

first return excursion train, they left the siding after seeing the 6h. 35m. p.m. up train go by without any tail board, on observing that the station and distant signal was at "danger," without having obtained such permission, but on the other hand it does not appear that Raynor made any objection to their coming out of the siding, or he would have shown them a red flag, and stopped their coming out.

To prevent similar accidents in future I would recommend,

1st, that the telegraphic system of signalling should be extended on to Kew, and that the regulation of not permitting a train to pass a station until the telegraphic signal "Line clear" had been received from the station in front, as followed on the North London Railway, be adopted in preference to the practice on the London and North-Western Railway, which in my opinion is not sufficient under all circumstances to prevent a collision from taking place.

2d, that more experienced signalmen than Raynor should be employed. The safety of the public should not be entrusted to a lad of 19 years of age, paid at the rate of 14s. or 15s. a week.

3d, that the construction of such a siding as that near Kentish Town station should, like the connection with ballast pits, be protected by station and distant signals on each side, with a signalman to attend to the signals.

4th, that no excursion or special train should be permitted to run at any other than the appointed time, without a special notice tail-board or extra lamp being sent by the previous regular train, according to the practice followed on the London and North-Western Railway.

5th, this excursion train should have had another guard with a set of continuous breaks at the tail of this train. If the driver of the excursion train is correct in saying that he sounded the whistle for the breaks when he was half-way between the platform and the spot where the collision occurred, a distance of 447 yards, the

application of the breaks on three more vehicles at the tail of the train might have greatly mitigated the effects, even if it did not prevent this accident. In addition I should observe that as there are heavy rising inclines between Kew and Bow, 1 in 80 and 1 in 95, the absence of a break at the tail of the train, might, in the event of the train breaking into two parts, have been attended with serious consequences. Before Chambers' continuous breaks were introduced on the North London Railway, two break vans and two guards would have been sent with such a train. The value of these breaks is fully admitted by the executive of the North London Railway, and there are no peculiar difficulties in their application to excursion trains on this line, as they are not liable to be broken up and detached at intermediate stations; but they undoubtedly involve a little more labour in making up the trains in the first instance, and the only objection urged against their use on this train by the Locomotive Superintendent (Mr. Adams), was that he did not like two sets of breaks, as they might not work together, and that practically speaking he thought 3 for 12 vehicles, besides the break on the tank engine, was sufficient. I do not think the first objection has any weight, as no two different breaks ever do act together, and it is of no importance that they should do so; and as regards the second, I must maintain, that the larger the proportion of break power that can be attached to a train, the greater will be the chances of safety to all persons in the train when some unforeseen neglect of duty on the part of an individual, like that at Kentish Town station, suddenly occurs.

I have, &c.,

W. YOLLAND,  
Colonel, R. E.

*The Secretary to the  
Board of Trade,  
Whitehall.*

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department Board of Trade,  
Whitehall, 13th 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 Lancashire and Yorkshire Railway Company, the enclosed copy of the report made by Captain Rich, R.E., of his inquiry into the circumstances connected with the collision which occurred on the 25th Oct. near the Eastwood station of the Lancashire and Yorkshire Railway.

I am, &c.

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

JAS. BOOTH.

*Railway Department, Board of Trade,  
Whitehall, 3d December 1861.*

SIR,

IN accordance with your minute of the 18th ultimo, I have the honor 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 25th October between an East Lancashire express passenger train from Bradford to Blackpool and a quick London goods train near the Eastwood station of the Lancashire and Yorkshire Railway.

No passengers were injured, but the head guard of the goods train received some contusions, from which he appears to have recovered. His break van, and the last goods waggon but one, were knocked off the line; the break van being the only one injured.

The quick London goods train from Normanton, composed of an engine, tender, 26 waggons, and two break vans, was late in leaving that station. It arrived at Hebden Bridge station about 4.47 p.m., and left about 4.55 p.m. on the day in question to proceed westward to Todmorton.

The East Lancashire express train was due at Hebden Bridge about 5.5 p.m.

It passed that station without stopping at 5.5 p.m., travelling at a speed of 50 miles per hour, according to the evidence of the station master.

This express train travels on the same line as the goods train as far as Todmorton junction, which is 4½ miles from Hebden Bridge. The express train consisted of an engine and tender, a break van, and two passenger carriages, fitted with continuous breaks, coupled in the order given.

The foreman of porters at Hebden Bridge station states, that he told the engine driver of the goods train, whilst the latter was taking in water, "to be quick and get away, as a fast train would be up shortly." The engine driver denies this.

The signal man at Hebden Bridge states, that he told the head guard of the goods train, as the latter was leaving, "to make haste, as the express train was due in ten minutes." The guard denies this.

No signal was given to either trains at Hebden Bridge. The regulations of the Company provide that the danger signal shall be kept on 5 minutes after a train passes; the caution signal 5 minutes more. The period between the passing of the trains

being stated to be exactly 10 minutes. No signal was shown.

The rules of the Company further provide, that all officers, platelayers, and other persons employed by the Company shall, by raising one, two, or more fingers, notify to drivers, guards, &c. of passing trains, the number of minutes a preceding train has gone by.

A platelayer working on the line about half a mile from Hebden Bridge, and about  $1\frac{3}{4}$  miles from Eastwood, states that he held up one finger as the express train passed, to inform the driver that a train was one minute in front.

The fireman acknowledges seeing the platelayer hold up four fingers; that he understood thereby, that a train was four minutes in advance; that it was his duty to inform the driver of the circumstance; but he states that he did not do so, as he thought that the latter must have seen the caution given by the platelayer.

A porter loading goods at Eastwood Mill goods siding (which is on the Hebden Bridge side of Eastwood station) states, that he gave the caution to the express train as it passed, by holding up one finger, and that the fireman saw him. The latter denies his.

The signal man at Eastwood station did not put on the distant signal to danger or caution after the *quick* goods train had passed.

There is no station semaphore. He admits that the express train followed the *quick* goods train at two minutes interval; viz. that the goods train passed about 5.5 p.m., the express train about 5.7 p.m.; but he adds, "that his regulations provide that he should 'only stop a train when it is following (at an interval of less than five minutes) a slow or stopping train.'" The goods train in question being called "a *quick* goods train," did not require the following train to be stopped.

This is no excuse for his not putting on the caution signal; but he appears to be a very old man, to have been taken by surprise, and to have rushed out and shown his green lamp, holding out two fingers at the same time, to denote that the goods train was only two minutes in front.

The engine driver admits seeing the green light, but denies seeing the two fingers. The guard of the train who was in the next carriage admits seeing them.

The engine driver says that he shook his fist at the signal man to evince his displeasure at his having allowed the goods train to proceed in front of him, and allows that when he got into the tunnel about 800 yards from the station he knew by the steam in the tunnel that a train had only just gone through it.

The driver's evidence differs from that of the other evidences. He states that he shut off steam before reaching Eastwood station, on seeing the green lamp

held by the Eastwood signalman, and that his speed on passing the station was only 20 miles an hour.

The other evidences show that he did not shut off steam till entering the tunnel, and that he was travelling at the rate of 35 to 40 miles per hour on passing Eastwood station. The latter appears to be the more probable speed, as the rate of running of the express train, according to the Company's time-table, is about 28 miles per hour, and the train left Sowerby Bridge station three or four minutes behind time.

The driver of the express states that he could have pulled up his train in 25 yards;—strong evidence in favor of the continuous breaks attached to his train: but I fear that this opinion led him into a reckless disregard of the signals that he received.

The line from Eastwood towards Todmorton is, on an ascending gradient of 1 in 300, to the mouth of the tunnel, 1,100 yards distant, close outside of which the collision took place. There is a curve in the tunnel, allowing it barely to be seen through by daylight, but not when it is dark or full of steam.

The collision appears to have been caused by the close proximity in which the trains were allowed to travel, and the neglect of the Company's servants:—

1st. In not shunting the *quick* goods train at Hebden Bridge.

The evidence of the station master, head porter, and signal man at this station shows, that they felt that the goods train, which stopped there for water, was liable to be overtaken by the express passenger train.

2d. In not putting on the distant danger or caution signal at Eastwood after the goods train had passed.

3d. In the reckless disregard by the engine driver, fireman, and guard of the express train, of those signals and cautions that were given, at least one of which each admits having seen.

The whole of the officers and servants concerned have been fined.

The regulations (which provide that express trains travelling at great speed shall not be stopped when following other trains whose rate of travelling is laid down at half that of the express train, unless the latter are called "slow or stopping trains," require alteration.

The want of station semaphores on a line having such traffic as the Lancashire and Yorkshire Railway should be supplied forthwith.

It would further appear desirable to have some mode of communication, by telegraph or otherwise, between Eastwood station and the mouth of the tunnel 1,100 yards on the Todmorton side, if it is necessary that trains should follow each other at such short intervals.

I have, &c.

F. H. RICH,  
Capt. R.E.

The Secretary,  
Railway Department,  
Board of Trade.

---

## LANCASHIRE AND YORKSHIRE RAILWAY.

Railway Department, Board of Trade,  
SIR, Whitehall, 13th December 1861.

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 Captain Rich, R.E., the officer appointed by my Lords to inquire into the circumstances which attended the collision that occurred on the 5th ultimo, between a Great Northern mineral train and a Lancashire and Yorkshire goods train, at

N

the Darton station of the Lancashire and Yorkshire Railway.

I am, &c.

The Secretary of the  
Lancashire and Yorkshire  
Railway Company.

J. BOOTH.

[Similar letter to the Secretary of the Great Northern Railway Company.]

---