

## LANCASHIRE AND YORKSHIRE RAILWAY.

Sir, *Shrewsbury, 15th November 1872.*

IN compliance with the instructions contained in your minute of the 9th ult., 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 5th ult. at Waterhouse siding, on the Lancashire and Yorkshire Railway.

A passenger train ran into a mineral train, while the latter was leaving the siding attached to a brick-yard.

Two persons have complained of being shaken.

Waterhouse siding is situated about a mile and a quarter to the south-east of Elland station.

The siding is at the south side of the railway. It is protected by distant-signals at each side.

The west end of the siding is joined to the line from Brighouse to Elland, and the east end of the siding is joined to the line from Elland to Brighouse, and crosses the line to Elland.

The distant-signal towards Elland is 920 yards from the siding, and the distant-signal towards Brighouse is 601 yards from the siding. The gradient of the railway between the distant-signals is 1 in 730, rising towards Elland.

On the day in question, a pilot engine and a break-van with a guard was allowed to proceed from Elland station, about 12.26 p.m., to Waterhouse siding, to take nine loaded waggons out of the siding.

An up express was due to pass the siding about 12.28 p.m., and a down express about 12.40 p.m. The pilot engine would foul both up and down lines of rails, in doing the work required at the siding, but it was nevertheless sent there by the goods porter at Elland.

When the pilot engine arrived at Waterhouse siding, it was detached from the break-van, driven into the siding, and attached to the waggons in the siding. The pointsman at Waterhouse siding and the engine-driver of the pilot engine both stated that the up and down distant-signals were placed at "danger" before the engine was detached from the break-van, which was left on the down line, while the engine crossed the up road, and went into the siding to bring out the waggons.

As the engine was drawing the nine waggons out of the siding, the passenger train for Manchester, which is due to leave Normanton at 11.25 a.m., and is due to pass Waterhouse siding about 12.28 p.m., came in sight as it rounded the curve.

The passenger train was running at its usual speed of about 30 miles an hour.

The driver of the pilot engine put on steam, in the hope that he could draw his train clear of the line on which the passenger train was approaching, but he failed to do so, and the engine of the passenger train struck the last waggon but one of the mineral train. The two last waggons of this train were broken and thrown off the rails. The buffer-plank of the passenger train engine was damaged, but no vehicles of this train left the rails.

The passenger train consisted of an engine and tender and six coaches. The four last vehicles were coupled together with continuous breaks. The guard was travelling in the last coach.

The engine-driver of the passenger train stated that the Waterhouse distant-signal was at "all right" for him to pass. This signal can be seen for over 400 yards before it is reached. The fireman and guard of the passenger train failed to notice this signal. It appears to be very seldom used to stop passenger trains.

The guard of the mineral train did not observe the state of the distant-signal. Under these circumstances it is difficult to say whether the driver of the passenger train, who stated that the signal was at "all right," or the driver of the pilot engine and the pointsman at Waterhouse siding, who stated that it was at "danger," are to be believed; but it is certain that if the driver of the passenger train had been keeping a good look-out, he would have seen the mineral train crossing the line on which he was travelling in sufficient time to stop the passenger train, considering the amount of break power that was available. It is also certain, that if the yard porter and signalman at Elland, the pointsman at Waterhouse, or the guard of the mineral train, had attended to the company's regulations, of not allowing passenger lines to be fouled for 10 minutes before trains are due, this accident would not have occurred.

When the signals and points at Waterhouse are arranged on the locking principle, it will be easy to ascertain whether the signals are on or off, and thus prevent the contradictory evidence that was given in the present case.

The Lancashire and Yorkshire Railway Company are doing a great deal at present in the way of rearranging their principal stations, and putting up proper signal cabins and locking apparatus.

I have, &c.,

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

F. H. RICH,  
*Lieut.-Col. R.E.*

## LANCASHIRE AND YORKSHIRE RAILWAY.

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

Sir, *Whitehall, 12th November 1872.*

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 17th ult., the result of my inquiry into the circumstances connected with the collision which occurred on the 15th ult., at Ewood Bridge station, on the Bacup branch of the Lancashire and Yorkshire Railway, between a passenger train and a goods train.

Two passengers have complained of having been shaken.

Ewood Bridge is an ordinary roadside station, provided with distant but with no home-signals; there are sidings on the down side of the station, connected with the up line by a through crossing, the points of which are between the platforms. There are two up distant-signals, one a semaphore, 420 yards from the

down end of the platform, and the other a spectacle-signal, 280 yards further off, the handles of both being on the up platform near to each other. Some years since a crossing existed further from the station on the Bacup side, than at present, and the spectacle-distant-signal was at that time used for the protection of this crossing. On the crossing being removed the spectacle-signal wire was extended to the platform, and there were thus two distant-signals for doing the work of one. The result which might naturally have been expected appears, from the evidence, to have arisen, viz., that the signal most troublesome to work and light (*i.e.*, the spectacle signal) has fallen into comparative disuse. The gradient falls from Bacup towards Ewood Bridge at about 1 in 120.

On the evening of the 15th ult. a dense fog prevailed in the neighbourhood of Ewood Bridge, and a foreman platelayer was stationed beside the semaphore distant-signal (which was the only

light) to act as a fog signalman. At 9.5 p.m. by the station clock (which, as it turned out, was three minutes fast) an up goods train from Raw-ten-stall, Bridge, a passenger train from Bacup being due at 9.11 p.m. The goods train consisted of engine, tender, 14 waggons, and a van; and upon its arrival 10 waggons and the van were left standing on the up main line, with the van 130 yards inside the semaphore distant-signal, while the engine and four front waggons went forward to shunt in the sidings. After one or two shunts had been made under the station-master's superintendence, he found that it was 9.11 p.m., the hour at which the passenger train was due; he accordingly ordered the driver to cross from the sidings to the up line with the 17 waggons which were now attached to his engine, back them against the portion of the train standing on the up line, and then bring the whole along the up line and back them into the sidings, out of the way of the passenger train. In carrying out these orders a mistake was first made by a porter in turning the engine and 17 waggons back into the sidings after they had come out on to the up line, instead of allowing them to back along that line; then a second mistake occurred in the station-master fancying, after the engine had set back along the up line, that he had received an all-right lamp-signal from the head goods guard (who was stationed about 40 yards from him, the under guard having been told to couple up) that the train was coupled up; in consequence of this he signalled to the driver to move ahead, but on the tail of the train passing him (the station-master), he found that the van was not with the train; the engine was then about again to return along the up line, for the part which had been left behind, when the collision occurred. I was not able to ascertain the origin of the mistake as to the all-right signal supposed to have been given by the head guard, as the latter was on the sick list when I made my inquiry.

The under guard states, that while the engine was pushing the waggons back along the main line he heard the passenger train coming, and ran from the sidings back towards his van to show the passenger driver a red light, and that he had got a few yards on the Bacup side of the van when the engine ran past him.

The 8.50 p.m. passenger train, consisting of tank engine, running tank first, five coaches, and a break-van, the van and two coaches being coupled together with continuous breaks, left Bacup for Bury, 10 minutes late, having been detained on the down journey. The driver was approaching Ewood Bridge station with his steam off at a speed of from 10 to 15 miles an hour when, a few yards on the Bacup side of the semaphore distant-signal, he saw a red hand-lamp, and then the signal-lamp showing red. He at once gave the break whistle, reversed his engine, and put on contrary steam, his fireman applying the break, the speed being thus reduced to three or four miles an hour on collision. The driver remained on the engine, and was uninjured; the fireman jumped off, and fell, but was not hurt. The guard of the train saw the distant-signal at "danger" just as the driver whistled; his break was already on, but he applied it tighter, and thinks the speed was diminished from 15 miles on passing the distant-signal to three or four miles an hour on collision. He was knocked over in his van.

The engine had its buffer castings broken, and the rear of the break-van of the goods train was broken, and the van knocked off the rails.

The foreman platelayer states that he was fog signalling near the semaphore distant-signal; that before going out he had only six fog-signals in his possession, and of these he gave three to one of his platelayers, there being no more in the station. One of these three he used to warn the goods train; a second he ran forward and put down on the rails about 180 yards from the semaphore distant-signal when he heard the passenger train approaching; and the third he was keeping for another goods train which had yet to come; that on the passenger train approaching he placed himself near the fog-signal, and showed the driver a red light; that the fog-signal did not explode. He allowed that the fog-signals had been in his possession about 12 months.

It was stated by all the witnesses that the fog was so dense that a white light could not be seen further than 40 yards.

This collision was caused by a portion of a goods train being left standing on a passenger line, protected by a hand-signal visible not more than 250 yards from its van. It would not have occurred had the Ewood Bridge station-master complied with the rule of allowing no shunting on the main line 10 minutes before a passenger train is due. In the present case, by his own acknowledgment, he allowed shunting to go on up to the very time at which (by his own clock, which he did not know was fast,) the train was due; and this on a densely foggy night, when there was the greatest necessity for using every precaution.

The collision would probably have been prevented had the superintendent of the signal department not left two distant-signals to do the duty of one when the need for the second one had ceased, and if he had placed the semaphore distant-signal at the spot which the spectacle-signal had occupied; this improvement will, no doubt, now be effected. Some blame attaches to the station-master for not having seen that the spectacle distant-signal was in working order (which he states it was not), but he had not been long at the station, and found the signal out of use when he took charge, about two months before the collision.

Again, the collision would not have occurred had the driver of the passenger train being approaching the distant-signal at a more cautious speed, as it was incumbent on him to have done on a foggy night like the one in question.

There was negligence both on the part of the foreman platelayer and station-master in not keeping themselves properly supplied with fog-signals. Owing to the small number available, the foreman could lay down only one, instead of two, in accordance with the rule; and this, from its age, a bad one.

It is hardly necessary to observe that this collision is one of a class, which would have been prevented had the traffic been worked on a proper block-telegraph system.

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

I have, &c.,  
C. S. HUTCHINSON,  
Lieut.-Col. R.E.