

The evidence in this case is conflicting, as between the Lancashire and Yorkshire Company's signalman on the one hand and the servants of the London and North-Western Company with the passenger train on the other hand. The evidence was given fairly in both cases, and it is difficult to determine with absolute certainty on which side the truth lies; but, under all the circumstances of the case, I am inclined to believe that the servants of the company with the London and North-Western train found the distant-signal at caution as they passed it, and that it was turned to danger while they were ascending the bank towards the Newtown cabin. The signalman did not know when he prepared to allow the empty-carriage train to leave the siding that the passenger train was about so soon to start from the Victoria station; and he may no doubt have thought that his distant-signal was turned to danger before that train passed it; but I hardly think his statement that it was kept at danger for five minutes previously can be correct.

In any case, the engine-driver of the London and North-Western Company did not keep a sufficiently good look out in approaching the Newton cabin. If he had done so he would have had no difficulty, on a rising gradient of 1 in 50, in bringing his train to a stand short of the empty-carriage train, and in thus avoiding a collision.

It is desirable that in the course of future working the distant-signal from the Newtown cabin should be kept habitually at danger, and only lowered when it is necessary to allow an engine or a train to pass, and when the line is clear for it to do so; and it is also desirable that the position of the home-signal from that cabin should be somewhat improved, that it may be more clearly visible to an approaching engine-driver.

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

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

Printed copies of the above report were sent to the Lancashire and Yorkshire and London and North-western Railway Companies on the 23rd September.

LANCASHIRE AND YORKSHIRE RAILWAY.

Sn. *Preston, 4th November 1873.*

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 22nd September, the result of my inquiry into the circumstances connected with the collision between a passenger train and a goods train which occurred on the 17th September at Gregson Lane siding, near Houghton Station, on the Lancashire and Yorkshire Railway.

No personal injuries appear to have been sustained in consequence of this collision.

Gregson Lane siding is situated between Bamber Bridge junction and Houghton stations, from which it is distant $1\frac{1}{2}$ and 1 mile respectively; Preston on the one side being distant $4\frac{1}{2}$ miles and Blackburn on the other $6\frac{1}{2}$ miles. The line falls from Houghton to Bamber Bridge and thence to near Preston on a gradient of 1 in 100.

The points and signal levers at Gregson Lane siding have recently been concentrated and interlocked in a raised cabin, but the down distant-signal (that towards Houghton) has been placed, though the gradient is falling at the rate of 1 in 100, only 600 yards from the home-signal. There is in clear weather a fair view of this signal.

On the morning of the day in question, which was somewhat misty and rainy, a special goods train from Liverpool to Blackburn, consisting of a six-coupled engine and tender, 29 loaded waggons, and a van, after having been detained at Bamber Bridge junction to allow two up passenger trains to pass, was imprudently allowed by the signalman to leave directly after the second of the two had passed, although a third fast up passenger train was due in 10 minutes. The goods train approached Gregson Lane siding at a slow pace at 9.26, the engine, on account of the slippery state of the rails, being hardly master of its load, and having taken about 14 minutes in travelling up the $1\frac{1}{2}$ miles from Bamber Bridge junction. Close behind the goods train was the 9.10 a.m. fast train from Preston to Blackburn which had overtaken it on the bank, and the signalman at the siding—although a fast down train from Blackburn to Liverpool was now due but not in sight or hearing—thought the best thing he could do was to stop the goods train and set it across on to the down line out of the way of the up passenger train, the sidings at

Gregson Lane not being long enough to put the goods train into. He accordingly told the driver as he passed his cabin that he was to stop and set back, then put to danger his down-signals, (the up-signals were already on), and as soon as the tail of the goods train had cleared the points of the cross-over road (30 yards above the cabin) he opened these points and the train set slowly back through them; the greater part of the train had reached the down line when the down passenger train from Blackburn came up, and its engine struck the goods train between the second and third waggons from its proper front. It upset these two waggons, which were a good deal damaged, and a third waggon had its axle bent.

The down passenger train, which was in charge of a driver of 19 years' service, consisted of a four-coupled engine and tender, six coaches, and two break-vans, each of the latter and the two adjacent coaches being coupled together with continuous breaks. It started from Blackburn at 9.19, three minutes late, having next to stop at Bamber Bridge, eight miles from Blackburn, the running time allowed being about 12 minutes, requiring an average speed of 40 miles an hour. The driver states that he was approaching the Gregson Lane distant-signal with steam shut off at a speed of at least 40 miles an hour, but on account of the morning being somewhat thick he did not see it till within 100 yards of it or rather more and then found it at danger, it being very rare to find it so; that he at once whistled both for the signal and the guards breaks and had his tender-break applied; that he reversed his engine on catching sight of the goods train on the crossing and applied reverse steam; that the speed was reduced on collision to four or five miles an hour; that he and his fireman jumped off just before it occurred and kept their feet.

The fireman acknowledges to the distant-signal having been seen at danger for a distance of at least 500 yards, otherwise his evidence agrees with that of the driver.

The head guard in the front van states that when he first saw the distant-signal, about 500 yards off, it was clear, but that it was put to danger when the engine was about 100 yards from it; that seeing this he at once applied his break and had it hard on as he passed the signal, but that it was some little time

before it took much effect; he believes that they would have stopped in another train's length.

The second guard on hearing the driver whistle looked out and saw the distant-signal at danger shortly before reaching it, and states that he immediately applied his break.

The collision occurred at 9.28.

The damage to the passenger train consisted in the right-hand corner of the buffer beam of the engine being knocked off, and in the right-hand steps of the front van being stripped.

This collision was due in the first instance to the driver of the down passenger train approaching the down distant-signal of Gregson Lane siding at so high a speed that he failed, though assisted by continuous breaks on six out of the eight vehicles composing his train, to stop at a point 625 yards within that signal, but was even then travelling at a speed which caused his engine to upset two loaded goods waggons with which it came into collision. I believe that had he reversed his engine and applied steam the reverse way sooner than he acknowledges to have done, he might have stopped before reaching the waggons.

Secondly, there was want of proper caution on the part of the signalman at Gregson Lane siding, knowing that the down passenger train was now due, in not waiting a little longer than he did before he allowed the goods train to cross after putting his down-signals

to danger. I think the guard must have been mistaken in thinking he saw the distant-signal first clear and then put to danger, as the fireman avers the contrary, as the driver can only speak to its having been at danger when he first saw it, and from the time that elapsed between the arrival of the goods train and the collision.

The signalman at Bamber Bridge junction is much to be blamed for having allowed a goods train with a full load to start up a long rising gradient of 1 in 100 on a slippery morning only 10 minutes in front of a fast passenger train. There was no reason whatever to have prevented his keeping the goods train till the passenger train had passed, after which there was nothing to follow for a considerable time.

Had the traffic been worked on the absolute block system properly carried out this collision would not have occurred.

The Gregson Lane down distant-signal should be moved at least 300 yards further from the home-signal; 600 yards on a falling gradient of 1 in 100 is not a sufficient distance for the protection of long goods trains shunting at the siding.

I have, &c.

C. S. HUTCHINSON,
Lieut.-Col. R.E.

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

Printed copies of the above report were sent to the Company on the 27th November.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade,
(Railway Department),
Whitehall, London, S.W.

24th October 1873.

Sir,

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 22nd ultimo, the result of my inquiry into the circumstances connected with the collision between a passenger train and a goods train, which occurred on the 18th ultimo, at Denby Dale station, on the Huddersfield and Penistone Branch of the Lancashire and Yorkshire Railway.

Four passengers were slightly injured on this occasion.

Denby Dale is the first station beyond Penistone on the way to Huddersfield; it is next to it again, and two miles distant, being Shepley. Between Shepley and Denby Dale there is a tunnel half a mile in length, the eastern end of which is 500 yards from the platform at Denby Dale. The distant-signal for trains approaching from Shepley to Denby Dale is 160 yards from the tunnel mouth, and 340 yards from the station; it can be seen, owing to a curve and cutting, for only 240 yards before it is reached.

The line rises from Shepley to Denby Dale on a gradient of 1 in 200.

As a safeguard against one train overtaking another in the tunnel, the traffic between Shepley and Denby Dale has been worked for many years upon the absolute block system.

On the day in question, a goods train, consisting of an engine, tender, 30 waggons, and a break-van, arrived at Denby Dale, on its way from Wakefield to Penistone, at 9.45 a.m., two hours late, having 19 waggons to leave, one to take on, and others to sort ready for removal on the return journey from Penistone. On its arrival "line clear" was telegraphed back to Shepley.

In order to get through the shunting operations it was necessary to set back a portion of the train towards the tunnel; and, with the station-master's

permission, 16 waggons and the break-van were moved back along the main line until the van had reached a point 160 yards inside the distant-signal, or 400 yards from the point at which the distant-signal is first visible, the view of the van itself being limited to about 220 yards. Although a portion of the up line between Shepley and Denby Dale was thus blocked, no intimation to this effect was sent from Denby Dale to Shepley, as the telegraphic working had never been applied to covering shunting operations, which had been always carried on under protection of the ordinary signals.

The shunting was continued until 10.23, when the telegraph clerk came to the station-master, and informed him that the passenger train due at Denby Dale at 10.23 had left Shepley. The station-master thereupon called to the driver to clear the up line of the waggons left standing on it with as little delay as possible, and sent a porter towards the tunnel mouth to hand-signal the coming train as an additional precaution to the distant-signal, which was at danger. The driver states that he lost no time in obeying these instructions, but that just as he had crossed from the sidings to the up line, the collision occurred. The porter states that he at once ran back on receiving the station-master's orders, and had got nearly as far as the distant-signal (about 300 yards from where he started) when the passenger train passed him; that he signalled to the driver to stop as soon as he saw him, which was when he was emerging from the tunnel; that the tender wheels were skidding when the engine passed him, but not those of the guard's break-van; that he saw the guard in the raised part of the break-van looking towards the station, but not turning his break-wheel, and that he did not see the van break afterwards go on, though he watched the train till the collision occurred, previously to which the speed did not appear much to slacken.

The station-master, who was on the bank opposite the van of the goods train when the collision occurred, heard the passenger driver giving the break-whistle when he first saw the engine, but did not see him