

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

6 April 1875

BoT Report into Accident at
Pendleton.

(4 Pages).

has to be performed in connection with these sidings, a signalman is ordinarily sent from the Baxenden station, 500 yards from the Colliery-siding. There are distant-signals in each direction, but no home-signals; and the points, which are worked from the ground, are not interlocked with the signals. The gradient on the main-line is, as above stated, 1 in 40, falling towards Accrington.

Thomas Walmsley, who was at the time of this accident a goods-guard in the employment of the Lancashire-and-Yorkshire Company, came up from Accrington to the Baxenden Colliery-sidings with an engine, a tender, a break-van, and eight waggons. After clearing the points leading to the sidings, he applied the break, and detached his break-van; and then, looking at his watch, he found it was 9.50, and a down-train was due. He allowed that train to pass, and turned the signals to danger. He released the break of his van, and held the points of the up-line; and he asked the waggon-inspector of the colliery, first to hold the slip-points leading to the down-line, and then to jump into the van, and apply the break, when he found it was clear of the slip-points. He saw the waggon-inspector jump into the van, after it had cleared the points, and endeavour to apply the break; but he (the waggon-inspector) turned the break-handle in the wrong direction, and, on finding that the van was gaining speed, and the break did

not appear to take effect upon it, he jumped out, and left the van to run down to Accrington.

His object in placing the break-van on the down-line was, that the engine might first push the waggons into the siding, might next rejoin the break-van, and might then push it along the down-line to Accrington. This was the second time that the goods-guard had come to these sidings in charge of a train. There was no signalman on the spot at the time. It appears that the break-van rushed down at a great speed to Accrington station; and that the servants of the Company at the station hardly saw it before it struck the passenger-train.

The remedies which are required to prevent similar accidents from occurring are obvious. A signal-cabin is required, from which the points and signals may be worked by a regular signalman, and in which the levers for working them may be interlocked with one another; and it is further necessary to construct additional siding-accommodation, so that all shunting-operations may be carried on without obstruction to, or interfering with, the passenger-lines, especially as those passenger-lines are, as already explained, on a gradient of 1 in 40, falling towards Accrington.

I have, &c.,

H. W. TYLOR.

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

Printed copies of the above report were sent to the company on the 17th June.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,
(Railway Department),
Manchester, 27th May 1875.*

Sir,

IN compliance with the instructions contained in the Order of the 10th ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances connected with the collision that occurred on the 6th ultimo, on the Clifton and Manchester section of the Lancashire and Yorkshire Railway.

In this case, the 1.5 p.m. passenger train from Bolton for Manchester overtook, and came into collision with, the 11.20 a.m. goods-train from Blackburn for Manchester, whilst following it on the same line of rails, between the Brindle-Heath signal-cabin and the Pendleton station signal-cabin. The buffer-beam of the passenger-engine was broken; and one waggon of the goods-train was broken up, and another waggon was damaged. Nine passengers complained of injury, and the guard of the goods-train was also injured.

The two signal-cabins above referred to are, respectively, the Pendleton cabin $2\frac{1}{4}$ miles, and the Brindle-Heath cabin about three miles, from Manchester. The line between them is worked, with Preece's instruments, on the block system; and there are the usual miniature semaphores, discs, and switches, in the cabins. The Pendleton station is protected by a distant-signal 800 yards from it, and a home-signal at the east end of the platform, both worked from the signal-cabin, which is at the east end of the station. The distant-signal only, and a foot-bridge over the line, about 150 yards within it, need be referred to on this occasion.

The gradient is 1 in 544 for a mile and a half, falling towards Pendleton. There is a curve of 40 chains radius, on which the line runs round a canal.

The passenger-train consisted of an engine and tender, eight passenger-carriages, and two break-vans; and the whole of the carriages were fitted up with continuous breaks.

Evidence.

The engine-driver, John Cartwright, started from Bolton at 1.8 p.m., three minutes late, stopping at all stations, and leaving Clifton junction about 1.30 p.m.

He found the road clear for him up to and past the Brindle-Heath signal-cabin. The first warning which he received was from the distant-signal worked from the Pendleton cabin, which was at danger. He passed that signal at a speed of 15 to 20 miles an hour. He had shut his steam off 200 yards before he reached it. He whistled for the signal, but did not whistle for the breaks until he had passed it. He had gone from 60 to 100 yards past the signal, and was passing under a foot-bridge, over the line, when he saw the goods-train in front of him. He then whistled for the guards-breaks, and did what he could to check his speed; and he might, he thinks, have been going six or eight miles an hour when his engine struck the van of the goods-train; he did not sooner obey the distant-signal, but tried to whistle it off, believing the line to be clear, because the block-system was in force between the two cabins.

The fireman, James Worsley, saw that the signals at the Brindle-Heath cabin were lowered for the train to pass on towards Pendleton, and he also saw that the Pendleton distant-signal was at danger. After passing that signal at danger, and when the train got to the turn of the bridge, his mate shouted to him "Whoa!" He put the break on when he saw the goods-train in front. He never thought anything was in front in the block, although the distant-signal was at danger.

The head-guard, William Taylor, was riding in a break-van near the middle of the train. He saw the Pendleton distant-signal at danger, and he applied his break before he reached it, sooner than he would have done under other circumstances, because it was raining, and he thought the break-blocks would not act so readily. He turned it on just as he was passing the distant-signal, but he did not put it tight on. In going under the foot-bridge on the east of the distant-signal, he put his break tight on, because he heard the engine-driver whistling for it. He did not put his break tight on when he first saw the distant-signal at danger, because he thought he was going at such a speed it would be easy to pull up at the station-platform. He understood the line to be clear to the next block-cabin, and therefore did not apply his break hard at the distant-signal.

The under-guard, Frederick Allington, was riding in a break-van, also near the middle of the train. The

two break-vans of this train had their elevated portions adjacent to one another in the middle of the train. He saw the Pendleton distant-signal at danger, and he partially applied his break, but he did not put it fully on, until, in passing under the foot-bridge over the line, he saw the goods-train in front of him. He did not apply it fully at the distant-signal because he thought the line would be clear to Pendleton station.

The guard of the goods-train with which this passenger train came into collision, John Broughton, left Blackburn at 11.30 a.m., 10 minutes late, and Bromley-Cross, his last stopping-place, $13\frac{1}{2}$ miles from Manchester, at 12.20. The signals were lowered for his train at the Brindle-Heath cabin, and he approached Pendleton at a very slow speed, not so much as five miles an hour. He found the Pendleton distant-signal at danger, and applied his break in consequence. He had 29 loaded-waggons, and a break-van behind, and an engine and tender. After stopping at Pendleton, he was taking his dinner in the van, and looking up every now and then, to see if the signal would go off; and he remembers nothing further, having been knocked senseless by the shock of the collision. He first came to his senses an hour and a half after the collision, in the waiting room at the Pendleton station, into which he had been carried. His train appears to have been standing at Pendleton some 9 or 10 minutes before the collision occurred.

The signalman who was on duty at the time in the Pendleton signal-cabin has left the Company's service, and was not present for examination during my inquiry; and the Company were unable to give him notice because they did not know where he had gone to.

A telegraph-boy was in the cabin at the time, named Joseph William Spencer. He had been working as telegraph-clerk in the cabin since the 12th February last. Referring to his record-book, in which he made some of the entries:—He booked a goods-train as signalled to him from Brindle-Heath at 1.14, as arriving at the cabin at 1.15, and as passing the cabin at 1.17. He altered his figure from 18 to 17 before the collision. This train was cleared from the next cabin (Bedlam-Bridge) about the time of the collision, but no entry was made in the book. He says that the signalman, Skinner, worked the instruments when he made the above entries. About 1.18 the signalman went down to the cellar for a necessary purpose, and he came up again in about a minute and a half. He was up in the cabin again before the express-goods-train was given on from Brindle-Heath. He, the telegraph-boy, had worked the block-instruments from 12.24 to 12.58 on the same morning, but he did not work the instruments between 1.14 and 1.22. He cannot say whether the express-goods train was cleared back to Brindle-Heath or not. The signalman might have done it, or might not, for anything he knows. The signalman told him to leave the book when the express-goods-train was standing on the main line.

The signalman on duty in the Brindle-Heath cabin, John Hayes, has been employed in that cabin since March, and has been a signalman in other places for 19 years. He produced his record-book, in which is entered 1.12 as the time at which the slow-goods-train was given on from the Brindle-Heath north cabin; 1.13 as the time at which it passed his, the south cabin; and 1.16 as the time it was cleared back from Pendleton. At 1.18 the express-goods-train was given on from Brindle-Heath north-cabin, at 1.19 it passed his cabin, at 1.23 it was cleared back from Pendleton. He could tell the difference when the regular men were working the instruments, and when the boys were working them. It appeared to him as if the regular man had not been working the instruments at 1.23. At 1.30 he received from Brindle-Heath (north) notice of the Liverpool passenger-train, which passed his cabin at 1.31. He gave the be-ready signal to the man at Pendleton at 1.30, but this signal was not acknowledged as it ought to have been. At 1.31 the train passed his cabin, and he telegraphed it as departed to Pendleton. The Pendleton signalman,

or some one, he believes the signalman, immediately threw the switch over which elevated the semaphore-arm in his cabin, and gave six beats to indicate line-blocked. The greater part of the train was at that time past his cabin. The train was going at the regular speed.

The signalman in the Bedlam-Bridge cabin, about 600 yards on the east of the Pendleton cabin, George Royle, also produced his record-book, from which it appeared that he received train-on-line from Pendleton for the slow-goods-train at 1.18; that it passed him at 1.19; and that it was cleared from the cattle-siding cabin, nearer to Manchester, at 1.29.

It would thus appear that the Bedlam-Bridge signalman cleared the line to Pendleton at 1.29 for the express-goods-train which was standing at the Pendleton station; and if this time is correct it would further appear that the express-goods-train was detained unnecessarily at the Pendleton station.

Conclusion.

This is, then, a case of a collision, under the block-system, between a passenger-train, fitted with continuous brakes, and a goods train which was preceding it between two block-stations. If the system had been properly worked, only one train could, of course, have been between the two block-cabins at one time. The mistake which led to the admission of a second train past the Brindle-Heath cabin, whilst the first was kept standing at the Pendleton cabin, lay between the two signalmen, one of whom I had no opportunity of examining. It would appear, however, that the signalman at Pendleton station omitted, on receiving line-clear from Bedlam-Bridge at 1.29 for the slow-goods-train, to allow the express-goods-train at once to follow it, and detained the latter train unnecessarily at his station, although he gave line-clear for it to the Brindle-Heath cabin, according to the evidence of the signalman in that cabin. I am inclined, under all the circumstances, to come to the conclusion that the signalman at the Pendleton cabin was primarily to blame for the collision. His book had evidently been tampered with, some figures had been altered, and the necessary entries were not all made; and it is clear that his work was not regularly conducted on this occasion. He was further to blame for allowing his telegraph-boy to meddle with the instruments, and to make the entries in the record-book, as the telegraph-boy himself admits. I learn that he had, on a previous occasion, been warned against such practices.

The engine-driver, fireman, and guards with the passenger-train, did not pay so much attention as they ought to have done to the distant-signal for the Pendleton station when they found it at danger. They all appear to have considered that the indication intended to be afforded by this distant-signal at danger, was, simply, that the block-length in advance was not clear; and they did not, on finding that distant-signal at danger, use the means with which they were provided for at once checking the speed of their train. If they had done so they might easily have avoided the collision. It is true that if the block-signalmen had done their duty properly, there could have been no preceding train between them and the Pendleton station, at which they were due to stop; and that if the block-signalmen make mistakes, such a collision might occur outside as well as inside the distant-signal; but it is necessary to maintain discipline as regards obedience to signals, whether the block-system is in force or not. This question was referred to in the accompanying notice, issued in October 1872.

I have, &c.,

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

H. W. TYLER.

LANCASHIRE AND YORKSHIRE RAILWAY.

NOTICE to Engine-drivers, Firemen, Guards, and all whom it concerns.

The Absolute Block System.

This will be put into operation at noon on Sunday 20th October 1872, from New Bailey Street cabin, Salford, to the Clifton junction cabin.

The signals as re-arranged will also come into operation on that day.

Printed copies of the above report were sent to the company on the 17th June.

The fact of the block system being in operation does not in any way relieve drivers, firemen, and guards from the responsibility of keeping a good look-out for anything in front of them, and a careful obedience of the signals.

H. BLACKMORE,
Superintendent.

Office of Superintendent
of the Line,
Victoria Station, Manchester,
October 12th, 1872.

LONDON AND NORTH-WESTERN RAILWAY.

*Board of Trade,
(Railway Department),
Whitehall, 19th May 1875.*

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the order of the 19th ultimo, the result of my inquiry into the circumstances connected with the collision, which occurred on the 1st ultimo, between a shunting engine belonging to the London and North-Western Company and a light engine belonging to the Caledonian Company, on a siding near Upperby junction on the London and North-Western Railway, about a mile south of Carlisle (Citadel) station.

The driver and fireman of the Caledonian Company's engine were injured, the former somewhat seriously.

The intermediate buffers of the Caledonian Company's engine and the buffer beam of that belonging to the London and North-Western Company's were damaged.

A Caledonian Company's goods-train, due at Carlisle at 4.50 p.m., had arrived at 8.40 p.m. on the evening in question, and its engine after having disposed of its load in the Upperby goods yard, and having had its van placed at its south end by the London and North-Western Company's shunting engine which afterwards ran into it, pushed the van southwards up to a disc-signal at the exit from the siding to the up main-line, where it waited with its tender end facing northward, until this signal should be turned off, and it should be allowed to enter the up main line previously to crossing to the down line on its way back to the engine sheds which lie to the north of the Citadel station.

The driver states that he had been standing at the signal from 10 to 15 minutes, waiting until the up limited mail should have passed, when without any warning his tender was run into by the shunting engine; that the blow was a sharp one, and that he was stunned by being knocked into the tender and falling upon the sand-box; that he had had the engine lights (carried on the cab) reversed on his way to the junction, so as to show red to the south and white to the north, and that this had been the customary mode of dealing with the lights during the 10 or 11 years in which he had worked in the Upperby yard without complaint from the London and North-Western Company's officers.

The Caledonian Company's fireman, who was standing upon the engine (which was blowing off steam),

neither heard nor saw anything of the shunting engine till it struck his engine. He was knocked down and hurt in the back and side.

The London and North-Western Company's driver states that he was in charge of a shunting tank engine, and on the arrival of the Caledonian goods-train was attached to its van, which he afterwards left in the siding for its own engine to join after it had disposed of its train in the goods yard; that 5 or 10 minutes afterwards he drew southward a number of waggons of this train, along the same siding in which he had left the van, for the purpose of making a shunt, and that while his fireman was looking northward for a signal when to stop, and he himself was looking southward, he observed about 10 yards off the white lights of the Caledonian engine; that his speed was not more than 4 or 5 miles an hour, steam being shut off, and that he had his break at once applied on seeing the other engine. He added that on his engine a red light was showing both to the north and south.

This collision occurred in consequence of want of due circumspection on the part of the London and North-Western Company's driver, who could not have been keeping a proper look-out when shunting along a portion of a siding in which it was most customary for an engine to be standing.

The question as to the nature of the lights which an engine should exhibit when in a similar position to that occupied by the Caledonian Company's engine admits of discussion. The showing of two white lights to the rear, as was done by the engine on this occasion, no doubt avoids any unnecessary red lights being seen by the drivers of trains passing on the adjacent main line, but at the same time does not protect the engine against another approaching it along the siding on which it is standing. It would seem reasonable to require that under similar circumstances the light next the main line should show white to the rear to prevent any unnecessary danger-signal to main line trains, and that the light furthest from the main line should show red to the rear as a protection against being run into on the siding.

I have, &c.,

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

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

Printed copies of the above report were sent to the company on the 17th June.

LONDON AND NORTH-WESTERN RAILWAY.

*Board of Trade,
(Railway Department),
Whitehall, 24th May 1875.*

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in your order of the 7th instant, the result of my inquiry into the circumstances which attended

a collision between a passenger train and a light engine that occurred on Saturday, the 1st instant, on the London and North-Western Railway, between the London Road and Buxton Street junctions, Manchester; on which occasion seven passengers are returned by the Company as having been injured, but the injuries received are believed in all the instances to have been very slight.