

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

17 December 1870

BoT Report into Accident at
Wigan.

(2 Pages).

modelling by concentrating and interlocking the point and signal levers.

It is becoming almost a byword to remark that under a proper system of absolute block-working this collision would in all probability have been prevented, but on the line from Manchester and Bolton, in which between the hours of 5 a.m. and 12 midnight there is an average, not including special trains, of nearly five an hour in each direction, of a very mixed character, some efficient means of preserving an interval of space between them is certainly most peremptorily needed.

For remarks upon signalling in case of fog, I would

refer to what I have stated in my report upon the Harrow collision. The necessity for distant fog signals, independent of platelayers acting as fog signalmen, is more particularly needed in the case of sidings, such as Little Hey, where trains stop but seldom during the day.

I have, &c.

C. S. HUTCHINSON,
Lieut.-Col. R.E.

*The Secretary,
Railway Department,
Board of Trade.*

Printed copies of this report were sent to the company on the 31st January.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,
(Railway Department),
19th January 1871.*

SIR,

In compliance with the instructions contained in your minute of the 23rd ult., I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending the collision which occurred near Wigan station on the Lancashire and Yorkshire Railway on the 17th ult., between a passenger train and a coal train.

One passenger is stated to have been injured.

From the south end of Wigan station the Lancashire and Yorkshire Railway is formed on a rising gradient as far as its junction with the London and North-western Railway, the portion nearest the station being in a curve and cutting. Starting from the station, the gradients are as follows: 1 in 67 for 70 yards, 1 in 125 for 80 yards, 1 in 184 for 70 yards, 1 in 150 for 100 yards, 1 in 100 for 65 yards, and 1 in 69 for 150 yards, the total distance from the station to the junction being 535 yards.

At the junction there is a raised signal cabin, in which the points and signals are interlocked, the distant signal for up trains from Wigan being, however, only 100 yards north of the cabin.

300 yards north of the junction cabin (called No. 1) there is a second raised cabin, No. 2, having a distant signal for up trains 210 yards to the north of it, at the up end of the Wigan platform. The signalman in this cabin has control of sidings.

170 yards north again of No. 2 cabin, occurs No. 3, also raised, and near the up end of the platform. The signalman here has charge of starting signals (65 yards from him) for up trains, and of points connecting two platform lines with the main lines.

There is also a fourth cabin at the north end of the station, where the junction between the lines from Liverpool and Southport takes place. These four cabins communicate by means of gongs, and the rules laid down for working the traffic specify that no train shall pass any one cabin until the space between it and the one in advance is clear, which will be shown by the acknowledgment of a gonged message, and by the distant signal being turned off.

The morning of the 17th ult. was very foggy in the neighbourhood of Wigan, and a platelayer was in attendance upon the signalman in No. 2 cabin, with instructions from the latter to work for up trains in harmony with the up distant signal from No. 1 cabin (200 yards south of No. 2 cabin), and for down trains, with a down distant signal worked from No. 3 cabin, just opposite No. 2.

At 11.25 a.m. a mineral train, consisting of engine and tender, 18 loaded coal waggons, and a break-van, arrived at No. 1 junction cabin, from Douglas Bank Colliery, a short distance north of Wigan, having waggons to leave in the London and North-western and Lancashire and Yorkshire sidings. The train had been delayed upon its previous down journey, and was about 15 minutes late. On account of the fog and of slow travelling the breaksman put a fog signal on

the rail about 60 yards north of No. 2 cabin, and at the same time says that he shouted to the fog signalman, "Now, mate, look out;" to which observation, however, the man made no reply, and which he denies having heard. The mineral train stopped with the van just beside the distant signal from No. 1 cabin, and there being a block in the line, it had to remain standing on the main line, till at about 11.42 or 43 it was run into by an up passenger train. The breaksman, as soon as his train had stopped, had gone forward to see about the shunting of the waggons, and had been talking to the goods inspector and No. 1 signalman. He says that when the passenger train became due he felt a bit uneasy at delaying it, but said nothing either to the inspector or signalman about it, knowing that there was a platelayer protecting his train from collision. He describes the fog as being so thick that he could not see two waggon-lengths. There was no damage done to the coal train.

The passenger train had started from Liverpool for Manchester at 11 o'clock, consisting of engine and tender, two third-class carriages, van, one second-class, one first-class, and one second-class carriage, six vehicles in all, the last four being coupled with Fay's patent breaks. The train reached Wigan at 11.38, three minutes late, and would in an ordinary way have then been united with another portion from Southport. This, however, having been telegraphed late, the driver of the Liverpool portion was ordered to go on by himself. In answer to the driver's whistle, the starting signal was lowered, and then, in answer to a second whistle as he was starting, the distant signal from No. 2 cabin was turned off; this latter signal meaning, according to the driver, that his road would be clear at any rate as far as No. 1 cabin distant signal. A fog signal was exploded before No. 2 cabin was reached, upon which the driver reduced his pace, which was already quite slow. On passing No. 2 cabin the signalman showed him a green flag, upon seeing which he went on steadily, prepared to pull up quickly. He then caught sight of the break-van of the mineral train about six yards before he reached it, and had just time to shut off steam and reverse his engine when he struck it at a speed he estimates of from three to four miles an hour. The only damage the passenger train received was that the buffer castings of the engine were broken and its buffer beam split.

In connexion with the starting of the passenger train, No. 3 signalman states that he was not aware the train was going right away when the driver whistled for his signal, but was, according to usual custom, only going to draw up out of the way of the Southport portion, and that he had accordingly not gonged it on to No. 2 cabin, which he did only after he had seen that it was going right away.

No. 2 signalman states that about 15 minutes after the mineral train had passed his cabin he sent his fog signalman to see if it had gone, and if the main line was clear; that he returned in three or four minutes, and told him the line was clear; that at this time the up passenger train was whistling for his distant signal,

which he turned off, although he had not received a gong from No. 3, and that this did not arrive till the train had nearly reached his cabin; that he passed the message on to No. 1 at once, giving the driver a green flag as he passed, and trusting to the platelayer to stop the train, if necessary.

With reference to a circular of December 1867, specifying that no train shall pass a cabin till an answer has been received from the one in advance, he states that not a signalman about Wigan attends to the rule in clear weather.

The platelayer acknowledges that he was sent by No. 2 signalman to see if the mineral train had gone on; that he came back and told him the line was clear, although he had not gone far enough to see No. 1 cabin distant signal.

This platelayer must therefore be primarily charged with the occurrence of this collision, for had he acted with reasonable intelligence it could hardly have taken place.

No. 2 signalman is also to blame for not having stopped the passenger train with a red flag, as he had received no message back from No. 1 cabin as to line being clear. He should also not have turned off his

distant signal before receiving the gong from No. 3 cabin.

The collision would most probably have been prevented had the signal arrangements been more complete. The up distant signal of No. 1 cabin, instead of being only 100 yards from it, should be close to No. 2, and should form a main signal for No. 2 by a slot arrangement. The use of flags would thus be dispensed with. Similarly, the starting signals worked from No. 3 cabin could be made the up distant signals from No. 2, by which means a signal could be dispensed with.

I am sorry to say that it transpired during the inquiry upon which this report is based that the signalmen in No. 2 cabin are on duty once every other week, at the time when they exchange night for day work, for 23 hours at a spell.

The rules laid down for the guidance of the signalmen in Circular of December 1867 appear to be but partially attended to.

I remain, &c.

The Secretary,
(*Railway Department,*)
Board of Trade.

C. S. HUTCHINSON,
Lieut.-Col. R.E.

Printed copies of this report were sent to the company on the 8th February.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade,
(*Railway Department,*)
Whitchall, 14th January 1871.

Sir,

In compliance with the instructions contained in your minute of the 23rd ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending a collision which occurred on the 17th ultimo at Ashton station, on the Lancashire and Yorkshire Railway, between a portion of a goods train belonging to that company and a passenger train belonging to the London and North-western Railway Company.

Three passengers are returned as having been shaken in consequence of the collision.

Ashton station is situated between Manchester and Stalybridge, six and a half miles from the former, and one and a quarter from the latter. The London and North-western Company have running powers over this line, which they use for their Yorkshire traffic.

About 550 yards on the Manchester side of the Ashton station there is a junction between the Manchester, Sheffield, and Lincolnshire Railway, from the London Road station, Manchester, to Guide Bridge, the trains of which company, after running on the Lancashire and Yorkshire Railway for about 50 yards, branch off by another junction to Guide Bridge. The junction cabin, which is raised high above the rails on the level of an over-bridge close by the latter junction, is not provided with locking apparatus, and has only four signals for the eight different directions trains may take,—four being, it is said, sufficient, as the Sheffield Company's trains never run for more than the 50 yards on the Lancashire and Yorkshire Railway, and the other companies' trains never on the Sheffield Company's line. For covering Ashton station in the Manchester direction there is a distant signal close to the junction signals, and therefore, about 500 yards from the station signals, the view of this distant signal being very good to approaching trains. Between the junction and station the line curves, and there is an over-bridge, 200 yards from the junction, which impedes the view. The station itself is on a falling gradient towards Manchester of 1 in 199; previous to which for 14 chains it falls in the same direction at 1 in 133, being then level for 24 chains. The junction signalman and station signalman (who has also charge of a level crossing) communicate by telegraphic bells, it being understood that the junction signal is not

lowered for a train approaching from Manchester, unless, in reply to a bell signal, the station distant signal has been previously lowered.

At 8.55 a.m. according to the Ashton station signalman, or at 9.3 according to the breaksman, on the 17th a mixed train, consisting of engine and tender, 9 goods, 12 coal waggons, and a break-van from Miles Platting, going to Stalybridge, drew up just outside Ashton station, where it had some waggons to leave. It was half an hour late, the engine having been detained at Miles Platting for moving waggons not forming part of its own train. The van and 12 coal waggons were left upon the main line, protected by the distant signal (put to danger by the station signalman), about 300 yards inside which the van was standing; and the engine then drew forward the nine goods waggons up to the points of a cross-over road leading, through the line to Manchester, to a goods yard on the south of it; eight waggons were then allowed to run into the goods yard, and the remaining one back against the coal waggons, the falling gradient of 1 in 199 permitting of this operation without necessarily requiring any assistance from the engine. The foreman in the yard then ordered the driver to go into a coal siding on the north side of the line to take some coal waggons from thence to the goods yard, where some carts were waiting for coal. As the time was now, according to the breaksman, 9.10 to 9.12, and a London and North-western passenger train was due to pass Ashton at 9.15, he very properly demurred, and said that they had better go on at once to Stalybridge, and move the coal waggons when they returned, which would be shortly. The foreman, however, repeated his orders in the presence of the passenger inspector of the station, who made no remark, and the breaksman replied, "Very well." The engine then got the coal waggons, and took them across into the goods yard, and was returning to rejoin its train, when, in passing over a waggon turntable in the goods yard, it got off the rails with all its wheels. On seeing this the breaksman said that some one had better go back to look after the London and North-western passenger train; upon which, a goods inspector, who had now appeared on the scene, said the passenger department would look after that. The breaksman then ascertained that a platelayer had, of his own accord, gone back with a red flag. While this was going on in the goods yard the station signalman, a man of 22