

but one of the Halifax train, and knocked it and the break van off the rails, just as the train was coming to a stand. The guard of the yeast van was quite aware, when they started at the west end of the station, that they were proceeding along the wrong road, but thought that they had been turned through the cross-over road at the Centre cabin till just before the collision.

Signalman Ward is certainly to blame for having used a white light for giving permission to the yeast driver to proceed along the wrong line. He should have called him up to the cabin, and informed him by word of mouth where he was going.

No blame attaches to the servants of the Company with the Halifax goods mail train, the guard of which had a most narrow escape, as well as the travelling postman.

It would help to avoid the occurrence of a similar collision if interlocked safety points were provided at the east end of the up goods line.

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

I have, &c.,
C. S. HUTCHINSON,
Major-General, R.E.

Printed copies of the above report were sent to the Company on the 24th January.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade, (Railway Department),
1, Whitehall, London, S.W.,

SIR,

10th January 1885.

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in the Order of the 22nd ultimo, the result of my inquiry into the causes of the collision which occurred on the 18th ultimo, at Radcliffe North junction on the Lancashire and Yorkshire Railway.

In this case as the 6.25 p.m. passenger train from Salford to Colne was passing Radcliffe North junction, it came into collision with some waggons and a van (forming part of the 2 p.m. mineral train from Clifton Hall to Hollingwood) which had been left standing on the down line of the Bolton branch, but had moved forward and fouled the junction just as the passenger train came up.

Two passengers are returned as having been shaken and injured. The guard of the passenger train was also shaken.

In the passenger train (which consisted of a four-wheeled coupled eight-wheeled bogie engine, and six-wheeled tender, three third-class carriages, two composite carriages, and a van, the coupled wheels of the engine and all the tender wheels being fitted with the automatic vacuum-break, and the five rear vehicles with Fay's improved continuous break, applicable by the guard,) the engine had its left-hand buffer broken and foot-plate damaged; the left leading axle-box of the tender was broken; and two third-class carriages had their panels broken and received other minor damage.

In the portion of the mineral train (which consisted of 18 waggons and a break-van) three waggons were more or less damaged, and one of them was thrown over on its side.

The collision occurred at about 6.51 p.m.

Description.

At Radcliffe North junction the lines from Manchester and Bolton unite, and thence proceed to Bury. The Bolton branch joins the main line on a gradient of 1 in 88, falling towards the junction; this branch is at present (owing to subsidence from coal workings) closed for passenger traffic. The down home-signals for the main line and branch are each about 110 yards from the signal-cabin (which is provided with all modern appliances), and about 40 yards from the point of collision.

Evidence.

1. *Patrick Cuddy*, signalman.—I have been 7½ years in the service, seven years signalman, and 16 months at Radcliffe North junction, where I came on duty on December 18th at 2 p.m. to remain till 10 p.m. The 2 p.m. coal train Clifton Hall to Hollingwood arrived at 6.25 p.m., having work to do at North Radcliffe, and I had it set back on to the down line of the Bolton branch, where no passenger trains are at present running. I then allowed the engine to come across with three waggons and the front break-van into the sidings adjoining the Manchester line: this was about three minutes after the train arrived. At 6.40 I got "Be ready" for the 6.25 p.m. passenger (Salford to Colne)

from Radcliffe Bridge, and "On line" at 6.49 p.m. I was clear for it, and I took off my signals, distant, home, and advanced, having previously pulled over No. 20 points, which lay right for the down line from Bolton. As the passenger train was close up to the home-signal, I was about pulling over No. 12 and 13 points (in connection with the movements of the engine of the coal train) on the Manchester line, when I noticed the side lamp of the van of the Hollingwood coal train nearer to the home-signal than it ought to have been from its previous position, and I at once reversed the home and advance signals, and showed a red light to the driver of the passenger train. I believe he saw what I did, as he at once whistled for the breaks. The collision then took place between the engine and about the third waggon from the front of the coal train. The engine ran about six or seven yards after the collision. I have not ascertained how the coal train had come to run back. No guard was with the coal train at the time. The collision occurred at 6.51 p.m. It was a very dark night, but dry.

2. *William Thompson*, driver; 22 years in the service, 10 years driver.—I was driver of the 6.25 p.m. passenger train from Salford to Colne on the 18th December. My engine was No. 664, a four-coupled engine with leading bogie, running engine first, with a six-wheeled tender. I had the automatic vacuum break applying to the coupled wheels of the engine and all the tender wheels, and a five-coupled break on the train in the hands of the rear guard. I had last stopped at Radcliffe Bridge, and left it at 6.50 p.m. right time, having next to stop at Bury. On approaching Radcliffe North junction I found the signals off, and I was nearing the home-signal at a speed of between 20 and 25 miles an hour when it was thrown up just as the front of the engine came opposite to it. I also saw the advanced signal thrown up and a red hand-lamp shown from the cabin. I consequently at once shut off steam, applied the vacuum break, and whistled for the guard's break. I did not reverse. I think the speed was reduced to six or seven miles an hour when we struck the fifth waggon from the front of those on the coal train, which I believe were at rest. No wheels left the rail in my train. My engine stopped in nine or ten yards of the collision. Neither I nor the fireman was injured. The time of the collision was 6.52 p.m. I did not see any one with the coal train. Five or six minutes after I saw the guard of the coal train, who said that when he left his train it was five or six waggon lengths clear of the main line. I did not examine the breaks of the coal train.

3. *Charles Ormerod*, fireman; 11 years in the service, 12 months fireman.—I was Thompson's fireman on the 18th December. I agree with his evidence, which has been read over to me.

4. *Harry Rigby*, guard; 16 years in the service, 5½ years guard.—I was the only guard with the 6.25 p.m. Salford to Colne passenger train on the 18th December. It consisted of six vehicles, a loose third-class next to the engine, two third-class, two composite

carrriages, and a van; the last five being coupled together with Fay's improved break, applied by a wheel in the elevated part of the van. We had last stopped at Radcliffe, and left it at 6.49 right time, having next to stop at Bury. Our speed at Radcliffe North junction was between 20 and 25 miles an hour. I did not notice the home signal thrown to danger, but I heard the break whistle just before the collision, and I had just got to the break and had taken two or three turns at it when the collision occurred. I was knocked down and hurt in the side, but have not had to leave my duty. No vehicles were thrown off the rails. I do not know anything about the coal train breaks.

5. *Mathew Horam*, goods guard; 25 years in the service, and goods guard 20 years.—I was guard of the 2.0 p.m. coal train from Clifton Hall to Hollingwood on the 18th December. On arriving at Clifton North junction the train consisted of engine and tender, break-van, 21 waggons of coal, and a rear break-van, in which I was riding: there was no guard in the front van. On arriving at Radcliffe North junction we were put on to the Bolton branch down line, and the engine stopped about three engine lengths inside the home-signal. The engine then went away with the first break and three waggons of coal to the sidings off the Manchester line. I followed them, having first put the break tight on in my van, and having pinned down the breaks on at least four waggons at the front of the 18 left standing on the branch. Before leaving the tail of the train I observed that it was perfectly at rest. Before ordering the engine to go ahead easy I had put down the breaks, and uncoupled the third from the fourth waggon. The night was dark, but not wet. I was in the sidings when the collision occurred, waiting to rejoin my train. I saw the signals thrown up against the passenger train, then a break whistle, and then the collision. I found the engine had struck the third or fourth waggon from the front of the eighteen, which waggon was on its side. No others were off the rails. The side of one carriage was scratched. I found the break on the van wheels all right and hard on after the collision. I did not examine the front waggon breaks. I can only account for my train having moved by the effect of a high wind which was blowing towards Bury, or to the vibration of a pilot engine working on the siding adjoining the line from Bury to Radcliffe. I had been injured 2½ hours previously by the steam break having been violently applied on the engine just as we were approaching Radcliffe North junction on the previous outward trip. We could have gone into the sidings adjoining the Radcliffe line, but this would have stopped the pilot engine working. We were about three hours late, having been detained on the outward trip. I applied to the signalman to be relieved from my duty after having been injured, but he begged me to continue on duty till I returned. When I did so I found there was no one to relieve me, the signalman saying that he had not had time to get anyone, but he then asked Bury to send us a man. I was not relieved till 10 o'clock the same evening.

Conclusion.

This collision was caused by want of care on the part of the guard in charge of the coal train from Clifton Hall to Hollingwood, in not properly securing that portion of his train (consisting of 18 waggons and a break-van) which had been left standing, on a falling gradient of 1 in 88, on the down line of the Bolton branch, about 23 minutes before the collision happened, while he went away with the engine, break-van, and three waggons to work in the sidings on the other side of the Manchester line. In consequence of a high wind blowing in the direction of Bury, the waggons were moved towards the junction, and the front ones had run foul of it just as the passenger train from Radcliffe Bridge was approaching the junction. The signalman fortunately happened to observe that the side light of the van of the coal train had shifted its position, and was nearer to the junction than it had been, just before the passenger

train was drawing near to the home-signal, and he accordingly threw up the home and advanced signals to danger, and showed the driver a red light. The driver fortunately saw the signals thrown to danger, at once shut off steam, and applied the automatic vacuum-break fitted to the four coupled wheels of the engine and to the six tender wheels, and whistled for the guard's breaks, the speed being thus reduced from about 25 miles an hour at the home-signal to about 6 or 7 miles an hour on collision, which occurred about 40 yards inside the home-signal. This reduction of speed is very creditable to the driver, and shows that he must have been keeping a very good look-out.

The guard did not observe the signals thrown to danger, but heard the break whistle, and got two or three turns at his break when he was knocked down by the collision.

With a good continuous break in the driver's hands, applying to the whole train instead of only to the engine and tender, it is probable that the collision would have been almost, if not entirely, prevented.

The goods guard, an experienced man of 20 years service as such, declares that before leaving the 18 waggons and van standing on the Bolton branch he had put the van-break tight on, and had pinned down the breaks on at least four of the front waggons, and that the whole were perfectly at rest, and some distance inside the branch home-signal when he went away with the engine, front break-van, and three waggons to work in the sidings. He could only account for the break-van and waggons having moved from the high wind blowing, and the vibration of a shunting engine working on an adjoining siding. However this may be, it is evident he was mistaken in supposing he had put down sufficient breaks to properly secure the 18 waggons and van on the falling gradient on which they were standing, and of the nature of which gradient he was well aware.

There is this to be said in the goods guard's excuse, that he had been severely shaken about 2½ hours previously by a sudden stoppage caused by the violent application of the steam break on his engine, and that he was still suffering from this, and was probably not up to the mark at the time he applied the breaks to the van and waggons left on the Bolton branch.

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

I have, &c.,
C. S. HUTCHINSON,
Major-General, R.E.

Printed copies of the above report were sent to the Company on the 24th January.



LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade, (Railway Department,)
1, Whitehall, London, S.W.,

9th February 1885.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in the Order of the 31st December last, the result of my inquiry into the causes of the collision which occurred on the 29th December, at Crow's Nest junction, near Wigan, on the Lancashire and Yorkshire Railway.

In this case, the 1.40 p.m. up passenger train from Liverpool to Bolton and the Yorkshire District, while running through Crow's Nest junction, was turned through facing-points into an up goods loop line, where it came into collision with a pilot engine at the tail of a coal train, which train had a few minutes previously been turned into the loop line to allow the passenger train to pass.

Forty-two passengers, a locomotive inspector who was on the engine of the passenger train, a traffic inspector who was in the van, and the driver, fireman, and guard of this train, were all more or less injured.

In the passenger train (which consisted of engine and tender and five vehicles, the break-power consisting of a hand-break on the tender and Fay's break, actuated by the guard in the rear van, applying to all the vehicles,) the engine had its buffer-beam and buffer broken, its left and right hand frame-plates and side foot-plates bent, its cylinders damaged and cylinder covers broken, two third-class carriages next the engine were badly damaged, and the three other vehicles slightly so.

In the coal train (consisting of engine and tender, 33 waggons, break-van, and a pilot tank engine, which had been assisting the train up the bank between Hindley