

To prevent a recurrence of a similar accident, I would recommend that the facing points be removed from the main line, as they are no longer required at this loop siding, which should communicate with the other sidings by means of a through road; and when locked facing points are kept on a main line care should be taken to have them properly locked, and without any play whatever at the tongue or the heel of the point rails.

*The Secretary to the
Board of Trade,
&c. &c.*

I am, &c.
W. YOLLAND,
Col. R.E.

*Lancashire and Yorkshire Railway,
Secretary's Office,
Manchester, 22nd November, 1861.*

SIR,
I HAVE submitted to the Directors of this company Colonel Yolland's report on the accident at Bury, on the 8th instant, enclosed in your communication of the 19th instant, and am instructed to inform you that the recommendations therein contained have had the best attention of the Directors, and that they have already ordered them to be carried out.

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

I am, &c.,
W. S. LAWN,
Secretary.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department, Board of Trade,
Whitehall, 6th January, 1862.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, to be laid before the Directors of the Lancashire and Yorkshire Railway Company, the enclosed copy of the Report made by Capt. Tyler, R.E., the officer appointed by my Lords to inquire into the circumstances which attended the collision that occurred on the 22d November last between a London and North-Western Passenger Train and a Lancashire and Yorkshire ballast train at the Elland Station on the Lancashire and Yorkshire Railway.

*The Secretary of the
Lancashire and Yorkshire
Railway Company.*

I have, &c.
JAMES BOOTH.

[*Similar letter to the Secretary of the London and North Western Railway Company.*]

SIR,

Derby, 2 January 1862.

IN compliance with the instructions contained in your minute of the 12th ultimo, I have the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, the result of my inquiry into the circumstances which attended the collision that occurred on the 22d November at the Elland Station of the Lancashire and Yorkshire Railway.

This station is $31\frac{1}{2}$ miles from Manchester, and about half way between Halifax and Huddersfield, being rather more than seven miles by railway from each of those places. To the west of it, and about 1,300 yards from it, the Halifax branch joins the main line at the North Dean Junction. The London and North-Western Company have running powers over this portion of the Lancashire and Yorkshire Railway, and 10 of their trains travel daily under those powers between Halifax and Huddersfield in each direction. Eight of these are passenger, and two are goods trains. One of the former, which left Halifax for Huddersfield at 3.30 p.m. on the 22nd November, came into collision with a ballast train which was standing on the main line 132 yards to the east of the Elland station-signal.

The Elland station is dangerously situated for trains approaching it from the directions of Manchester and Halifax, whilst the goods traffic transacted at it is considerable, and the quantity of traffic of different descriptions that passes it is very great. It is provided with a "spectacle" signal close to the booking office, which is used as a station-signal, and with a distant-signal, worked by a wire, 726 yards from it towards the west. The distant-signal cannot be seen from the station, but is obscured from view by a tunnel 418 yards long and 250 yards west of the station, which is frequently filled with steam and

smoke after the passage through it of engines and trains. Neither of these signals are well seen by an approaching driver. The distant-signal, which is first sighted on a curve, is partly hidden by telegraph-posts, and has for its back-ground the abutment of a masonry bridge 18 yards behind it. The station-signal is frequently not visible until after a driver has proceeded some distance out of the tunnel, and got clear of the steam and smoke issuing from it. The gradient between the North Dean Junction and the Elland station is 1 in 300 falling towards the latter, and the line is level from the Elland station-signal to the point of collision.

The London and North-Western train, consisting of a tank-engine, travelling coal-box first, and two carriages, of which one was provided with a break, left Halifax punctually at 3.30. on the afternoon in question. The driver slackened speed to take up a pilotman, as usual, at the north-end of a portion of single line commencing at a mile from the North Dean Junction, and almost stopped his train to allow the pilotman to get off his engine again at that junction. He then started off at his customary speed for Elland and Huddersfield, and finding (according to his own statement) the distant-signal from Elland at "all right," he passed it with his steam on at 20 miles an hour.

He shut his steam off before emerging from the tunnel, preparatory to passing the Elland Station; and as soon as he was clear of the steam and smoke at the tunnel-mouth, he observed that the station-signal was at "danger." He then saw further that there was a ballast train on the main line in front of him, and that a porter was running towards him, and waving his hand as a signal to him to pull up. He whistled for the guards break, and did his best then to stop his train, but he came into collision with the tender of the ballast engine at a speed which he estimates himself at 10 or 12, and which the driver of the ballast train considers to have been 25 miles an hour.

The latter is no doubt an exaggeration, as the damage done was not so great as to warrant the belief that the speed was greater than from 10 to 15 miles per hour. The buffers of the passenger engine were fractured, but the buffer-plank was unbroken. The framing of the tender of the ballast engine was broken, the tank was unseated, the feed-pipe was damaged, and the foot-plate was knocked up; and one of the ballast waggons was knocked off the rails and destroyed. Two of the passengers in the London and North-Western train unfortunately suffered injury.

The ballast train consisted of an engine and tender, ten waggons partly loaded, and a break-van. It was employed in picking up refuse ballast, and had taken up three fourths of its load on the up line, on which it had been previously standing. It was prevented from waiting for the remainder by the approach of

two long coal trains, which had both of them shunting to do at the station, and which required to pass over that line; and it was shunted to the down line (on which the collision occurred) to make way for these trains, at 3.20, about 18 minutes before the passenger train was due. The coal trains had just completed their work, and proceeded on their journey, and the ballast train was about to return to the up line when the passenger train came in sight. The driver of the ballast train, seeing the speed at which it was approaching, and observing that it would not be able to pull up, tried to back his waggons out of the way, but he had hardly got them into motion before he was obliged to jump off his engine to avoid the effects of the collision.

There is one siding on the north, and there are several sidings on the south of the line at Elland; but it appears that on this occasion the south sidings were full of waggons, and that the north siding, though it was not full, was occupied by waggons which had been marshalled there in readiness to be taken away by a train that was shortly expected. The head porter, who ordered the ballast train to shunt to the down line, thinks that there might still have been space for it in the north siding, though the station-master believes that there was not; and the excuses that are made for not making the extra shunt that was required for placing it in the siding are, first, that it would have been in the way of the waggons there standing, and, secondly, that the porters were busily employed in trying to get the coal trains away, and to shunt the ballast train back to the up line out of the way of the passenger train as fast as possible.

The evidence as to the condition of the distant-signal is conflicting. All admit that the station-signal was at "danger;" but the driver and fireman of the passenger train assert, as I have stated, that the distant-signal was at "all right;" while the head porter states that he turned it to danger at 3.5, more than half an hour before the collision occurred, and that he did not afterwards take it off again. The following statement, in which all the men concerned agree, corroborates strongly the evidence of the head porter:—The conductor of the ballast train asked the second porter, in the hearing of the engine-driver, whether the signals were *on* when he was told to shunt across to the down line, and the second porter answered that they were so, having seen before giving this answer that the lever by which the distant-signal was worked was turned towards danger. This would tend to show that the lever of the distant-signal had, at all events, been turned to danger, and there is no reason to suppose that the signal was not working properly. It could not be seen, as I have before explained, from the station, but it is stated to have remained unaltered since that period.

I am inclined to believe that the truth may lie in this case with the station-porters,—that the distant-signal may have been at danger,—and that, as it was not easy to observe, the driver and fireman of the passenger train may have missed seeing it, and may be really under the impression that it was] at "all right" when they passed it.

The driver was a man of good character, who had been in the service of the London and North-Western Company for 13½ years, and had been a regular engine-driver for 12 months. He had driven over this portion of the line every other day for two months, and must thus have become well acquainted with the position of the signals and the nature of the approaches to the Elland station. He has been dismissed from his employment, as well as the guard of the train, since this accident. The latter did not attend at my inquiry, and I had not therefore an opportunity of examining him.

Under the circumstances which I have detailed, I consider the causes of this collision to have been:—1. The shunting of the ballast train from the up to the down line in the face of the through passenger train which came into collision with it. 2. The want of more efficient signals for its protection when it was so shunted, and the dangerous situation of the station at which it was standing. 3. The omission of the engine-driver and fireman to observe the distant signal, which appears to have been at danger as they approached it.

To provide against a recurrence of similar accidents, it is desirable that the signals should be improved and that the station should be protected in a more efficient manner. Telegraphic communication ought to be established between North Dean and Elland, specially to prevent any train from starting from or passing either of them in the direction of the other until the line has been previously ascertained to be clear. The tunnel would thus be rendered more safe, as well as the Elland Station and the remainder of the line to North Dean; and they cannot be considered to be adequately protected without such an arrangement.

I may take the opportunity of adding, in conclusion, that the station at Elland is also much in want of improvement, especially as regards the passenger platforms, which are low, and dangerously narrow. The north platform, situated between the main lines and the north siding, and unfenced from the latter, is particularly unsafe; and the sooner the station is re-modelled and enlarged the better.

I have, &c.,

H. W. TYLER,
Capt. R.E.

*The Secretary,
Board of Trade, Whitehall.*

*Lancashire and Yorkshire Railway,
Secretary's Office, Manchester,
17th January, 1862.*

SIR,

I HAVE submitted to the Directors of this Company, Captain Tyler's Report as to the collision at Elland Station on 22nd November last, which accompanied your communication of 6th instant; and I am instructed to inform you that the recommendations therein contained shall have the best attention of my Directors; also, that some of them have already been ordered to be carried into effect.

Yours, &c.

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

W. S. LACON,
Secretary.

LONDON AND BLACKWALL RAILWAY.

*Railway Department, Board of Trade,
19th December 1861.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, to be laid before the Directors of the London and Blackwall Railway Company, the enclosed copy of the Report made by Colonel Yolland, R. E., the officer appointed by my Lords to inquire into the circum-

stances which attended the collision that occurred on the 22d ultimo, at the Stepney Station, between a passenger train and some goods trucks.

I am, &c.

*The Secretary,
London and Blackwall
Railway Company.*

JAMES BOOTH.