

LANCASHIRE AND YORKSHIRE RAILWAY.

SIR,

Manchester, November 10, 1849.

I HAVE the honour to lay before you, for the information of the Commissioners, the result of my inquiry into the circumstances attending a collision which occurred on the main line of the Lancashire and Yorkshire Railway, at 9 A.M., on the morning of Saturday the 3rd instant.

The point where this accident occurred was at the Heaton Lodge junction, where the London and North Western Railway Company's line from Huddersfield runs into the main line of the Lancashire and Yorkshire Railway, about a mile to the westward of the latter Company's Mirfield station.

In order to convey a correct idea of the circumstances attending this collision, it appears necessary that I should give a brief description of the nature of the traffic, and of the manner in which it is conducted.

The London and North Western Railway Company's line from Huddersfield runs into the main line of the Lancashire and Yorkshire Railway at Heaton Lodge; and about $3\frac{1}{2}$ miles further on, to the eastward, the same Company's line from Dewsbury also runs into the same main line. The London and North Western Company run trains between Huddersfield and Dewsbury, using the intervening $3\frac{1}{2}$ miles of the Lancashire and Yorkshire line.

Between these two junctions, and about a mile from Heaton Lodge, is situated the Mirfield station of the Lancashire and Yorkshire Company; and here that Company's branch from Lowmoor and Bradford comes into the main line. The Company runs branch trains between Bradford, Lowmoor, Mirfield, and Huddersfield, using, for the distances between Heaton Lodge and Huddersfield, the London and North Western lines.

It thus appears that, over the mile intervening between Mirfield and the Heaton Lodge junction, there passes, in addition to the vast main-line traffic of the Lancashire and Yorkshire Railway, a branch traffic between Bradford, Lowmoor, Mirfield, and Huddersfield, and the London and North Western Company's traffic between Huddersfield and Dewsbury.

The branch-trains of the Lancashire and Yorkshire Company conduct the greater part of the traffic, both in passengers and goods, between all places on their own lines, and those on the London and North Western Company's lines as far as Huddersfield.

The passenger-traffic between places beyond Huddersfield and all places on the Lancashire and Yorkshire Company's lines, is interchanged at Mirfield, where the trains of both Companies stop. The goods-traffic between the same places is interchanged at the Heaton Lodge junction.

At Heaton Lodge the London and North Western Company have a station, at which all their trains stop, upon their own lines. Here the London and North Western goods-trains leave all goods-trucks destined for places on the Lancashire and Yorkshire Railway, and take up such trucks as may have been left for them by the Lancashire and Yorkshire trains.

The Lancashire and Yorkshire passenger-trains do not stop at Heaton Lodge; but their goods-trains stop when they have trucks to hand over to the London and North Western Company, or when the station-master stops them, by signal, to take up trucks he may have to hand over to them. I am informed, that about three in four of the Lancashire and Yorkshire goods-trains stop at this point.

The station at Heaton Lodge belongs exclusively to the London and North Western Company. The Lancashire and Yorkshire passenger-trains do not stop there; and their goods-trains, when they stop, are placed, for the time they remain, under the orders of the London and North Western Company's station-master.

From the nature of the traffic, its amount, and the manner in which it is conducted, as described in the preceding sketch, it may be inferred that a considerable extent of siding accommodation must be required at the Heaton Lodge junction, and that the siding should, generally, be so placed with respect to the main line of the Lancashire and Yorkshire Railway, over which by far the greater amount of the traffic passes, as to facilitate as much as possible the transfer of goods-trucks, and thereby diminish the interval during which every train that stops must necessarily be detained.

On examining the junction, however, it appeared to me, not only that the extent of siding at present provided is insufficient, but that, further, it is very inconveniently situated as regards the Lancashire and Yorkshire trains; the points leading to the principal sidings being placed far up on the London and North Western Company's lines (259 yards from the junction), thus causing a considerable detention to the Lancashire and Yorkshire goods-trains.

Having thus, as far as appears at present necessary, described the peculiar features of the traffic at this point, I now proceed to narrate the circumstances more immediately attending the collision. I have derived the following information from the evidence of servants of both Companies, adopting their testimony when (as generally happened) they all agreed, and on some of the minor points, whereon there were some discrepancies, following that which appeared to be the more probable account.

It appears that, about $8\frac{1}{2}$ A.M., on the morning of Saturday the 3rd instant, there were four trains, all belonging to the Lancashire and Yorkshire Company, and all moving in the same direction, at that Company's station at Mirfield.

First, there was a goods-train from Normanton with part of its trucks to be delivered at Heaton Lodge;

Next, there was a goods-train from Leeds;

Next, a branch passenger-train from Mirfield to Huddersfield, waiting for these goods-trains to get out of the way;

And then a branch goods-train waiting in a siding to follow the branch passenger-train.

The first of these trains left Mirfield about $\frac{1}{2}$ past 8, and reached the points of the Heaton Lodge junction at 20 minutes to 9. It consisted of an engine and tender, 31 loaded trucks, and a break-van. The guard had received a way-bill at Normanton, where the train was made up, directing him to leave 10 trucks of coke at the Heaton Lodge junction; and it appears that, of these 10 trucks, seven were situated near the head of the train, and the remaining three near the break-van, being separated from it, however, by three other trucks.

On reporting to the station-master at Heaton Lodge the number of trucks to be handed over to him, and their position in the train, the latter directed the guard how to place them in the sidings; and proceeded with them himself, the better to guide their movements.

As those movements were rather complicated, and consumed a great deal of time, I shall describe them:—

First, the train was drawn partially on to the London and North Western line, till the van in rear with the three trucks next it were within a short distance of the junction points. There they were uncoupled and left standing on the main line of the Lancashire and Yorkshire Railway, protected by a danger-signal, distant 432 yards from the points, and showing, as the morning was a very foggy one, a red light in addition to the disks. Meantime the great body of the train passed up the London and North Western line till it cleared the points of a short siding 120 yards from the junction. Into this it backed; and in it uncoupled, and left the last three coke-trucks. It then regained the main line of the London and North Western Company; stopped again, and uncoupled and left behind, the trucks which intervened between the last three and the first seven coke-trucks; then passing on till it had cleared the points of a second siding 259 yards from the junction; it backed into it and uncoupled, and left the first seven coke-trucks; and regaining the main line of the London and North Western Company, again backed on to the trucks it had left near the entrance of the first siding—coupled on to them, and backed the whole on to the three trucks and van, which had all this time stood upon the Lancashire and Yorkshire main line. The time consumed in these various movements to and fro appears to have been about 20 minutes. Nor were they yet ready to start, for, on rejoining the three trucks and van, it was found these latter had been drawn up so near to the junction points that there was not room for the head of the train to clear the switches, and it consequently became necessary again to back the whole train.

But in the mean time the second goods-train had come up and stopped so close to the break-van of the first that it was necessary for it to back too. Both trains were in the act of backing when the branch passenger-train, which followed, came up, and ran into the second goods-train.

Here I would pause for a moment to direct the attention of the Commissioners to the great length of time during which the main line traffic of the Lancashire and Yorkshire Railway, with all the additional traffic passing over the mile between Mirfield and Heaton Lodge, was completely blocked, owing partly to the want of convenient siding accommodation at the junction, and partly to the very inconvenient way in which the first goods-train was made up.

It appears to me that, had there been proper sidings at this junction, opening directly from the Lancashire and Yorkshire main line; and had the goods-train been properly sorted before starting, by placing all the trucks destined for Heaton Lodge in the same part of the train, the traffic need not have been stopped for more than six or eight minutes, instead of being blocked up as it was for upwards of 20 minutes.

On inquiring into the reasons why the first goods-train was sent off from Normanton so badly sorted, I was informed, that it was because the Lancashire and Yorkshire Company had no means whatever of sorting their goods-trains at that station.

It appears that Normanton belongs, partly to the Lancashire and Yorkshire Company and partly to the Midlands Company; and that the Midlands Company have charge of the station and complete control over the arrangements. One siding only is given up to the Lancashire and Yorkshire Company, into which all goods-trucks destined for the various places on their lines are put as they happen to arrive from different places, without any reference to their ultimate destination. The Lancashire and Yorkshire Company's engines take out the trucks, as they happen to stand in the siding, and are not allowed to remain in the station to sort them. It may, therefore, happen that a goods-train has a dozen trucks for the same places scattered all over a long train. This, in my opinion, is a positive source of danger on such a busy line as the Lancashire and Yorkshire Railway.

I now proceed to describe the movements of the second goods-train.

When the first goods-train, which had come from Normanton, had left the Mirfield station, the second, which had come from Leeds, proceeded to shift some trucks in the Mirfield sidings, and to take out 13 trucks which it was to take on. The engine then required water and coke. All this took up 15 minutes, and the train started at $\frac{1}{2}$ to 9, and reached the danger-signal 432 yards from the Heaton Lodge junction points at 8 minutes to 9. It passed the danger-signal, and, proceeding very slowly, went up to within a few waggon lengths of the van left by the first goods-train. There it stopped. The train consisted of an engine and tender, 19 loaded trucks, and a van; and the van, when it stopped, was about 150 yards within the danger-signal.

The morning was a very foggy one, and the danger-signal, though showing a large red light, could scarcely be distinguished at a greater distance than 8 or 10 yards.

Under these circumstances it was clearly the duty of the guard to have gone back with a red lamp and some detonating fog-signals; and to have fixed the fog-signals to the rails at distances

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of 100 feet apart, and the nearest not less than 400 yards from the train, as directed by the Lancashire and Yorkshire Company's printed instructions.

But the man appears to have considered that his train was sufficiently protected by the fixed danger-signal 150 yards behind him; and that, at any rate, having passed the signal-post, he was within the station, and under the orders of the station-master, and that, therefore, his own responsibility ceased. Instead, therefore, of going back to stop the passenger-train, which he knew must be following him, the guard left his break-van, and walked towards the head of his train, to speak to the engine driver. This was a grievous error of judgment, and unfortunately the proper person to have corrected that error, the station-master, had left his station, and gone away up his own line to conduct into the proper sidings the coke-trucks of the first train.

When the first goods-train had come back from the London and North Western Company's sidings, and coupled on the three trucks and van left upon their own main line, the guard of that train called to the driver of the second train to back, to give room for the first to back also; and the driver of the second train proceeded to back accordingly. Yet, even then, the guard of that second train does not appear to have thought it necessary to take any precautions, and the station-master, who now, for the first time, learnt the arrival of the second train, appears to have been so busy with the arrangements for sending away the first, that he attended to nothing else.

The second goods-train had backed about 10 yards, and the van was within 140 yards of the fixed signal, when the branch passenger-train from Mirfield to Huddersfield came up and ran into it.

The branch passenger-train was timed, as I understand, to leave Mirfield at $\frac{1}{2}$ past 8, but was detained to allow the two goods-trains to get away before it.

At this point a question naturally suggests itself, why were not the goods-trains made to make way for the passenger-train, according to the usual custom on railways, and in accordance with the Lancashire and Yorkshire Company's own rules? The answer, as I am informed is, that the siding accommodation at Mirfield is insufficient for the great goods-traffic now centering there; being at the outlet of the branch from Lowmoor and Bradford, all the goods-traffic of those places, and all the goods-traffic between places on the Lancashire and Yorkshire lines and the London and North Western Company's lines as far as Huddersfield, centre at that point, and so completely fill up the only two sidings that there is generally no space for the main line goods-trains to shunt to make way for a passenger-train.

On the morning in question, one of the sidings was occupied by the branch goods-train waiting to follow the branch passenger-train to Huddersfield; the other siding was filled with trucks from various places, including the 13 trucks taken on by the goods train from Leeds.

The Lancashire and Yorkshire Company appear to be aware of the insufficiency of the siding accommodation at the Mirfield station, compared with the amount of goods traffic now centering there; but they expect that, when their line through Halifax is completed, affording a more direct route between Manchester and Bradford, that goods-traffic will be materially lessened, and that then the present extent of siding at Mirfield may be found sufficient. I am of opinion, however, that, even if the goods-traffic between Manchester and Bradford were removed from Mirfield, the present sidings would be found insufficient to accommodate the branch traffic to Huddersfield, and yet allow room for the main line goods-traffic to shunt when required. It appears to me that the siding accommodation at Mirfield should be increased.

The branch passenger-train left Mirfield at 6 minutes to 9 o'clock; and about 9 o'clock, as it drew near the Heaton Lodge junction, the driver perceived a plate-layer wave his hand to him to stop. He immediately shut off his steam, and called to his stoker to put on his break. He does not appear to have thought it necessary to reverse his engine, or blow the danger-whistle for the guard to apply his break, as he had only had a momentary view of the man through the fog, and did not clearly understand what his signal meant. About 100 yards further on, however, he came up with the fixed signal-post, and the red light, then seen for the first time, at once apprised him of his danger. He reversed his engine as quickly as possible, and blew the whistle for the guard to apply his break.

The train, consisting of an engine, tender first, followed by a break-van, behind which were four carriages, does not appear to have been running at any high speed; and by the time they had reached the signal-post, the stoker had got his break screwed on. Still the various movements required to reverse the gearing, and get the steam on against the driving-wheels, and the time it took the guard to get out of the centre compartment of his van, and screw on his break, appear to have consumed the whole of the short interval it took the train to run over the 140 yards, separating the signal-post from the goods-train, and the engine, upon whose speed the only effectual check had been the action of the tender-break for 140 yards, was still moving, as far as I can judge, about seven miles an hour when the collision occurred.

The shock was not a very violent one, yet its effects extended to, and were felt at the very head of the goods-train. The engine-driver and stoker of that train, though separated from the van in rear by 19 trucks, were thrown down by the concussion: this I attribute to the circumstance of the train being engaged in backing at the time, by which movement all the trucks had been run up close together, so as to form, as it were, a continuous mass.

The van in rear of the goods-train, which, therefore, received the first shock of the collision, was in no way hurt; next it were four trucks laden with casks of oil; the trucks were not hurt, but the casks were strained, and the oil lost. Next came a new truck laden with the iron bars of which they make the tires of wheels: this truck, though new and strong, was broken up, and rendered unserviceable. Then came some trucks laden with grain, and these again were unhurt, though the grain was pitched out over the line. No further injury can be traced till we reach the engine, and here the feed-pipe of the tender was broken, showing that the shock must have been nearly as great at the head as at the tail of the train.

The engine-driver and stoker of the passenger-train had jumped off when they saw that a

collision was inevitable: they were in no way hurt. The guard had just given the last turn to his break when he was thrown violently against the side of the van, and coming into contact with it with his head first, he was for a moment rendered senseless. On recovering, he found that he was a good deal bruised; and, feeling too much shaken to go back himself, he sent the stoker back with a red flag, and detonating fog-signals; and this man went back and stopped the branch goods-train which was following.

Three of the carriages of the train were empty, but there were 10 or 12 third-class passengers in the remaining carriage. As far as I can learn, the injuries sustained by these were not very serious; the principal sufferer appears to have been a woman whose nose was broken.

The tender of the passenger-train, which was in front of the engine, was a good deal injured; the tank was separated from the framing, and shifted on it about a foot; the feed-pipes were broken. The engine was not hurt. The carriages were slightly strained; the bodies being shifted about an inch on the framing.

On reviewing all the circumstances of this collision, it is at once apparent that the more immediate cause of the accident was the neglect, or error of judgment, of the guard of the second goods-train, in trusting to the fixed signal 150 yards behind him, instead of going back to a sufficient distance to give timely notice to the train which he knew was following. I understand that this guard has been discharged from the service of the Lancashire and Yorkshire Company.

The London and North Western Company's station-master at Heaton Lodge appears also to have acted with a want of proper consideration, in leaving his station to conduct goods trucks into distant sidings. Having the charge of all trains stopping at his station, he should have remained to watch over their safety.

Again, the station-master at Mirfield appears to have been to blame for allowing a passenger-train to start so soon after two goods-trains, the first of which he knew would probably be detained some time at the Heaton Lodge junction, without cautioning the driver, and telling him to approach the junction very slowly, and with great circumspection.

But though these are the causes more immediately apparent, I am of opinion that the principle cause lies deeper; and that it will be found in the fact, that the goods-traffic upon the Lancashire and Yorkshire Railway has now out-grown the accommodation provided for it: and that the consequence is that the traffic upon that line is now attended with a degree of risk to which it ought not fairly be exposed.

Three points in the course of the Lancashire and Yorkshire Company's goods-traffic have come under review during the present inquiry, Normanton, Mirfield, and the Heaton Lodge junction, and at each the extent of siding accommodation appears to be insufficient; and at Heaton Lodge it is most inconveniently placed.

At Normanton the goods-trains cannot be sorted, and the consequence is, the frequent detention of those goods-trains for an unreasonable time at the various places where they exchange traffic.

At Mirfield the sidings are insufficient, and the main line goods-trains have frequently no means of shunting to get out of the way of passenger-trains.

At Heaton Lodge the inconvenient position of the sidings causes constant and dangerous delays to the Lancashire and Yorkshire goods-trains.

I would recommend, that the Lancashire and Yorkshire Railway Company should make every effort to obtain, at the Normanton station, the means of sorting and classifying their goods-trains. The present arrangement at that station, in my opinion, exposes their whole traffic to constant danger.

I would also recommend that the siding accommodation at Mirfield be increased, and that more convenient sidings, opening directly from the Lancashire and Yorkshire main line, be provided as soon as possible at the Heaton Lodge junction.

I have, &c.,

Capt. HARNESS, R.E.,
&c. &c.

R. M. LAFFAN,
Capt. Royal Engineers.

Office of Commissioners of Railways, Whitehall,
November 16, 1849.

SIR,

I HAVE been directed by the Commissioners of Railways to forward to you the enclosed copy of a report made to them by Captain Laffan, on the collision which occurred at the Heaton junction, on the 3rd instant.

It appears from this report that the public safety is endangered by the want of sufficient siding accommodation at the Heaton junction and at the Mirfield stations, for the large amount of traffic at present passing those places. It also appears that this accommodation is necessary to ensure that regularity in the passenger-trains which the convenience of the public, as well as their safety, requires.

I am to inform you that the Commissioners have directed a communication on this subject to be addressed to the London and North Western Railway Company, and they hope that the Lancashire and Yorkshire Railway Company will communicate without delay with that Company, and that such arrangements as may ensure the safety and convenience of the public will, by their co-operation, be promptly effected.

I am also to inform you that the remarks contained in Captain Laffan's report, upon the amount of the trains at Heaton, have been communicated to the Midland Railway Company.

I have, &c.,

The Secretary of the
Lancashire and Yorkshire Railway Company.

H. D. HARNESS,
Capt. Royal Engineers.

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SIR,

Office of Commissioners of Railways, Whitehall,
November 16, 1849.

I HAVE been directed by the Commissioners of Railways to forward to you the enclosed copy of a report made to them by Captain Laffan, on a collision which occurred on the line of the Lancashire and Yorkshire Railway on the 3rd instant, close to the Heaton junction, and which appears to be to a certain extent attributable to the imperfect siding accommodation at the Heaton station, which is under the control of the London and North-Western Railway Company.

I am to request you to call the attention of the Directors of the Company to the whole of this report, which appears to claim their careful consideration, and to inform them that the Commissioners have directed a communication to be addressed to the Lancashire and Yorkshire Railway Company, calling their attention to the observations of Captain Laffan on the deficiencies at the Heaton Lodge and Mirfield stations, and to the Midland Railway Company, with reference to his remarks upon the arrangement of the trains at Normanton, and they hope that, by the co-operation of the London and North Western with those Companies, such arrangements as may ensure the safety and the convenience of the public will be promptly effected.

I have, &c.,

The Secretary of the
London and North Western Railway Company.H. D. HARNESS,
Capt. Royal Engineers.Office of Commissioners of Railways, Whitehall,
November 16, 1849.

SIR,

I HAVE been directed by the Commissioners of Railways to forward to you the enclosed extracts from a report made to them by Captain Laffan, on a collision which occurred on the Lancashire and Yorkshire Railway, on the 3rd instant, near the Heaton Junction, and to request you to call the attention of the Directors of the Company to the inconvenience and dangers which may be occasioned, as shown by the extracts, by an injudicious arrangement in a train of the carriages to be detached during its progress, and to express the hopes of the Commissioners that the instructions enforced at Normanton on this subject will receive renewed consideration.

I have, &c.,

The Secretary of the
Midland Railway Company.H. D. HARNESS,
Capt. Royal Engineers.

SIR,

Derby, November 29, 1849.

REFERRING to your communication of the 16th instant, enclosing extracts from Captain Laffan's report on a collision on the Lancashire and Yorkshire Railway, I am instructed to state, in reply, that to marshal the trains at Normanton in the way suggested would be fraught with far more delay and danger than can possibly arise at the Heaton junction.

At Normanton there are about 150 trains in the 24 hours, whilst at Mirfield there are about 25.

The trains arrive from Hull and York in trains of from 40 to 60, or 70 waggons, placed indiscriminately as to station, and to re-arrange them at Normanton, as suggested, would block up the main line for a long time, occasionally for an hour and a half or two hours.

I consider that the want of sidings at Heaton junction, as alluded to by Captain Laffan, to be the evil more particularly requiring to be remedied.

I have conferred with the station-master at Normanton, who is most desirous to do all in his power to facilitate the traffic and ensure safety.

I have, &c.,

Capt. Harness, R.E.,
&c. &c.JOSEPH SANDERS,
General Manager.

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Yorkshire and East
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APPENDIX No. 64.

LANCASHIRE AND YORKSHIRE AND EAST LANCASHIRE RAILWAY.

SIR,

Office of Commissioners of Railways,
December 11, 1849.

I HAVE the honour to lay before you, for the information of the Commissioners, the result of my inquiries into the circumstances attending a twofold collision which occurred on the morning of the 26th ult., upon the joint line of the Lancashire and Yorkshire and East Lancashire Railway Companies, leading from the joint terminus of those Companies at Liverpool.

The joint line extends from the Liverpool terminus to the Walton junction, distant 3 miles; there the lines separate; the East Lancashire going off to the left, towards Ormskirk, and the Lancashire and Yorkshire proceeding onwards towards Wigan. The joint portion is under the superintendence of an officer representing both Companies; the only station upon it is situated in Bootle-lane, 1½ miles from Liverpool, and there the staff consists of a station-