

engine-tender, until the engine-driver got about 300 yards from the station, when he noticed that he was without his train.

He immediately stopped his engine, and sent his fireman back to look after the train.

The fireman had only gone a few yards back when he met the train following the engine down the incline of 1 in 100. He shouted to the engine-driver that the train was following, and the engine-driver tried to get his engine in motion, but could not do so, owing to his having only one side of his engine in working order, and the engine at that side being on what is called its "centres."

The train ran against the engine-tender at a speed of about seven or eight miles an hour. The guard,

who was looking out of his van, and was not aware that the train was uncoupled from the engine, was slightly hurt in the arm and head. Three passengers have complained of having been hurt.

The accident was caused by the engine of the passenger train having broken down, and by the engine-driver having forgotten to get it coupled up again to the passenger train, after he had completed the work necessary to enable the engine to proceed to Birmingham with the train.

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

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

Printed copies of the above report were sent to the company on the 9th June.

### GREAT WESTERN RAILWAY.

Sir,

*Dolgelly, 16th June 1873.*

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 accident that occurred on the 26th ultimo, at Much Wenlock station, on the Great Western Railway.

On the day in question, the train which is due to leave Wellington at 9.30 a.m. for Craven Arms, started at its proper time.

It consisted of a tank engine, a carriage truck loaded with market goods, two third class, a composite carriage, and a break van with a guard at the tail of the train.

The train waited at Coalbrookdale for the train from Shifnal, and it was consequently about 9 minutes late in reaching Much Wenlock. The engine and carriage truck were detached, and the latter was placed in the siding at Much Wenlock. The engine was again attached to the train, and the driver then got the signal from the station-master and the guard of the train to proceed to Craven Arms.

The railway from Buildwas junction near Coalbrookdale, to Craven Arms, is a single line. The man who has charge of the points and signals at Much Wenlock is also charged with the duty of collecting the passengers tickets. He is stationed in a raised cabin, which is situated at the south-west end of the station platform. The points and signals connected with the passenger line are worked in the cabin and are interlocked with each other. The facing points which lead to the goods yard are placed about 155 yards on the Craven Arms side of Much Wenlock station. These points are also worked from the signalman's cabin and are interlocked with the station signals. The signalman placed his signals at danger as soon as the passenger train arrived. He then left his cabin to collect the tickets.

At the time that the passenger train was leaving Much Wenlock, a porter, who is charged with the duty of checking the waggons in the goods yard, was standing on the station platform. He was waiting to push the waggon of market goods into the goods yard. As soon as the passenger train left, and before it reached the points that lead to the goods yard, this man went

into the signal cabin and turned the points to the goods yard. He became aware of his mistake when the passenger train had reached the points, and he then tried to put them back into the proper position for the passenger train, but he did not do so in time; and the engine and carriage next to it were thrown off the rails, by passing through the points while they were half open. The three last carriages of the train passed through the points in the proper direction towards Craven Arms.

The train was running at a speed of about 10 miles an hour, as it passed through the junction points which lead to the goods yard. The driver shut off steam and whistled for the guard's break, and the fireman applied the engine break, as soon as the driver noticed that his engine was running into the goods yard, and the train was stopped immediately. The couplings did not give way, no vehicle was upset, and no one was hurt.

The life guard and one horn plate of the engine were broken, and the permanent way was a little damaged.

The porter who made the mistake had no business to go into the signal cabin or to meddle with the points. He has been in the Company's service for some years, and had done duty as a signaller for 5 years, but he gave it up because the night work did not agree with his health. He bears an excellent character, and it is impossible to account for his complete absence of mind in turning the points, and apparently forgetting altogether the existence of the passenger train, although that train had been moving past him a moment before, and must have been within 100 yards of him and distinctly visible, at the time that he moved the points.

As the points that lead to the goods yard are facing points for down trains and may be turned in either direction while the station signals are at danger, I recommend that a signal interlocked with the points shall be placed at the goods yard junction. This will act as a starting signal for down trains, and will prevent the points being moved when the signal is lowered for trains to proceed.

*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 company on the 5th July.

### LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,  
(Railway Department),  
Whitehall, May, 1873.*

Sir,

IN compliance with the instructions contained in your minute of the 18th 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 15th ultimo,

about half a mile west of the Goole station on the Lancashire and Yorkshire Railway.

A passenger train ran into a train of empty waggons which was standing across the railway.

The engine-driver, and fireman, and guard of the passenger train, and four passengers, were hurt. Their injuries are believed to be slight.

There are two junctions with the passenger line at

the west side of Goole station. The junction with the goods yard is about half a mile to the west of Goole, and the junction with the Goole coal line is a little more than a mile from Goole.

In the interval of about 1,000 yards between the goods yard junction and the coal line junction, there are two junctions with some goods sidings, which are at the north side of the passenger lines. These goods sidings are about 400 yards long. They join the down line about 100 yards west of the goods yard junction, and they join both to the up and down lines about halfway between the goods yard junction and the coal junction.

The coal junction is protected with home and distant-signals in each direction. The junction with the goods yard has distant signals in each direction, but no home signals.

The junction at the west end of the sidings is protected by home signals, and the man in charge of these sidings communicates by gongs with the signalman at the goods yard junction, and with the signalman at the coal line junction, to intimate to these junction signalmen when he requires to use the sidings. When this is the case, the junction signalman at the goods yard junction works his distant signal for the protection of the up line, and the junction signalman at the coal junction works his distant signals for the protection of both the up and down lines.

The two sidings between the goods junction and the coal junction are provided with chock blocks at each end, to prevent the waggons in them from being pushed out and fouling the main line. The sidings are at a lower level than the main lines.

On the day in question, a special train, which consisted of an engine, tender, 40 empty waggons, and a guards' van, arrived from Wakefield, at the west end of the Goole goods junction, at about 8.30 p.m. There was no room for it in the goods yard, and it was determined by the man on duty in the Goole goods yard, to place these waggons in one of the sidings between the goods yard junction and the coal junction. He communicated his intention to the signalman on duty at the goods junction.

The siding nearest the main line had a large number of waggons in it, and there were also some waggons in the siding next to it. The yardman believed there were only about ten waggons in this last-named siding, and he was aware that the siding would hold about fifty.

The guards' van was detached from the goods train, and the forty waggons were pushed back into the siding. The engine drew out, and took the van away into the goods yard, to get another train and proceed back to Wakefield.

No notice was given by the yardman, who put the waggons into the siding, to the signalman at the coal junction, of what he was doing: as he did not intend to interfere with the passenger lines at the west end of the siding. After placing the waggons in the siding, the yardman went away with the engine to the goods yard, to assist in making up a goods train for Wakefield, and having completed this work, he left off duty about 10 minutes to 9.

The 7.30 p.m. passenger train, which consisted of an engine and tender, a second-class carriage with a brake compartment and a guard, a composite, and two third-class carriages, coupled together in the order in which they are given, left Wakefield about two minutes late. It was delayed at Knottingley waiting for the train from Leeds, and it reached the coal junction at Goole at about 8.57 p.m., thirteen minutes late. The signals at the junction were at "all right," and it ran past the junction, on its way to Goole station, at a speed of about 25 miles an hour. The steam was shut off at the time. When it reached the west junction of the sidings with the passenger lines, the engine ran into some empty coal waggons that were standing across both lines of rails. The engine-driver was not

aware of anything being in the road until he struck the coal waggons.

The engine of the passenger train was uncoupled from the tender, was diverted across the up line of rails, and ran into the bank on the south side of the line, about 22 yards beyond the crossing where it struck the waggons. The tender was also thrown off the rails, and came to a stand across the up line. The composite carriage had mounted on to the tender, and the two leading wheels of this carriage were off the rails. The other three passenger coaches remained on the rails. The engine and tender were damaged. The brake compartment of the second-class carriage next to the tender was driven in, and the sides of this and the rest of the coaches were damaged. Six empty coal waggons were thrown off the rails and broken to pieces, and several others were damaged.

The guard of the train was standing at the brake at the time of the collision. He was prepared to apply it as the train approached Goole station, but he had not done so when the collision occurred. He was thrown down by the collision, but he got up at once and got out of his van.

He found the signalman from the coal junction coming to see what was the matter, and asked him whether he had placed his signals at danger. On finding that he had done so, he asked him to go forward towards Goole, to prevent anything from approaching from that direction. The guard then got the passengers out of the train, and put them in a safe position at the side of the line, and then went to look after the fireman and engine-driver.

The signalman at the goods yard junction, and his relief man, who had just come on duty at that moment, also heard the crash, and arrived at the spot very soon after the accident. A train was brought from Goole station, and the passengers were taken to their destination.

The accident was caused by the man who was let in charge of Goole yard, neglecting to satisfy himself that all the waggons were placed safely in the siding before he went away to the goods yard with the engine. This man had been employed in the yard for about two years. He excused himself by stating that he was not a regular yardman, and that he believed he had placed no more waggons in the siding than it would hold, and that he thought that if there had been more waggons than the siding would hold safely between the chock blocks, the waggons would have been checked when he was placing the 40 waggons of the special train in the siding, and that he would have perceived the check, and thus become aware of their having been pushed past the chock block, and across the up and down lines of rails.

It appears that there were 26 waggons in the siding at the time that the 40 empty waggons were put in, and that when these waggons were pushed in, the stop of the chock block gave way, and 14 waggons were pushed out of the siding and across the main lines.

The Lancashire and Yorkshire Company are at the present time erecting new signals at the coal junction. I would also recommend that they should erect a new signal cabin and new signals at the goods yard junction, and that the sidings between these two junctions should be controlled by blind sidings, worked in connection with the junctions, and placed in charge of the men on duty at these stations.

I would also suggest slight alterations in the arrangement of the signals.

Distant signals should not be placed on the home signal posts, and the distant signal at one station should not overlap the home signal at the next station. The home signal at the adjacent station should be slotted, so as to work as a distant signal for the adjacent station, when these stations are close together.

I have, &c.,

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

F. H. RICH,  
Colonel R.E.

## LANCASHIRE AND YORKSHIRE RAILWAY.

Sir, *Dublin, 20th May 1873.*

In compliance with the instructions contained in your minute of the 30th 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 26th ultimo at Middleton station, on the Lancashire and Yorkshire Railway.

Middleton is the terminal station of the branch line. The goods yard is at the south side of the line. There are two cross-over roads leading from the up main line into the goods yard, and both cross-over roads have slips on to the down line. One set of slips, which are those nearest to the platform, has facing points on the down line. There is also a cross-over road between the up and down main lines at the east end of the station platform; and there is a siding at the north side of the railway which leads to a ballast pit, and joins the up main line at the same place as one of the lines that leads to the goods yard. There are no station signals, but there is a distant signal which has a repeater, and this distant signal can be lowered to "all right" by one lever which is placed at the west end of the up platform, and by another lever which is placed near the junction of the sidings at the east end of the yard. All the points are worked separately by ground levers, and are in charge of the foreman shunter of the goods yard, who also works the distant signal for the protection of the station, when he is doing any shunting on the passenger line.

The foreman porter at the passenger station is charged with the working of this same distant signal for passenger trains. Either of these men can take off the distant signal, but it requires both of them to set together to put it on.

The railway from Middleton junction to the east end of Middleton station falls on a gradient of 1 in 90, and it is level at the station platform.

On the day in question a goods train, which consisted of a tank engine, 14 waggons of goods, and four waggons of coal, arrived at the east end of Middleton station yard about 12.40 p.m. There were two guards in charge of the train, which was brought to a stand at the east end of the station. The engine driver, under the instructions of the yard foreman, pushed back 14 waggons of his train on to the up line, along the cross-over road which is furthest from the station platform. The engine was then uncoupled from the train and ran into the ballast siding. Fourteen waggons of goods, which had been backed on the up line, were then allowed to run down the incline into the goods yard, and the four waggons of coal which were at the tail of the train, and which appear to have been detached while the train was standing on the down line, were then allowed to run along the down line, and were turned into the coal siding at the back of the station platform, through the facing points of the slip road. The engine-driver having then placed his engine in front of the 14 waggons of goods, he and the fireman went to get their dinners. The porters at the station were also engaged in getting their dinners at this time. About 10 minutes to 2 the foreman porter returned to the station and lowered the distant signal for the passenger

train, which is due at Middleton at 2 o'clock from Manchester. The passenger train, which consisted of a tank engine, three third, a first, a second, and a third-class carriage with a brake compartment and a guard at the tail of the train, arrived at its proper time. When the engine-driver was within an engine length of the slip points leading to the coal sidings, he observed that they were open for the sidings. He was running at a speed of about seven miles an hour at the time; the steam was shut off. He reversed and put on steam, and his fireman made an attempt to apply the tender brake, but the driver could not stop the train, and the engine ran against some 20 coal waggons which were standing in the sidings about three carriage lengths from the points. The waggon of coal which the engine struck was smashed to pieces and three other coal waggons were damaged. The leading wheels of the engine of the passenger train were thrown off the rails and the engine was slightly damaged. The bodies of all the passenger carriages were shifted on their frames, and the ends of three of them were driven in, but none of them left the rails. The engine-driver and fireman remained on their engine, and were not hurt. The guard of the passenger train, who was riding in the last vehicle, had two of his ribs broken, and was rather seriously hurt. Eight passengers have complained of being injured, but it is believed that none of them were seriously hurt.

The accident was caused by the yard foreman forgetting to place the points of the slip road right for the passenger line, after he had put the four waggons of coal into the coal siding. The lever handle that works these points is provided with a chain for the purpose of fastening the points right for the passenger line. This chain must have been unfastened to allow the coal waggons to get into the coal siding, and was not put back.

Accidents of the kind are certain to happen sooner or later, when the safety of the passenger line is left dependent upon the memory of a man, whose mind is occupied with the difficult and sometimes dangerous operations of sorting the goods trains, and shunting the various parts of them into the different sidings at stations.

The yard foreman has been a long time in the company's service, and bears an excellent character, but he no doubt omitted to set the points right from forgetfulness and not from any wilful neglect.

He is however very much to blame for not honestly confessing the truth about the matter, instead of trying to make it appear, that some boys who are in the habit of going to the coal yard to buy coal, had wilfully meddled with the points.

I recommend that proper signals should be supplied and fixed at Middleton station; that the points should be interlocked with the signals, and that the sidings should be controlled by blind sidings, the points of which should be interlocked with the main line signals and points. This will render accidents of the kind impossible.

*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 company on the 9th June.

## LONDON AND NORTH-WESTERN RAILWAY.

Sir, *Birmingham, 10th May 1873.*

In compliance with the instructions contained in your minute of the 26th March, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances con-

nected with the accident that occurred on the 18th of March at the New Street station, Birmingham, of the London and North-Western Railway.

A passenger train from Wolverhampton ran into a Midland train of empty carriages, which was standing