, till he was close to it, and had no time to stop. He put on steam again, on seeing the Widnes junction signalman waving the green flag, and he ran into the two coal waggons that were attached to the pilot engine at a speed variously estimated from six to eight miles per hour. The signalman who was waving the green flag, was doing so for the purpose of calling the coal train back, and he stated that he was not aware at the time that the passenger train was in sight, but it appears to have been close to him. According to the regulations of the London and North-western Railway Company, this man should not have allowed either of the coal trains to leave the St. Helen's branch, when the passenger train was so nearly due, without blocking both lines to the next stations; but he stated that he had never been in the habit of working in this manner, and that he thought his distant-signals were sufficient protection to prevent the passenger train approaching, whilst a coal train was on the line.

At a place where the view is so liable to be interfered with by fog, and by the smoke and steam from the chemical works adjacent, it is very desirable that the absolute block system should be introduced as soon as possible.

The present accident seems to have been caused by the driver of the passenger train not having exercised due care in approaching Widnes station, when he found the signals at danger.

It was also wrong of the signalman to allow the two pilot engines to come off the St. Helen's branch