

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

4 November 1851

BoT Report into Accident at

Bullfield, Bolton.

(3 Pages).

My Lords direct me to observe, that although it appears from the Report, that this accident is attributable primarily to the neglect of the man who had charge of the signals, there appear to be some facts therein disclosed, which require the serious attention of the Directors; and first, my Lords observe, that the train with which the passenger-train came into collision was a return-train with empty coal-waggon, which has been habitually run without a time-table, and apparently without any specific instructions as to its progress. Upon this point I am directed to urge the great necessity that exists, with a view to the safety of the public, that all trains, and more especially when run upon a railway which, like the Great Northern, is used in great measure for the conveyance of passengers, should be worked to carefully regulated time-tables.

With reference to the regulation of this branch of the Company's traffic, my Lords desire me to call attention to the fact, that the present is another instance to be added to those enumerated in the letter addressed to the Company by the direction of the late Board of Commissioners of Railways, dated the 30th September, of accidents arising from the running of coal-trains upon the Company's lines at hours which interfere with the regular passenger-trains.

I am also to observe upon the great want of punctuality in the working of the trains upon the line, as evinced by the copy of the return which accompanies the Report of the inspecting officer. The fact of a train (the up-coke-train) having started late from its original point of departure ten out of the thirteen days which are included in the return, the variations from the stated time extending from ten minutes to nearly four hours, appears to require grave consideration by the Directors, as such habitual neglect in a case as to which there does not appear to be any excuse, must render the construction of time-tables altogether nugatory.

The return also displays an alarming deficiency in this respect, in the case of the passenger-train, which, it is to be remarked, conveys Her Majesty's mails. This train having been late leaving Boston each night, except one, the time of its departure therefrom varying from five minutes to nearly three hours, after its appointed time.

My Lords also desire, that the attention of the Directors should be called to the observations of the inspecting officer as to the position of the signals at the Kirkstead station, which would appear to be capable of being more easily worked, and therefore made more efficient, by modifying the existing arrangements respecting them.

My Lords are desirous that the foregoing observations should be brought to the consideration of the Directors as having an important bearing upon the degree of safety to be expected by the public in travelling over the lines of the Great Northern Company; and they trust that the Directors will use their best endeavours to relieve themselves from the very great responsibility which must attach to them from a recurrence of accidents of the nature of that which has elicited these observations.

I have, &c.,

*The Secretary of the
Great Northern Railway Company.*

J. L. A. SIMMONS,
Capt. Royal Engineers.

APPENDIX No. 44.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department, Board of Trade,
Whitehall, November 25, 1851.*

SIR,

I HAVE the honour to acquaint you, for the information of the Lords of the Committee of Privy Council for Trade, that I have inquired into the accident by collision that took place on the 4th instant at a coal depôt called Bullfield, on the Lancashire and Yorkshire Railway, situated about one mile beyond Bolton; and beg leave to report as follows:—

The Bullfield coal sidings are protected by distant-signals, which extend up and down the main line, and which are visible from seven hundred to eight hundred yards distance. The signal for the up-trains is placed about four hundred yards from the lower points which lead into the coal-siding, and close to these points is placed the switchman's box. A coal-train from Wigan arrived at Bullfield about 9.25 A.M., ten minutes before the express-train from Preston was due, and drew up so as to have the tail of the train nearly opposite to the switchman's box. The train was left standing on the line while the driver took the engine into the siding to draw out some waggons which were to be attached to the train; while so engaged, the express from Preston came up, and notwithstanding that the distant signal was turned on, it ran into the coal-train. The express-train consisted of engine, tender, five carriages, and a break-van, and the gradient was a falling one of 1 in 460. The driver of the express-train admits that he saw the stop-signal at the farthest point at which it can be seen; that he immediately put on his own break, and whistled to the guard to put

Appendix No. 43.

ACCIDENTS.

Great Northern
Railway.

Appendix No. 44.

Lancashire and
Yorkshire Railway.

Appendix No. 44.

ACCIDENTS.

Lancashire and
Yorkshire Railway.

on his break, which he did; and as he passed the distant-signal (four hundred yards from the siding) he reversed the gear of the engine. He attributes his not being able to pull up the train to the slippery state of the rails, which were covered with frost. The coal-train which was thus obstructing the line, and was the cause of the accident, is a regular train, which is timed to leave Wigan at 6.30 A.M., but did not on the morning in question start till 8.35; it was, therefore, two hours and five minutes late. It was stated by both driver and guard, that this train is never started punctually to its time. The former said, that the usual time of starting it was from 7 to 7.30; the latter, from 7 to 9; but in the time-tables it is put down to leave Wigan at 6.30.

From the statement of the driver of the express-train, which is confirmed by the guard, who states, that his van was next to the tender, and that he could see everything that was going on on the engine, there appears to me to be no doubt that the breaks were applied the moment the stop-signal was seen. I had an opportunity of examining the breaks of the tender and van in the workshops, and found them as powerful as any ordinarily in use; and as the proportion of break-power to the load was above the usual average with which trains travel, the train ought to have brought up with the power applied, unless it was travelling at an undue speed, which I am inclined to believe it was; and, moreover, I incline to the opinion that the speed to which it is timed is inconsistent with safety on this line.

The distance between Preston and Bolton is twenty miles, and the time allowed, including one stoppage, is thirty-five minutes. If the time occupied in getting up and slackening speed at starting, arriving, making one stoppage, and passing two junctions be allowed for, the average speed may be taken at forty-four to forty-five miles an hour; and if it be taken into consideration that the first five and a half miles along the North Union Railway is nearly a continuous ascent, and that there are two gradients on it, each of 1 in 100, and that the next four and a half miles along the Preston and Bolton line is likewise a continued ascent, having gradients varying from 1 in 127 to 1 in 220, when the line begins to descend, it will be evident (under unfavourable circumstances) that to keep time the latter part of the journey must be performed at a still higher speed. If the rails were in such a slippery state as to prevent the train from being brought up in time, the same cause would operate in retarding it in the first half of the journey; and as the train was not behind time on its arrival at Bullfield, the conclusion is, that the latter part of the journey was performed at a very high speed, and the consequence was, that on the line being unexpectedly obstructed by a goods-train, two hours late, the power of the breaks was insufficient to stop the express-train, although applied the moment an obstruction became apparent, and with the addition of the reversed power of the engine.

I do not mean it to be inferred that the speed of the train was of itself unsafe, but that it was rendered so by the circumstances of the line arising from the want of punctuality observed in the goods and mineral trains, and from the number of special-trains which run at all hours. It was stated to me that from the accumulation of goods that occurs under certain circumstances at the Company's depôts and the number of quarters from which they receive them, that however desirous they are that their timed trains should observe punctuality, they find it impossible to accomplish it. Whilst I am far from conceding the impossibility, I consider the admission bears me out in my conclusion that the existing circumstances of the line are such as not to allow of very high speeds being maintained with safety.

I would observe, with regard to this statement of the Company finding it impossible to maintain punctuality with their goods and mineral trains, that such an admission involves a contradiction with the issue of the detailed time-table, which is published monthly; and the putting forth a document of this description, the details of which are allowed to be habitually disregarded, must be most injurious in its effects on the servants of the Company, tending either to mislead them or to engender a careless habit and a disregard of orders.

The pointsman at Bullfield was, I think, much to blame in suffering the coal-train to stop when the express-train was due in ten minutes; and I would draw attention to the printed rules of the Company, in which something more specific is required than that "goods-trains are always to give way to passenger-trains," for the pointsman did not appear to be aware that he had acted imprudently.

It will be observed that the guard's-van in the express-train was placed next the tender. There are many reasons which point out that the safety of a train is best attended to when the guard and his van are placed last in the train; but there is one that particularly deserves attention in the event of a collision caused by the train running into another; for in such an event, the breaks being applied, as in the case we have been considering, the shock would undoubtedly be lessened, from the circumstance that the springs of all the buffers would be extended, and their collapse, when the engine struck, would mitigate the violence of the blow. With the van next the tender the reverse would be the case, and the effect of the collision would be so much the greater.

I have, &c.,

Captain Simmons, R.E.,
&c. &c.

GEO. WYNNE,
Capt. Royal Engineers.

173

*Railway Department, Board of Trade,
Whitehall, November 28, 1851.*

Appendix No. 44

ACCIDENTS.

Lancashire and
Yorkshire Railway

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you a copy of a Report they have received from their inspecting officer relative to the collision which occurred at the Bullfield coal depôt on the Lancashire and Yorkshire Railway on the 4th instant, caused by an express-train running into a coal-train whilst delayed upon the main line at the depôt.

My Lords direct me to call the attention of the Company to the admitted irregularity of the ordinary goods and mineral trains upon the lines of the Lancashire and Yorkshire Railway, which appears to be carried to such an extent as to render nugatory the precaution which has been adopted by the Directors for the safety and convenience of the public and the guidance of their servants by the issue of a printed time-table.

My Lords particularly desire that the attention of the Directors should be drawn to the observations in the Report of the inspecting officer upon the speed necessary to be maintained by the express-trains between Preston and Bolton, which he considers, under the existing condition of the goods and mineral traffic, as admitted by the Company, inconsistent with the safety of the traffic upon the line.

My Lords would observe, with reference to this subject, that it appears most desirable and essential for the public safety that the regulations as to time appointed by the Directors should be strictly adhered to, the neglect of them being an ever-fruitful source of accident, as shown in the case under consideration.

My Lords also direct me to call attention to the observations of their officer upon the advisability of more definite regulations being issued for the guidance of the servants of the Company with reference to the preference which is to be given to passenger-trains over goods-trains, more especially where the siding accommodation is not sufficient to allow of the necessary operations in connexion with the goods-trains being effected clear of the main line.

The concluding observation also in the Report, as to the position in the train of the guard's-van appears worthy of the consideration of the Company, not only for the reason assigned,—viz. the diminution of the effect of any collision which may occur, but also on account of the possibility of an accident occurring at the rear of a train, or of a carriage becoming detached unknown to the guard in the front; and likewise, because the guard is nearer to the place where his services are required for the safety of his train in the event of a stoppage when at the rear than at the front end of his train.

I have, &c.,

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

J. L. A. SIMMONS,
Capt. Royal Engineers.

APPENDIX No. 45.

Appendix No. 45.

Blackburn
Railway.

BLACKBURN RAILWAY.

*Railway Department, Board of Trade,
Whitehall, November 27, 1851.*

SIR,

I HAVE the honour to acquaint you for the information of the Lords of the Committee of Privy Council for Trade, that I have inquired into the circumstances of an accident from collision that occurred in the Cranberry Moss tunnel of the Blackburn railway so far back as the 21st October, and to which the attention of their Lordships was drawn some time after by Mr. Potter, a sufferer by the accident, the Company having neglected to make a report of it.

Mr. Potter attributes the accident to the "uniform custom on this line of running luggage-trains just before passenger-trains;" and he further states, that "there is not one time-piece on the line, nor are the guards of the luggage-trains furnished with watches."

The following are the particulars that I learned respecting the accident:—

A goods-train from Blackburn left Bolton at 9.5 A.M. on the 21st October, being 5 minutes after time; it had to stop at all the stations on the way (seven in number); at a short distance from Bolton the line rises for a length of 5½ miles with a gradient of 1 in 72; at a few chains from the summit the gradient is reduced to 1 in 115, when it immediately falls with a gradient of 1 in 75 for several miles; about 10 chains from the summit on the Blackburn side there is the entrance to a tunnel which is upwards of 2,000 yards in length.

When the goods-train reached the Entwistle station, situated about one mile from the mouth of the tunnel, the guard of it asked the station-master what the time was; he replied, "I cannot exactly tell, but I think it is about 9.15" (it must in reality have been