

Appendix No. 24. to the "danger" notch, and fastened it down there. Owing, however, to some derangement in the action of the wire the discs of the auxiliary signal only turned to an angle of 45° with the line, instead of standing perpendicularly across it; and as the line on which the approaching train was moving swept round towards the signal on a curve, the driver saw the discs end on, being thus an "all right" signal, and it was not till the sweep of the curve had brought his engine within 300 yards of the signal post that he perceived at the same moment the doubtful position of the discs and the coal waggons standing about 200 yards beyond them. The driver then reversed his engine, and the guard applied his break. The train consisted of an engine and tender, and five carriages, one of which was fitted with a break. The train had nearly come to a stand when the collision occurred.

ACCIDENTS.

Lancashire and Yorkshire Railway.

"The passenger train sustained no damage; and the passengers, though somewhat shaken, all continued their journey to the races. Two of the coal waggons were crushed.

"The signal has been properly adjusted since the accident, and it now works well. The only remark I think it necessary to make with reference to this accident is to point out the necessity for paying constant attention to every part of the mechanical apparatus used in working distant signals, as the wires are liable to frequent derangement, sometimes from accidental causes, sometimes from variations of temperature.

APPENDIX No. 25.

Appendix No. 25.

Lancashire and Yorkshire Railway.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department, Board of Trade,
Whitehall, August 6, 1852.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, for the information of the Directors of the Lancashire and Yorkshire Railway Company, a copy of the report which has been made to their Lordships by the officer appointed by them to inquire into the circumstances which attended the accident that occurred at Burnley on the 12th ultimo.

My Lords direct me to request that you will bring to the especial attention of the Directors the observations in the report upon the manner in which the ordinary duties at the Burnley station are performed by persons not in the employment of the Company, and therefore not amenable to its regulations, and as to whom it does not appear that the Company have any knowledge whether they are fit persons to perform the duties in connexion with the trains.

On this subject my Lords direct me to observe that it appears that the system of supervision upon the railway cannot be very perfect, when such an occurrence as the employment of strangers for the performance of important duties in connexion with the trains, and the transference of these duties from one of the Company's servants to another, as happened when the porter took the guard's duty, can take place regularly without coming to the knowledge of the superior officers of the Company or being rectified, and the necessity for such an arrangement, if it existed, removed.

My Lords further direct me to request you to call the attention of the Directors to the great remissness in the management of their railway as exhibited by the fact, that although additional assistance was sent to Burnley in the morning to aid in the despatch of these two immense trains, containing together about 2,000 passengers, and preparations made for accommodating them with carriages, and although sufficient notices had therefore been given to allow of a due consideration of the arrangements proper for conducting these trains, the senior officers of the Company should have left the entire arrangements for the final discharge of the passengers from the railway to a small establishment such as that at Burnley, with, as it appears to their Lordships, a very inadequate supply of guards upon the trains.

My Lords direct me to point out to the Directors the very great responsibility which must attach to them, if by giving extraordinary facilities for the conveyance of large masses of excursionists, especially children, they induce a traffic of this description upon their lines of railway and then do not take care that adequate means are provided for their accommodation and safety, as their Lordships regret to say appears to them to have been the case in the present instance.

My Lords trust that the Company will take the warning which they have now received by this painful occurrence, and that they will take measures to ensure a greater degree of vigilance in this respect, and not allow these excursion trains to proceed upon their journeys without having carefully ascertained that all arrangements have been made, wherever necessary, to ensure their safety.

My Lords desire me also to request you to call to the attention of the Directors the concluding paragraphs in the report as to the particular method to be adopted in working down the inclined plane into the Burnley station, which appears to their Lordships to require the consideration of the Company, and also to the observations upon the impropriety of placing carriages in the same train the buffers of which are of unequal height.

I have, &c.

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

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

SIR,

August 3, 1852.

Appendix No. 25.

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ACCIDENTS.—
Lancashire and
Yorkshire Railway.

I HAVE the honour to acquaint you, for the information of the Lords of the Committee of Privy Council for Trade, that in compliance with their Lordships instructions I proceeded to Burnley, on the 20th of July, for the purpose of inquiring into and reporting upon the circumstances attending a fatal accident that occurred on the 13th ult. on the Lancashire and Yorkshire Railway, and the day after I attended an adjourned inquest on the bodies of the persons killed.

The following are the particulars I learned from the inquiries I made among the officers and servants of the Company, and from the evidence I heard on the inquest.

The Burnley branch, which is about eight miles in length, rises continuously from its commencement at Todmorden on the main line to a summit level about half way, at an average gradient of about 1 in 70, and thence to Burnley it falls continuously with nearly the same gradients, the terminal gradient being 1 in 69. The line is single, except for a length of about 400 yards from Burnley, where it is laid double. The station is on a short siding, not eighty yards in length, off the up line; it rises slightly from the main line, and terminates at a solid wall of masonry forming the wing of a bridge, against which is fixed a timber buffer, unfurnished with springs. The main line is continued some distance beyond the siding and joins a branch of the East Lancashire Railway.

The establishment at the Burnley station consists of a station master, a booking clerk, five porters, and a night watchman. The traffic of the branch to and fro is worked by one engine, and there is one guard to the seven passenger trains each way. The station master's duties (except the exercise of a general control over the whole establishment) are altogether in the goods department, in which also four of the porters assist; the booking clerk and one porter (named Parker) attend to the passengers, and after the arrival of the last train at 7 P.M. Parker goes off duty and the night watchman comes on.

On the morning of the 12th instant, according to previous arrangements which had been made, two excursion trains left the the Burnley station. I should not say the *station*, but rather Burnley, because the station platform is only calculated to accommodate about six carriages, and the two trains, which consisted respectively of forty-five carriages and thirty-five carriages, had to be drawn up on the main line, where the passengers got into them; these consisted chiefly of the children attending the schools at Burnley, who were accompanied by their teachers and some of their friends. The first train of forty-five carriages started a little before 6 A.M. and was bound for York; it was drawn by two engines and accompanied by three guards. The second train, composed of thirty-five carriages and drawn likewise by two engines, was accompanied by two guards; this train was bound for Goole, and was the one which met with the accident. The carriages composing these trains were collected at Burnley the previous night, and before they were started in the morning the superintendent of the Manchester station, together with an inspector and five porters, was in attendance to render every necessary assistance; this supernumerary force left with the trains, and the inspector was the only one who returned, and his doing so appears to have been quite accidental. All the arrangements for unloading the trains on their return were left to the porter (Parker) who, the general manager informed me, was the Company's responsible man out of doors at Burnley, and to him is left all the arrangements connected with the arrival and departure of trains; that he considered him from his knowledge of the station the most proper person to be intrusted with such arrangements, and that the guards and drivers were bound to go into whatever siding he had prepared for them and directed them to go into.

The train from York returned to Burnley about 10.30 P.M. and safely discharged its passengers. The train from Goole arrived about one hour afterwards. The further particulars connected with it, and the unfortunate circumstances that resulted, will perhaps be best detailed by extracts from the evidence given before me and on the inquest.

Grant, the night watchman, stated to me, that before the arrival of the *York* train he went, by Parker's direction, to the top points, where the double line commences, that he was charged to stop the train there, to see the engines unhooked from the train, to let them down the straight line, and to turn the carriages across to the up line. When he told the guard of the *York* train to do so, the guard said they had better move a little lower down, and the train with the engines attached moved about 140 yards farther down on the down line, and the passengers were then discharged. It will be noticed here that the guard did not hesitate to disobey the orders of Parker, as conveyed to him by Grant, although by the statement of the general manager to me he was bound to obey them; his doing so, however, was in my opinion the exercise of a sound discretion. With regard to the train from Goole, to which the accident occurred, Grant states, that having stopped this train above the top points, he told the driver of the leading engine that the engines were to be unhooked, and go down the straight line; while the train was to be crossed over to the other line; he then went to the guard at the head of the train, and asked him if he had breaks sufficient to hold his train, and he replied, he had, Grant then told him the train was to cross over to the up line, and that from thence they were to be turned into the East Lancashire siding.* The points where this would be done stand about 140 yards from the fixed buffers at the end of the platform; they are weighted to stand open for the station siding, so that in the absence of a person to work the lever handle

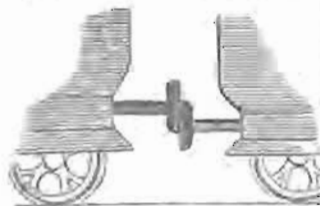
* The extension of the main line beyond the station is known, to the porters and others connected with the station, as the East Lancashire siding.

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 ACCIDENTS.
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 Lancashire and
 Yorkshire Railway.

the train would, as a matter of course, run into the station siding, and be brought up by the fixed buffers; and this was what subsequently happened to the train, for when it reached the points there was no one there, and the train, instead of being turned into the East Lancashire siding, ran up to the station. As soon as the guard perceived what had happened, viz., that his train was running up to the station instead of on to the East Lancashire siding, he turned his break hard on; but two breaks were powerless to bring up a train of this magnitude in 140 yards, and it was not stopped till it came in contact with the fixed buffers. The train was at the time not moving faster than at the rate of a moderate walk; but it must be recollected that the mass was a very great one, amounting, I suppose, to 180 tons. The effect of the blow was felt chiefly in the fifth and sixth carriages, which were raised up on end thus—



The blow being felt where it was, resulted apparently from the reaction of the buffer springs of these first six carriages, which after being pressed down rebounded against the following carriages, the buffer springs of which had not yet fully felt the pressure from behind. The other carriages, I was informed, were very little damaged, and there was not the slightest mark on the fixed buffers. There is one important point to be noticed with regard to these carriages, which is, that the buffers of the carriages that were driven on



end by the force of the collision were so placed that their tops stood nine inches lower than the tops of the buffers of the ordinary carriages. As well as it could be ascertained there were three of these carriages together, so that the seventh carriage had likewise low buffers. The evidence of Parker was to the effect,—that he consulted in the morning with the station master as to the unloading of the trains, who said it was a most awkward plan, and that he must act according to instructions from the inspector; he consulted again in the evening with the night watchman, and the result was that they agreed that the plan as already detailed in the evidence of Grant would be the best, subject, however, to the approval of the inspector; and he states that he said to Grant "We will not make a single move till we have seen Mr. Cross (the inspector)." Grant, in his statement to me, said nothing of this, and he acted quite independently of the inspector. Parker then goes on to say, that in order to send the train down as proposed it would require three men; one to turn the top points, another to turn the East Lancashire points, and another to stand and give signals with his lamp. "I therefore arranged for Grant to go to the top points, James Crabtree to the East Lancashire points, and left myself at liberty to give the necessary signals." We will now hear the evidence of James Crabtree, which will show who he is, and how he acquitted himself at the important post to which he was appointed.

James Crabtree stated:—"I am a calico printer. I have nothing to do with the railway. I had brought some passengers luggage to the railway. It might be quarter to eleven when Parker said to me, 'Come and hold these points,'—just before the arrival of the York train,—the points for the East Lancashire siding; he said he was expecting a train. I engaged to do it for that train, and I did so; it was the York train. When I returned to the station, Parker and Grant were going up the line; the former called out to me, 'I want you again, Crabtree.' I followed them up to the same points through which I had led the York train. He told me the Goole train was expected, and I was to let it down on the East Lancashire siding. I had stood at the points about ten minutes when Thomas Bridge came up to me. I said, 'Thomas, I will leave these points with you, and you will be sure to turn these points for the East Lancashire siding.' He promised to do so, and I left him. Ashton, a guard, was crossing the line at the same time, and I left Ashton with Bridge. I spoke to both, and said, 'Now, chaps, mind those points, so that the train may go down the East Lancashire siding.' I don't know that Ashton heard me. I then went up to the top points, and found Parker and Grant sitting down there. I told Parker I had left Ashton and Bridge at the points." He then goes on to state, that he has been in the habit of turning the points for some time, but chiefly on Sundays; that he was employed with the knowledge of the station clerk; that Parker acts as guard every alternate Sunday, and that on the other Sunday he (Parker) has leave of absence. When Parker acts as guard he (Crabtree) attends to the points, and that he has acted, some chance times, on week days for Parker. He stated that he did this work gratis, but afterwards admitted that his inducement was from the advantage he derived in carrying luggage.

Thomas Bridge stated:—"I am a blacksmith. I live near the station. For the last twelvemonth I have been in the habit of going into the goods department of an evening, and assisting in shunting waggons. On the day of the excursion trains I was sent by the station clerk and Parker to keep the yard door, whilst the tickets were being collected from the York train; as they were collected they were thrown into my hat. I afterwards went up to the East Lancashire points, when Crabtree said 'Tom, will you attend to these

"points while I go up the line?" He told me I was to turn the train down the East Lancashire siding. As he left, Ashton, the guard, came up; he examined me, to see who I was, asked where the train was to go to, tried the points, and left me, going up the line. I saw nothing more until an engine came down on the straight line, and some one called out to me from the engine, 'Turn me into the shed.' I left the East Lancashire points and went and turned the engine into the shed. The distance between the lever handles of the two sets of points is about five yards, and before I got back again the Goole train passed me, and went through the points into the station, instead of down the East Lancashire siding."

Parker's explanation of the employment of Crabtree on the railway was, that it had been arranged about three months since, between himself, the station master, and station clerk, that Ashton and he should do the guard's duty on alternate Sundays, and that the other duties of the station should be done on Sundays as already described; that he is not aware whether any superior officer of the Company was acquainted with the arrangement, but it was sufficient for him that the station master agreed.

In reviewing all the circumstances connected with this accident, the causes to which it is referrible appear to me to be:—

1st. The entire want of definite instructions as to the mode of bringing down an incline of 1 in 69 a train of unusual dimensions, and an absence of all arrangement for its reception and the safe discharge of its passengers, 800 in number, who would, from the insufficiency of accommodation at the station, require to be let out on the side of the railway on a dark night.

These remarks are equally applicable to the train from York, containing 1,000 passengers, though they fortunately escaped any disaster.

2dly. The responsibility of the arrangements being thrown on an individual who, from his station among the Company's servants, could not command respect sufficient to have his orders obeyed, supposing him to have been competent to give proper orders on such an occasion, but who it turned out (as might have been expected) was incompetent to form a just opinion of the effect of gravity on a train composed of six or seven times the number of carriages which he was ordinarily in the habit of seeing descend the plane.

3dly. The utter laxity of discipline among the servants of the Company at the Burnley station, which permitted them to make unauthorized arrangements with irresponsible persons for carrying on the duties of the station, whereby persons not in the employ of the Company, ignorant of the mode of working a railway, and unacquainted with the responsibility attached thereto, were placed in situations where, neglecting the duties assigned to them, they caused the disaster which occurred to the train, and which resulted in the death of four individuals.

I have not assigned, as one of the causes of disaster, the insufficiency of break power, because if the engines had not been detached their power would have been sufficient to stop the train; but ignorance of the force to be resisted was the fundamental error. I do not attach culpability to Parker, for I believe he was most anxious to carry out what he considered the best arrangement. No man of any experience in such matters would have thought, with the engines detached, of permitting a train of the magnitude of the one in question to descend an incline of 1 in 69 without having a preponderating break power at command, and I never heard it pretended that even in ordinary travelling one break to seventeen carriages was considered sufficient, how much less in the circumstances under consideration.

There was great remissness, I consider, in the pre-arrangements, in permitting a train of the magnitude of the Goole train to start with only two guards.

Without wishing to interfere unduly with the duties which the Company may think proper to impose upon their servants, I think it right to draw attention to what appears to have been the cause of the Company's servants employing persons unconnected with the railway to assist them in performing their duties, which was that the only guard on the line was allowed no relaxation in his duties on Sunday save that which arose from there being but three trains instead of seven; he therefore concocted with Parker the plan of the latter doing his duty on alternate Sundays, and getting Crabtree, on those days, to do his duty as porter and pointsman.

When the line was first opened the trains used to be drawn up on the wooden bridge, about 140 yards from the end of the platform, the engine then detached, and the carriages allowed to descend by gravity; this was a very safe arrangement, the inclined portion not being more than seventy yards. Subsequently, however, it appears the engine was detached at the Townley station, three quarters of a mile off, and from thence the carriages descended by their gravity to the station. This objectionable plan of working the line has been abandoned since the accident, and it is to be hoped that it will not be again resumed. In the event of any trains upon a future occasion exceeding the ordinary weight of trains that the servants of the Company on this branch are accustomed to, it might even be desirable that the engines should not be detached until the train is discharged of its passengers.

The practice of mixing carriages in a train having the buffers placed so much lower than those of other carriages, as appeared to be the case with some of the carriages in the Goole train, is very objectionable, and should be discontinued.

I have, &c.

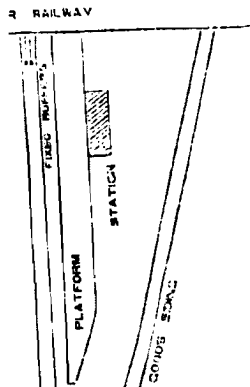
Captain Simmons, R.E.,
&c. &c.

GEO. WYNNE,
Capt. Royal Engineers.

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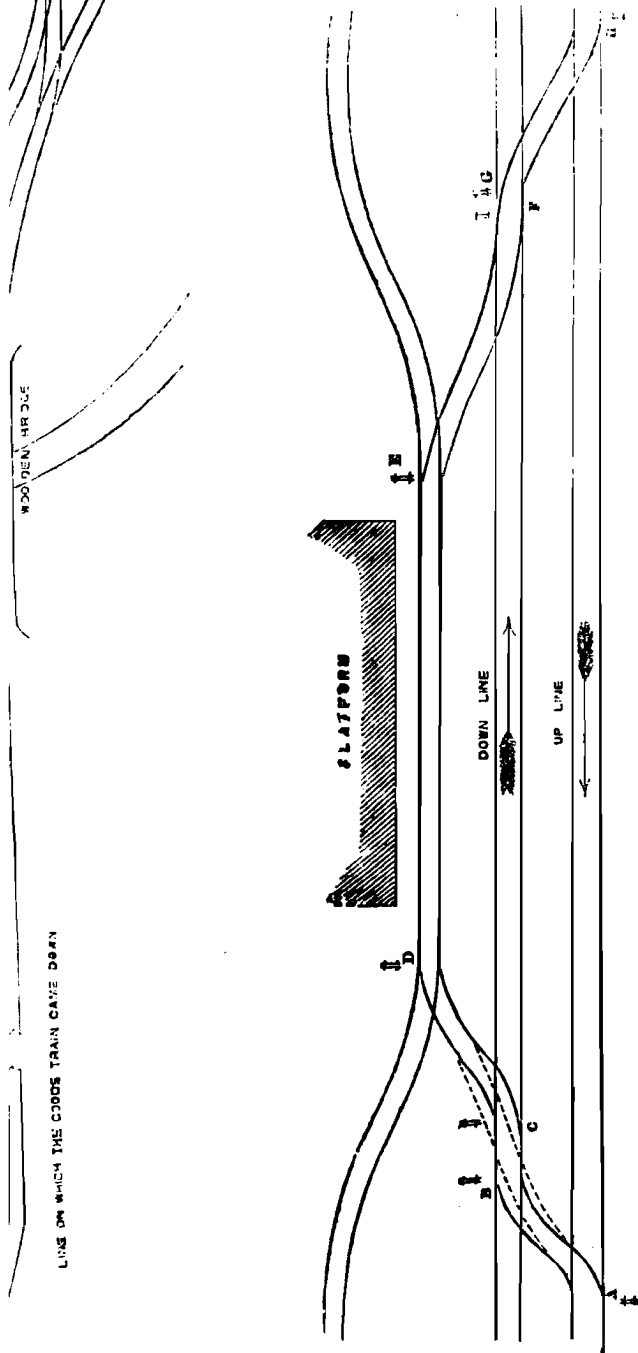
Lancashire and
Yorkshire Railway.



BURNLEY.

	Yards.
Length of platform	76
From fixed buffers to East Lancashire points	136
From East Lancashire points to Top points	248

The East Lancashire points are weighted to stand open for the station.



INTS
DIFFERENCES