

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

18 October 1859

BoT Report into Accident at
Radcliffe Bridge.

(2 Pages).

Committee of Privy Council for Trade, the result of my inquiry into the circumstances which attended the accident, that occurred on the 18th ultimo, near the Heywood Station of the Lancashire and Yorkshire Railway, to Thomas Mitchell, a passenger in an excursion train.

A special excursion train, consisting of an engine and tender, and twelve carriages, including two break carriages, left Sowerby Bridge for Liverpool at 7.10 A.M. on the day in question. At Todmorden, four additional vehicles were added, two carriages and two cattle trucks. The latter were attached to the train by the inspector and the station-master at Todmorden, to make up sufficient accommodation for those who wanted to participate in the trip. The guard told the passengers,—30 or 40 in number,—who were put into these trucks, before they left Todmorden, that they must “keep down” till they reached Rochdale, and that they would obtain carriages at that place.

Instead of obeying the guard's directions, however, about a dozen of the passengers in the second cattle truck climbed up the sides of that truck as soon as they left Todmorden. The driver stopped for water at the Summit Tunnel, and he warned these passengers of the danger of their position, telling them that they would “get caught” by the bridges. They then got down, and promised to remain on the floor of the truck.

When the train stopped at Rochdale, $8\frac{1}{2}$ miles from Todmorden, the guard asked for some carriages, as substitutes for the trucks; but he was informed that there were none to spare at that station, and that the train must go on as it was until he could get some. After leaving the Blue Pits station, 2 miles further on, four or five of the passengers again climbed up on the sides of the second truck. The guard mounted the top of his van, and motioned to them to keep down, but they seemed to take no notice. In passing Heywood, which is a mile from Blue Pits, the driver also observed the passengers on the end, and inside, rails of the second truck. He stood up on the seat of his engine, whistled to attract their attention, and motioned to them to get down.

They all did so but one, Thomas Mitchell, who was riding astride of the top rail, at the outside hind corner of the truck. As he appeared to be preparing to follow his comrades, his head struck against the arch of a bridge, rather more than 100 yards to the west of the Heywood station. He was knocked down into the truck, and received a severe cut across his forehead, in a slanting direction, over the left eye. The driver and head guard both witnessed the occurrence, and they brought the train to a stand, within a short distance. Mitchell was taken back to the station, and thence to a public house in Heywood, where he received medical aid. It is stated that he is now in a fair way towards recovery. The train was fortunately proceeding at a com-

paratively slow speed at the time, the driver having been almost stopped, as he passed the Heywood Station, by the semaphore signal, which was kept at “danger,” to warn him of a train in front. The guard also, who saw the impending danger, had turned on his break again before the accident happened. If the train had been travelling at its ordinary speed, the poor man would not, probably, have survived the blow.

The bridge against which he struck his head, was a masonry arch, not more than 10' 6" above the level of the rails, at the part under which the outside of the cattle truck would pass. The truck was of the pattern always employed by the Company:—9' 8" above the rails, and projecting 1' 7" outside the rails, on each side. It is no wonder, therefore, that a passenger, sitting on the top of the truck, should have been struck whilst passing under the bridge.

It would appear from the evidence that I have received, and from what I have stated, that Mitchell did very wrong in riding upon the rails of the truck, after the warnings which were administered to him by the Company's servants in charge of the train. And he has to blame himself in a great measure, no doubt, for the terrible injury that he has sustained. But a far greater share of blame attaches to the directors of the Company, so long as they allow vehicles of this description to be employed for the conveyance of passengers.

Considering the enormous number of excursionists that they carry, and the class of passengers of this description with whom they have principally to deal, the directors of the Lancashire and Yorkshire Company must be better aware than any other set of directors in the kingdom, of the difficulty that their officers and servants experience in keeping such passengers under proper control, even when ordinary carriages are employed. They must further be aware that it is next to impossible for their servants to prevent those who travel principally by excursion trains, from mounting on the sides of cattle trucks, when such vehicles are made use of. In the present instance, the passengers could not be kept down on the outward journey, before they were excited by the occurrences of a pleasure trip; and it is notoriously more difficult, in the general way, to manage them on such occasions as they return. It is to be hoped that the directors will profit by the warning conveyed to them in this case, better than they have done by those which have been afforded by other similar occurrences, and that they will now positively prohibit such vehicles from being in future made use of on their line for the conveyance of passengers.

I have, &c.

The Secretary,
Railway Department,
Board of Trade.

H. W. TYLER,
Captain, R.E.

LANCASHIRE AND YORKSHIRE RAILWAY.

Railway Department, Board of Trade,
Whitehall, November 16, 1859.

SIR, IN compliance with the instructions contained in your letter of the 22d 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 accident, that occurred on the 18th ultimo, near the Radcliffe Bridge Station, on the East Lancashire Section of the Lancashire and Yorkshire Railway.

This station is $7\frac{1}{2}$ miles to the north of Manchester, and $2\frac{1}{2}$ miles to the south of Bury. There is a signal, worked according to a method known as Whitworth's patent, 300 yards to the north of the station platform; and there is a second signal at 650 yards to

the north of that platform. The view on the approach to the station from Bury is much obstructed by a curve, in a cutting, and by several bridges over the railway. The gradient falls, 1 in 227, from the north, to within 550 yards of the station, and then rises, 1 in 264, towards the station.

On the 18th ultimo, a goods train left Bury for Manchester at 3.50 p.m. It called at the “New Warehouse,” on the north of Radcliffe Bridge, on its way, to leave two waggons in a siding. After it had waited for a minute or two, while a passenger train passed, on the *down* line, the two waggons were shunted into the siding; and it started for Salford soon after 4 o'clock. It consisted of an engine and tender, nine waggons, and a van.

Immediately after leaving the Radcliffe-warehouse siding, however, the driver found that the cotter was loose on one of the cross-heads of his engine, and he, therefore, stopped the train, and knocked down the cotter with his hammer, to make it tight.

After proceeding about half a mile further, he heard the cotter striking against the axle, and thus discovered that he had knocked it down too far. He stopped again, to remedy this defect, by inserting a piece of sheet iron, as a lining, in the cotter-hole; and he supposes that he would have completed this operation in seven or eight minutes.

Before he had time to finish it, he heard a cattle train approaching from behind. He jumped on his engine, to try to move forward out of its way; but he had hardly started his train before it was overtaken, and struck by the cattle train. Two wheels of the engine, and the tender of the cattle train, were thrown off the line; and the van, and seven or eight waggons, in the goods train, were destroyed.

The tail of the goods train appears to have been 85 yards within the Whitworth signal, to which I have above referred, and 215 yards to the north of the station-platform, when the collision took place. This signal is connected with a *treddle* on the *up* line of rails, and is always turned to "danger" by the wheels of an engine passing it on that line. It was therefore at "danger" when the cattle train approached it. But the other signal, 350 yards to the north of it, is worked only by a lever, from the neighbourhood of the station, and had not been turned "on" before the collision, because the station porter was not aware of the goods train having come within it. He could not see the train from the station, in consequence of the curved condition of the line.

It is impossible to ascertain from the evidence the exact length of time that the goods train was standing on the line before the accident occurred. The most conclusive statement on the subject is that of a platelayer, who was walking from Radcliffe towards Bury. He met the goods train when he was 20 yards to the north of the Whitworth signal, before it came to a stand. It did not particularly attract his attention, because he thought it was simply going to stop at the station. He then walked five-eighths of a mile before he met the cattle train. He made no signal to the driver of that train, as he believed the other train to be far enough in front of him.

When the goods train came to a stand for the second time, the guard lighted his tail lamp, and put it on his break-van. He then went forward to the driver, and asked him how long he should be obliged to remain. The two men differ considerably in their statements of what passed between them; but shortly afterwards the guard heard the cattle train coming. He ran back to stop it, but he had hardly passed his own van when the collision occurred.

From the evidence of the platelayer above referred to, it would appear that, if this guard had been more active in the discharge of his duties, he might, at all events, have gone a considerable distance to the rear of his train, and have given the driver of the cattle train warning of the danger that awaited him.

This latter train consisted of an engine and tender, 25 waggons, and a van. It was a special train, running on Tuesdays only, during a certain season of the year. It left Bury at its usual time, 4.20 p.m. The driver found the distant signal from the station

at "all right," and it was only as he passed under a wooden bridge near that signal that he was able to see the Whitworth signal at "danger." He reduced his speed to about 15 miles an hour, and was very seriously injured in jumping from his engine shortly before the collision. His fireman, who also jumped from the engine, escaped unhurt.

The signals at this station are much in want of improvement. They are low and not easily seen. The Whitworth signal, in particular, has a brick bridge behind it, and it was not possible to see it from the other when I was on the spot, in a somewhat misty state of the atmosphere.

The further of the two signals should be removed to a better position, at a greater distance from the station; and it might with advantage be made to work upon the principle which has been adopted for the other. The present Whitworth signal should also be raised to the top of a bridge, or to some good situation, as it might thus be made far more useful. A return signal of some sort is wanted to indicate towards the station, the action of that which is more distant from it.

As it happened, it is a question whether the guard of the goods train might not have prevented this accident from occurring, if he had been more active in the discharge of his duty. But the want of a better arrangement for the working of the goods train is at the same time strongly shown.

As I have already stated, the goods train started first from Bury, and afterwards from the warehouse siding near Radcliffe, while the cattle train followed it from Bury. Now, there was no means of securing a proper interval between these two trains, between the warehouse siding and Radcliffe. The officer who started the cattle train from Bury could not, of course, be aware of the time at which the goods train would leave the warehouse siding. The goods porter of the warehouse kept his signal "on," while the goods train was standing near his post, but he turned it "off" again as soon as that train had gone out of his sight, and then went to his work, according to his usual custom.

Under this system, the cattle train, or any other train, might follow very closely behind the goods train as it leaves the warehouse, without any warning being given to the driver. Either this goods porter should be instructed to obey the ordinary rule, of keeping up his danger and caution signals, each for five minutes after the departure of the goods trains from his sidings; or else some other means of securing the necessary interval should be provided.

The goods train was on this occasion an hour behind its time, in consequence of the engine allotted to it having been detained in its work with a preceding train.

This is a line of constant curves and heavy gradients, on which it is exceedingly desirable that the telegraph should be more employed. No instrument has yet been furnished at the Radcliffe Bridge Station. But the establishment of telegraphic communication, and a proper system of train signals, are the best means that the Directors can employ for ensuring a proper interval between their trains.

I have, &c.

The Secretary of the
Railway Department,
Board of Trade.

H. W. TYLER,
Captain R.E.

LANCASHIRE AND YORKSHIRE RAILWAY.

Railway Department, Board of Trade,
SIR, Whitehall, November 18, 1869.

In compliance with the instructions contained in your letter of the 29th 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 accident, that occurred on the 26th ultimo, near

the Ringley Road Station, on the East Lancashire Section of the Lancashire and Yorkshire Railway.

This station is 3½ miles to the south of Bury, and 6½ miles to the north of Manchester. It is approached on a sharp curve from Bury; and the gradients fall from it, 1 in 120 towards the north, and 1 in 96 towards the south.

On the 26th ultimo, the 7.40 p.m. passenger train