

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

30 September 1869

BoT Report into Accident at
Lostock Junction.

(2 Pages).

sengers in the carriages from Scarborough, and three others in those from Blackpool, have since complained of contusions.

The break-van from Scarborough was examined after the collision, and it was then found that two of the teeth of a cast-iron cog-wheel, by means of which the break is worked, were fractured; and that the fractured portions of them had jammed in the rack which works on the wheel, so as to make it impossible to turn the break-handle, and thus to render the break useless. The break-van had been used, it appears, between Halifax and North Dean Junction on the previous day, on its way to Scarborough, and had then been in good order; but it had not been in use at all between North Dean and Scarborough, or, as already stated, between Scarborough and Sowerby Bridge. It would hardly have been used at Scarborough, because it was at that place in the middle of a long train; and there is no evidence to show how the fracture could have occurred, which, by preventing the employment of the break at Sowerby Bridge, led directly to the accident. The sections of fracture were bright, and

the mischief appeared to have been done that day. It is supposed that the apparatus might possibly have been tampered with by some one at Scarborough who was not acquainted with the actions of breaks of this particular description, and who might, by turning the handle forcibly in the wrong direction, have fractured the cog-wheel. After the break has been taken off, the handle, on being released, turns round suddenly, and the break flies on of itself, by the pressure of a spring from which its action is partly derived; and if it is then turned in the wrong direction the cog-wheels may be fractured; and these will occasionally give way, under rough usage, even when applied in the proper way. This particular wheel does not appear to have been much worn, and it would no doubt be better if such wheels were constructed of steel instead of cast iron, or if they were made somewhat stronger, even in iron.

*R. G. W. Herbert, Esq.,
Board of Trade,
Whitehall.*

I have, &c.,
H. W. TYLER.

A copy of the above report was sent to the company on the 5th November 1869.

LANCASHIRE AND YORKSHIRE RAILWAY.

SIR,

Preston, 21st Oct. 1869.

IN compliance with the instructions contained in your minute of the 8th instant, 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 30th September at the Lostock Junction station on the Lancashire and Yorkshire Railway.

At the Lostock Junction, which is 13 miles to the north-west of Manchester, the line from Southport and Liverpool on the west joins the line from Preston on the north. The junction was formed 20 years ago, and the junction cabin has not yet been supplied with modern improvements in the shape of locking apparatus for working the points and signals. But the junction is protected by the usual home semaphore signals, and by distant signals in each direction, the distant signal towards Liverpool being 800 yards from the cabin. The station, which is situated between the cabin and the distant signal, is about 350 yards from the former and 550 from the latter, and there are platforms at the station for the lines to and from Liverpool and Preston.

The Liverpool line falls for rather more than a mile on a gradient of about 1 in 70 towards the junction, but further westward it rises to the summit at Chewmoor, on a gradient of 1 in 94, for several miles past the West Houghton Station, which is 1½ miles from the junction.

On the day in question, an excursion train left Staleybridge for Southport at 6.50, and reached Southport at 9.45 a.m.; and left Southport on its return journey at 6.30 p.m., punctually, according to the excursion time-bill. It consisted of an engine and tender, 12 carriages, and two vans, with a guard in each, and contained about 450 passengers. The engine driver, fireman, and guards, were all well acquainted with the line. The train did not stop anywhere from Southport until it approached the Lostock Junction station, but it was intended to draw up at that station for collecting tickets. In rounding the curve on the approach to the distant signal from Lostock Junction, the engine-driver saw, as he was looking out for the signal at 7.30 p.m., the three side and tail lamps of a goods train, about 200 yards ahead of him, and outside of that signal. He was then travelling, as he says, at 12 miles an hour, and he had, after ascending the above gradient of 1 in 94, just commenced the descent of the gradient of 1 in 70, which runs down upon the junction. His steam was already shut off, and he whistled

for the tender and guard's breaks, which were at once applied. He also reversed his engine, and turned on his steam, and reduced his speed, as he believes, to four or five miles an hour before he struck the van of the train before him 400 yards outside of the distant signal.

The engine and carriages of the excursion train all remained on the rails, and the buffer-plank only of the engine was broken, but six of the passengers have complained of injury. The vans of this train were coupled each to two carriages with Newall's continuous breaks, and it was, no doubt, owing to this good arrangement that no greater damage was done.

The goods train which was thus in the way of the excursion train was a special train, not included in the company's time tables. It left Wigan at 6.50 p.m. for Bolton, with slate and slag; and consisted of an engine and tender, 16 loaded and one empty waggons, and a break-van. It was not intended to stop at Lostock Junction, but was detained in approaching that junction, in consequence of other trains being in front of it. It passed West Houghton, according to the guard, at 7.10, and approached the distant signal from Lostock Junction about 7.15. It was pulling up, in obedience to the distant signal, which was at danger, when the van was struck by the engine of the excursion train, at 250 yards, according to the belief of the guard, or 400 as measured by the engine driver of the excursion train, outside of the distant signal. The guard in the goods van only saw the excursion train approaching when the engine was, as he thought, about 50 yards from him, and he had just time to jump out of his van before the collision occurred. He states that his train was proceeding forward as he left it at a speed of six or seven miles an hour, and that he fell, by reason of that speed, in jumping from his van. His impression was that the excursion train was travelling at 20 miles an hour when he first saw it, and nearly the same speed when his van was struck.

The buffers of the goods van were broken, and the wheels were jammed so that they would not revolve. Four of the waggons were damaged in their buffers and ends, but none of the wheels of the goods train were thrown off the line.

In front of the above special goods train from Wigan, there was a special timber train from Liverpool to Manchester, which had been stopped by the Lostock Junction signals, while a passenger train from Preston to Manchester was standing on the Preston line for the collection of tickets at the junction sta-

tion. The passenger train had the right of precedence, and the signalman, acting according to his regulations, would not allow the timber train to pass through the junction until the passenger train had gone forward out of its way. There was thus a block on the Liverpool line of three special trains, whilst the Preston passenger train was waiting for three minutes for the collection of tickets, and the position of the Lostock station was a most unfavourable one—on a steep gradient and sharp curve—for the detention of such trains.

There is a good deal of discrepancy between the statements of the guard of the special train from Wigan and the servants of the company with the excursion train as to the respective speed of the two trains. They are equally positive in their different assertions, and the truth lies probably somewhere between them. It is in any case plain that the engine driver of the excursion train had not sufficient warning of the obstruction before him to enable him to avoid the collision on the one hand, while the guard of the special train from Wigan would not, on the other hand, have had time, while his train was pulling up in obedience to the junction signals, to run back and to give proper notice of his danger to the driver of the excursion train which was following so closely after him.

According to the record book which is kept at the West Houghton station, it appears that the three trains passed that station, without stopping, at the following times :—

H. M.
The special timber train at 7 17
The special Wigan train at 7 18
The excursion train at 7 20

and it would not have been very unlikely, even without the check that was received by the timber train and the Wigan train at the Lostock junction, that the excursion train should overtake and come into collision with the Wigan train sooner or later after leaving West Houghton. The porter who was on duty at West Houghton as the excursion train passed was busily employed in shifting luggage from the up to the down side of the line, and did not give any warning to

the driver. He went into the porter's room to fetch his lamp for that purpose when he saw the excursion train coming, but he found when he returned to the platform that the train had already passed. The station-master was in the booking office, issuing tickets to passengers for the 7.21 train to Southport, and, having left the porter in charge of the platform, did not see the excursion train pass. The telegraph-clerk received at 7.17 notice of the excursion train having passed Hindley, two miles from West Houghton, at 7.16, and entered it on the train-slate on the platform, where the porter could have seen it at 7.17, as was his duty, but he did not mention the circumstance to anyone, nor was it usual for him to do so. The driver of the excursion train did not, therefore, any more than the driver of the Wigan train, receive any warning in passing West Houghton of a train in front, and the porter on the platform at that station certainly did not exercise the caution which he ought to have done in that respect.

There are altogether 34 trains in each direction passing West Houghton daily, besides from 4 to even 15 special trains, varying in number according to circumstances.

The company would do wisely in introducing at once a block-telegraph system of working on this line, with so heavy a traffic, severe gradients, and obstructed view ; and they might conveniently establish block-telegraph stations at Lostock Junction, at the summit at Chewmoor, half a mile from West Houghton, and at the West Houghton station. They should also re-organize the signal arrangements for the branches and sidings at Chewmoor, remove the distant signals to greater distances, furnish station signals at West Houghton, add a semaphore post with two arms between the Lostock Junction and the junction station, to be worked by the signalman and to protect the point of danger, which is some distance from the actual junction,—and provide locking apparatus with modern improvements and appliances at the junction.

I have, &c.,
H. W. TYLER.

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

A copy of the above report was sent to the company on the 10th November 1869.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade
(Railway Department),
Whitehall, 23rd November 1869.*

SIR,

I HAVE the honour to report for the information of the Board of Trade, in obedience to your minute of the 4th inst., the result of my inquiry into the circumstances which attended a collision that occurred on the 27th ult., on the Barnsley branch of the Lancashire and Yorkshire Railway, between a passenger and a coal train, on which occasion 16 passengers have complained of having been injured ; no bones were broken, but some persons were bruised and others were severely shaken. The guard of the passenger train was so seriously hurt that I was not enabled to see him.

There are two colliery sidings, named Craigs and Willow Bank sidings, about 400 yards apart, on the eastern side of the Barnsley branch; that lying nearest to Barnsley (Craigs siding) is situated nearly a mile from Barnsley station. Both sidings are protected by distant signals in each direction, with repeating signals to those towards Barnsley, owing to a curve in the line and two over bridges and some cuttings, which prevent the distant signals from being seen from the points which join the sidings to the main line, from whence they are worked.

On the 27th ult. a coal train, with 16 waggons on, left Barnsley for Horbury Junction at 11.45 a.m., its rope: time for leaving being about 11 a.m. It reached

Craigs Colliery siding at 11.50 a.m., and left, after taking on 16 waggons, at 12.3 p.m. It reached Willow Bank Colliery siding at 12.5 p.m., and had taken out 10 waggons and was ready and in the act of departing at 12.18 p.m., when it was run into by the 12.15 p.m. passenger train from Barnsley to Wakefield.

It was proved, and not disputed by the driver of the passenger train, that the signalmen at Craigs and Willow Bank sidings had put on their distant signals to "danger," as soon as the coal train reached Craigs and Willow Bank sidings, and that they had not taken them off before the collision took place. The coal train had taken longer than usual in bringing out the waggons at Willow Bank siding, the driver having attempted to take out too many waggons up the steep incline from the colliery at a time.

The distant signal worked from Craigs siding is about 900 yards from the spot at which the collision took place, and it can be seen for a long distance from a train advancing from Barnsley.

On this morning the passenger train consisted of engine and tender, running with the tender in front, and four carriages, the last having a guard's compartment fitted with a break and continuously coupled to other breaks on the other vehicles.

The driver states that he left Barnsley at the proper time and was running at his usual speed ; he believes the signals were on at "danger" against him,