

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade (Railway Department),
8, Richmond Terrace, Whitehall, London, S.W.,
November 21st, 1901.

SIR,

I HAVE the honour to report for the information of the Board of Trade, in compliance with your Order of the 11th November, the result of my inquiry into the causes of the collision which occurred on the 5th November between a passenger train and a goods train at Todmorden on the Lancashire and Yorkshire Railway.

In this case, in consequence of the Burnley branch lines being blocked, owing to an accident, the 8.13 a.m. train from Preston to Todmorden was being brought into the station from No. 4 signal-box on the up main line, and was by accident turned into the up loop line, where it came into collision with the 11.45 p.m. goods train from Rose Grove to Leeds.

The passenger train consisted of a pilot engine, which was a six-wheeled coupled goods engine and six-wheeled tender, fitted with the automatic vacuum brake on all wheels and hand brake on six tender wheels, of the following vehicles in order named, viz. :—a bogie carriage van, a six-wheeled third, a bogie composite, and a bogie carriage van, and of the train engine proper, which was a four-coupled bogie passenger engine and six-wheeled tender, fitted with the usual automatic vacuum brakes and hand brake.

The carriages were fitted throughout with the automatic vacuum brake, with the exception of the centre pair of wheels of the six-wheeled third carriage.

The goods train consisted of engine and 46 loaded waggons and a brake van.

Three passengers complained of injury.

All three engines were damaged, and the bogie carriage at the then rear of the passenger train next the train engine was derailed.

The collision occurred during a thick fog at about 10 a.m.

Details of damage to rolling stock and permanent way are given in the Appendix.

Description.

The main lines from Manchester to Hebden Bridge and Yorkshire run through Todmorden from west to east, the down line being to the north of the up line.

Opposite Todmorden No. 4 signal-box are the points of the double junction of the main lines from Burnley and Preston with the Yorkshire main lines, the former run in a north-westerly direction, the up line being to the north of the down line.

Thirty-five yards west of the signal-box are the facing points leading from the up main to the up loop line.

Eighty-three yards east of the junction trailing points in the down main line there are the trailing points of a cross-over road between the up and down main lines to Yorkshire.

The up main line home signals are a few yards beyond the trailing points of the cross-over road, and so are 86 yards east of the facing points to the up loop and of the signal-box.

The up main line home signal from Preston is 70 yards back from the fouling point of the junction of the two main lines.

There are no set-back signals for the cross-over road, and no outlet signal at the east end of the up loop for trains which, being shunted into the up loop, require to proceed in the down direction.

The gradient of the Yorkshire main lines is a falling one of 1 in 239 from west to east.

Evidence.

Thomas S. Berry, signalman, states: I have been in the service 20 years, and a signalman about 11½ years. I have been in Todmorden No. 4 box for about five weeks. Before this I

was stationed at Rochdale No. 5 box for the summer, and formerly I was at Todmorden No. 3. On November 5th I came on duty at 6 a.m. to work until 2 p.m. I had gone off duty

the day previous at 2 p.m., but I had been called out again for something less than an hour at 7.40 p.m. to take charge of Todmorden No. 3 box, on account of the accident that had occurred there on the night of the 4th. The 8.13 a.m. train, Preston to Todmorden, owing to the accident which had occurred at No. 3 box, could not be turned over the branch, therefore all trains from East Lancashire district for Todmorden Station had to be sent to Todmorden No. 4 box, and there reversed and drawn into the station. I received "Is line clear" signal for the 8.13 a.m. from Preston to Todmorden at 9.28, accepted it at 9.33, received "Train entering section" same time, and it arrived at 9.36. I brought the train to a stand at my home signal, and I telephoned to the station to get a man to conduct the train into the station, as has been usual when the trains have to be taken into the station over the East Fork. I drew the train down below the crossing, and as it was passing my box I told the driver I would put an engine on to draw him into the station. I had a pilot engine standing in the up loop, and as soon as I had ascertained that a man had come from the station to conduct the train into it I turned the pilot from the up loop on to down main line. As the pilot was passing my box I warned him that he was going to be attached to a loaded passenger train standing on the main line, and that he was to be careful. It was very foggy at the time. The foreman porter asked me if I had got a road for the train into the station, and I said "No, not yet, but I will get one," and I got it accepted on the main line by No. 3 box at 9.56 a.m. I looked along my frame to see if the road was properly set, and I thought it was. I then told the foreman "Right away into the station," and as it was just passing my box I saw that I had forgotten to reverse my up loop points and that the road was set for the up loop. I had a Rose Grove to Leeds goods train shunted across into the up loop, consisting of 61 waggons and engine, according to my information from Portsmouth, and it was standing near to the entrance of the up loop. I then realized that the passenger train would run into it. I made every endeavour to stop it, and I got the attention of the driver of the train engine, which was in the rear, but I do not know whether he took any action to stop the train or not. Several times daily I have to shunt all sorts of goods and empty carriage trains across this cross-over road into the up loop to clear the main line, and to reverse the empty passenger trains from Burnley ready to return there. There are no set-back signals to indicate to which road the train is travelling, and I have therefore made it a practice to instruct the men in charge of the train into what road they are going. Had there been set-back signals at this cross-over road they would have been properly locked with the loop line points. The weather was very foggy at the time and I could not see the points. I attribute the mishap to my forgetfulness in not having reversed the loop line points. The facing points leading to the down branch were bolted, and I thought, from looking at the levers, that the lever which was over was the lock-bar for the points leading into the loop, instead of which it was the point lever and the lock bar lever was back. These levers are next to each other, and I did not go close up to make sure. There is no outlet signal at the east end of the loop, and trains which are shunted into the up loop requiring to go in the down direction have to be called out by hand. I am not inserting the train circuit calls in the train book, because we have not time to do it.

W. Southworth, driver, Lostock Hall, states: I was working the 8.13 a.m. passenger train, Preston to Todmorden, on November 5th. I signed off duty on the 4th at 6.20 p.m., and on again on the 5th at 7.20 a.m., expecting to finish about 6.40 p.m. I was working engine No. 872, which is a four-coupled bogie passenger engine with six-wheeled tender, fitted with automatic vacuum brake on all wheels, except the four bogie wheels, and also hand brake on tender. When I got to Stansfield Hall I got the signal for Todmorden No. 4 box, and as I knew there had been an accident I was not astonished. I found the home signal for No. 4 box was at danger, and I came to a stand at it, and stood about 10 minutes. Then the signal was lowered, and I drew down towards the signal box. Somebody opposite the box instructed me to draw my train down clear of the cross-over road, and he would hook another engine on to me and draw us into the station. After standing two or three minutes a pilot engine came up to the train and connected the vacuum, the pilot engine blowing the vacuum brakes off. The pilot engine whistled and commenced to drag us across the cross-over road. After we had started a foreman porter got on the steps of my engine, and he was on all the time. As my engine was opposite the signal-box I heard somebody shout out "Whoa" twice, and I immediately applied my brake, but I felt the shock of the collision almost as soon as the brake was applied. It was very foggy, but I could have seen a big object about 40 or 50 feet off. No one complained to me. My train consisted of four bogie vehicles with van compartment at each end. Only the tender buffers of my engine sustained slight damage. One pair of wheels of the third van, next to my engine, was off the road. I occupied myself keeping the passengers off the down line, and also warned the signalman at No. 4 to block all roads. My fireman worked the same hours, and also signed off the same time the day before, as I did.

Jos. Edmondson, driver, Rose Grove, states: On November 5th I was working Todmorden No. 2 pilot. I had signed off duty at 3.20 a.m. on the 3rd and next came on duty at 12.50 a.m. on the 5th, expecting to finish about 1 p.m. I entered the service in 1884, and have been a booked driver for about 15 months. I was working engine No. 944, which is a six-wheeled-coupled goods engine and six-wheeled tender, fitted with automatic vacuum brake, and hand brake on tender. About 20 minutes before the accident happened I was turned into the up loop from the down main line at Todmorden No. 4 box. On passing the box the signalman told me to get clear inside, and to do this I had to buffer up to the engine of a goods train standing in the loop. I had been standing about 15 minutes, when I think it was the foreman porter came up and said, "Go outside and get hold of the train," which was on the down main line just through the cross-over road. The foreman travelled on the step. My mate coupled up to the passenger train and connected the vacuum pipes as well. The foreman then told me I was right now for the station, and on receiving a hand signal from him I proceeded. I was on the look-out for a signal from the signalman, and he called out "Right away," and also gave me a hand signal. I then gave the engine more steam. On passing under the overbridge I noticed my engine was not running square with the bridge, and I thought there was something wrong. I was running eight to ten miles an hour at the time. I shut off steam

and applied the brake, but I had not time to stop the train before I came into collision with engine No. 1057, which was attached to the goods train in the up loop. I at once noticed that a hole had been made in my tender, and that the water was rushing out, and told my mate to put out the fire. I then went back to the signalman at No. 4 box, and asked him if he had forgotten that he had the points set for the loop, and he said at once he had. We were running engine first at the time, and the hole in the tender was made by the carriage buffer piercing it. The right hand buffer of the engine was broken off and the buffer spindle of the left hand buffer was also broken, and one tender buffer spindle as well. There was nothing else damaged. I was not hurt. I do not think we should be going above four miles an hour when the collision occurred. I shut off steam and applied the brakes before I saw the goods train in the up loop.

Joshua Brooksbank, driver, Leeds, states: I have been in the service since 1882, and a booked driver about 3½ years. I signed off duty on the Sunday morning (November 3rd) at 6.40 a.m., at Leeds, and on again at 6.10 p.m. on the 4th, to work a goods train from Leeds to Rose Grove. I then worked the 11.45 p.m. goods train, Rose Grove to Leeds, and on arrival at Todmorden No. 4 box about 6.30 a.m. I set my train back into the up loop in accordance with the instruction of the signalman. I had wired for relief from Rose Grove to Lowmoor. We had been delayed on account of fog and accident at Todmorden. I had 46 loaded waggons and a van on my train. I just got inside the loop line and clear of the points by about two yards. Some time after this a pilot engine was put in front of me and helped me push my train back so that he could bring his engine through the loop points, and he was only just through the points when he came to rest. When he backed into the loop line my engine was carrying two green lights, and on coming to a stand in the loop my fireman changed one of the green lights to a red one.

Frederick Dixon, acting fireman, states: I have been in the service 9 years, and an acting fireman about 5 years. I signed off duty at 4.35 a.m. on the 3rd, and on again at 6.10 p.m. on the 4th, to act as fireman to Driver Brooksbank. When we came down to Todmorden we had two green lights on the engine, and when the train had come to rest in the up loop I changed one of the green head lights to a red one. An hour after the accident I looked at the lights and found them still burning. There was a white

light on the buffer plank of the pilot engine which ran into us.

Jos. Newsam, foreman porter, Todmorden, states: I have been in the service 12 years, and have been at Todmorden 4½ years, all the time as foreman. On the morning in question, owing to the accident at No. 3 box and the branch being blocked, I had to conduct the Preston to Todmorden train, due at 7.13 a.m., into the station, and I was sent for to conduct the 8.13 a.m. train, Preston to Todmorden. It has been the practice at this station to conduct trains through the cross-over road because the cross-over roads are not signalled, and also to ensure that the engines are detached and attached properly before they start. I saw the cross-over road points scotched over for the train, and gave the driver a signal when ready. Whilst the pilot was drawing the train towards the station I rode on the step of the rear engine. When we got opposite No. 4 box I saw the signalman come out of the box and shout to us to stop. The driver immediately applied the brake, but the accident occurred directly after this. I dropped off the engine and went round the train and saw that the trailing wheels of the bogie carriage next to the train engine were off the road with one pair of wheels. The driver was keeping back the passengers, who had alighted from the train, from getting on to the down main line. I went back to the signal box to see that the signalman blocked the roads in all directions, and I commenced to get single line forms ready, so as to open single line workings between No. 4 box and Eastwood. The inspector then arrived and took charge. The signalman told me that he had forgotten to reverse the loop points.

John Henry Burgess, guard, states: I entered the Company's service in 1888, and have been a passenger guard 7 years. I came on duty at 8 a.m. on 5th November to work till 7.30 p.m., having previously come off duty at 7.30 p.m. on 4th. I was guard of the 8.13 a.m., Preston to Todmorden, train which consisted of engine, bogie carriage van, bogie composite, six-wheeled third, and a bogie carriage van, fitted throughout with automatic vacuum brake, except the centre pair of wheels of the six-wheeled third. After the pilot had taken hold of us and as we passed No. 4 signal box the signalman said "Right away." I was riding in the rear van of the train, which was then next the pilot engine. It was very foggy, and I could not see the driver and fireman on the footplate. There were about 80 passengers in the train. No one complained to me of injury, but complaints were made at the station.

Conclusion.

There is no dispute as to the circumstances under which this slight collision occurred. Owing to an accident on the previous evening, which blocked the branch lines from Burnley to Todmorden, the 8.13 a.m. up train from Preston to Todmorden could not be run over the up branch line which joins the up main line at No. 3 signal-box, but had to be sent on to No. 4 box on to the down main line, and there reversed and drawn into the station on the up main line by means of a pilot engine.

The train in question was brought to a stand at the up home signal from Burnley at 9.36 a.m. by Signalman Berry at No. 4 box, who then telephoned to the station for a man to conduct the train into the station, as that is the practice at the place. Berry then had the train drawn down below the points of the cross-over road on to the down main line, and told the driver that an engine would be put on to the train to draw it back into the station.

The pilot engine was waiting in the up loop, where was also the 11.45 p.m. goods train from Rose Grove to Leeds, which had been delayed by fog and by the accident of the previous day, and had been shunted from the down main line across into the up loop.

The engine of the goods train was very near the entrance to the loop, there being just room for the pilot engine ahead of it inside the loop points.

As soon as the conductor for the train had arrived Berry let the pilot engine out of the up loop and through the cross-over road on to the down main line, where it was attached to the tail of the passenger train, and as soon as the points of the cross-over road had been scotched over, Newsam the conductor gave Edmondson the driver of the pilot engine the signal to start, which he accordingly did. Edmondson also got a hand signal from Berry as he passed the box. Unfortunately, Berry had forgotten to reverse the points leading from the up loop after the pilot came out from it to be attached to the train, and so the passenger train, instead of proceeding along the up main line, was taken into the up loop, where it came into collision with the goods train standing just inside the loop points.

Edmondson noticed that he was not on the up main line when he was under an overbridge, which is 22 yards beyond the facing points leading to the up loop, and 45 yards from where the engine of the goods train was standing in the loop. He immediately shut off steam and applied his brakes, but could not stop his train in time to prevent a collision, though the shock was not severe.

Signalman Berry is alone to blame for the mishap, which he explains occurred through mistaking two adjacent levers in the frame when he looked along it to see if the road was rightly set for the train to be drawn into the station. The fog was so thick that he could not see the points themselves.

It was unfortunate that there were no set-back signals for the cross-over road to indicate to which road the train was travelling; had there been these signals they would have been so interlocked with the points of the up loop that it would have been impossible to have pulled off the signal for setting back on to the up main line while the points were set for the up loop.

As goods and empty carriage trains have to be shunted across the cross-over road several times a day the Company would, I consider, be well advised to add the necessary signals for the operations involved. I understand these would have been erected before now but for the fact that the box is a very old one and that there is a probability of large alterations being undertaken at Todmorden.

The Assistant Secretary,
Railway Department, Board of Trade.

I have, &c.,
E. DRUITT,
Major, R.E.

APPENDIX.

DAMAGE TO ROLLING STOCK.

Passenger Train.

No. 152 T.V.—One headstock, one long footboard, and one quarter light broken; two buffers bent; elliptical springs displaced.

No. 373 C.—One diagonal cross timber and one middle-bar split; two buffer rods bent; buffer packing split.

No. 442 C.—One quarter light broken; headstock and gasfittings damaged.

No. 22 T.V.—One headstock, one footboard, one handrail, one headstock cap, one vacuum pipe, one heating pipe, two end panels, four end lining boards, all broken; two buffers and brake-

work bent; body moved: waist panel and gasfittings damaged.

Engine No. 872.—Tender buffers damaged.

Goods Train.

No. 8348 Low Goods.—One end plank and two muntins broken.

Engine No. 1057.—Leading buffer plate and framing bent; buffers broken off.

Pilot Engine.

No. 944.—Both tender buffers and tender tank end damaged.

DAMAGE TO PERMANENT WAY.

One crossing chair broken.