

LANCASHIRE AND YORKSHIRE RAILWAY.

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

16th August 1886.

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 26th ultimo, the result of my inquiry into the causes of a collision which occurred on the 22nd ultimo at Exchange station, Liverpool, on the Lancashire and Yorkshire Railway.

In this case, as the 6.20 p.m. passenger train to Preston (consisting of engine and tender, two third-class, one first-class, one second-class, break-van, one composite, one third-class, and one first-class carriages) was leaving No. 6 platform line, the fourth vehicle from the rear was struck on the side by a light engine No. 909, which was going into No. 5 platform line, and was by a mistake turned through a cross-over road on to the line on which the passenger train was running.

The four rear vehicles were parted from the front portion of the train, and although none of them were upset, the composite and the third-class carriage next behind it were much damaged, the latter being thrown off the rails.

Twelve passengers are returned as having been injured, one of them seriously.

The light engine and the four rear vehicles in the passenger train were damaged. (For particulars, see Appendix.)

Description.

At Exchange station, Liverpool, there are seven lines of rails, of which four are platform lines, all being signalled for running both in and out.

The points and signals are interlocked, and are worked from a small cabin B at the end of one of the platforms and a main cabin A about 100 yards outside this cabin.

The home-signal for the down line into the station is No. 4, which is situated 193 yards outside cabin A, and the splitting signals for the platform line, of which one is No. 5, are 93 yards outside this cabin.

No. 22 points for the cross-over road leading from No. 4 to No. 5 lines, are within a few yards of the cabin, and No. 23 points, facing slip points on this cross-over road, are about 41 yards inside this cabin. The normal position of these slip points is for No. 5 line, and when pulled over they lie for the crossing on to No. 6 line. One end of No. 22 points and No. 23 points are bolted by the same lever, No. 11.

The point of collision, at the fouling point of No. 6 line and the crossing leading from No. 23 points to No. 6 line, is 32 yards inside these points, 73 yards inside cabin A and 166 yards inside No. 5 signal from which the light engine started; and it is only 29 yards outside the starting-signal from No. 6 line, and 61 yards outside the point from which the passenger train started.

The line from cabin A to the buffer-stops in the station is level.

The following is a copy of a special notice issued in October 1885.

“Train bookers employed in signal-boxes.”—“Train bookers employed in signal-boxes must not interfere in any way with the block instruments, bells, or signal-levers, or must they give any hand-signal, or meddle in any way with the signalman’s duties. Any disobedience of this order will render both signalman and train booker liable to instant dismissal.”

Evidence.

Robert Langton states: I have been 25 years in the service, and about 15 years a driver. On the 22nd July I was driver of the light engine, appointed to take out the 6.25 p.m. passenger train Liverpool to Wigan. I had engine 909 bogie-tank fitted with automatic vacuum break and four coupled wheels, and was running tank first. On approaching Exchange station from the shed, I brought my engine to a stand at No. 4 signal, outside the station. The station pilot was standing at that time between the signal and the station, and after standing there five minutes, No. 4

signal was lowered, and I came slowly forward to No. 5 signal, which was at danger, when I came to a stand. I stood at No. 5 signal about one minute, when it was lowered for me to go forward. After passing the cabin and getting upon 23 points I saw I was being turned into the outgoing train, which was then leaving No. 6 platform. I was then travelling at a speed of about four miles an hour. I immediately applied my vacuum break, but came into collision with the last vehicle but three of the outgoing train stripping the elevation and part of the side of the van,

and then striking the corner of the carriage next in rear of it, and damaging more or less the succeeding vehicles of the train. The effect of the collision was to break the four vehicles away from the train, and its severing the vacuum pipes brought the outgoing train to a stand by the automatic action of the break. The vehicles which were broken away from the outgoing train were apart about 20 yards when the front portion came to a stand. I came on duty at 5.55 p.m. The station pilot went clear into a siding. I did not see No. 23 points moved, or the bar, so I cannot say exactly when the bar was moved. My engine did not leave the rails.

Charles Biglow states: I have been 13 years in the service, and about 11 years a guard. On the 22nd July I was guard in charge of the 6.20 p.m. train from Liverpool to Preston. My train consisted of eight vehicles, *i.e.*, two thirds next the engine, a first and second, guard's van, composite, third and first; the three last vehicles being to detach at Ormskirk. We started from the station at our booked time. After seeing the departure signal of the station off, I gave the driver a signal to start, and got in my van, and had commenced sorting my letters and way bills when we were run into by the light engine, which struck the front portion of my van. The effect of the collision was to throw the last carriage but one off the road. The collision appears to have separated the vacuum-break couplings, and the consequence was that the whole of the train was brought to a stand. We were running at a speed of from 8 to 10 miles an hour when the collision occurred. Several passengers complained of being injured. My train was divided at the break, and about a carriage length apart when they came to a stand. The train was fitted throughout with the automatic vacuum break. I did not feel it go on till after the collision. The train was pretty full.

James Seddon states: I have been in the service 16 years, and been employed in cabin "B" for that period. On the 22nd July I came on duty at 2.30 p.m. until midnight. After the light engine had passed No. 5 signal I then put my slot upon it. At this time the 6.20 train had passed my cabin, and I went to put that lever to danger. Immediately I put my lever to danger, controlling 41 signal, the collision occurred. I have observed from my cabin on several occasions that the signalmen in "A" cabin have allowed the train booker to work the signals when things have been quiet. I am aware of the general order issued by the superintendent, warning signalmen against this practice, and threatening instant dismissal. I have very recently seen the train booker working the signals and points in "A" cabin. I have never mentioned this to Mr. Ingham or the inspectors. The 6.20 train was running at over five miles an hour when the collision occurred, and the light engine at about the same pace, I should say.

John Bullfield states: I have been 39 years in the service, and 37 years a driver. On the 22nd July I was driver of the 6.20 p.m. Liverpool to Preston. The proper signals were lowered for me to depart, and I saw none of those signals reversed. On passing "A" cabin, when leaving the station, I felt a sudden shock to the train, and I applied my vacuum break, but almost simultaneously, I think the vacuum break was applied in the rear, and the train was brought almost suddenly to a stand. On leaving the station I did not see the light engine entering the station, and the first intimation I had of anything being wrong was the sudden shock. We were then running at a speed of seven or eight miles an hour. After the collision the train came almost to a sudden stand, and did not run half a carriage length. The tender of my engine was exactly opposite the cabin when we came to a stand. I came on duty at 6.10 a.m. It was a fine evening.

Thomas Pickering states: I am 17 years of age, and am train booker in "A" cabin. I have been four years in the service, and two years and eight months in cabin "A." My duty is to book the trains in the train book inwards, and the departures outwards. According to my train record book, the "Be ready" signal for the 6.20 p.m. Liverpool to Preston was accepted at the cabin in advance at 6.20. This bell signal was given by signalman "Peasley," and "Peasley" prepared the road for this train to depart. Immediately prior to this, on the down line, there had been accepted a light engine at 6.16, on line at 6.18, and it was arriving in the station at about 6.20, when the other train was departing. "Peasley" made the road for the light engine to enter the station, and after the light engine had got within No. 5 signal "Peasley" put it to danger, and then sat down to get his tea. Whilst the light engine was entering the station the "Be ready" was offered and accepted for the Crosby train at 6.20, and it was given on line at 6.20, and immediately accepted. "Peasley" instructed me to pull over 23 points to turn the Crosby train into No. 6 platform. I was aware that the light engine ought to have passed 23 points before I pulled them over. I simply obeyed "Peasley's" orders, and thought the engine had got clear. I saw the collision take place, and then became aware of the mistake. I remember reading in the instructions in the programme of special train arrangements, a notice to signalmen prohibiting them from allowing train bookers to interfere with the points and signal levers or block instruments. During the whole of the three years I have been in the cabin I have more or less, occasionally, worked the points and signals. I have not worked the block instruments. About four or five times prior to the accident that day I worked the levers. I am not aware that any inspector or other person has been in the cabin and seen me work the points and signal levers. I have been called upon to work the points and signal levers during busy times during the last three years. I work with all the signalmen in their turn. Two of the signalmen have instructed me at times to work the levers. The third man has only been a short time in the box, and has not allowed me to work the levers. As soon as the engine had passed No. 5 signal "Peasley" put it to danger, and sat down to take his tea, instructing me to pull over 23 points so as to turn the incoming Crosby train into No. 6 platform. I had to put back 41 signal, and as I put back 41 signal the engine and about four carriages had got past it, and the train came to a stand opposite to our cabin. I have obeyed the orders of the signalmen because I thought it would prevent delay to trains coming into the station. I came on duty that day at 8 a.m. for 12 hours. The light engine was to go into No. 5 platform line, and the Crosby train into No. 6. "Peasley" put back No. 5 signal-lever, and put back No. 11 facing point locking-bar lever. I know that there is an order prohibiting a signal from being put to danger until the whole train has passed it.

Henry Peasley states: I have been 28 years in the service of the Company, and three years in "A" cabin. Prior to my appointment to this cabin I was a district relief pointsman. I came on duty at 2 p.m. on the 22nd July for an eight hours' shift. At 6.12 I accepted on the down line the York train, which was given on line at 6.14, and arrived on No. 3 line at 6.15, and after this train arrived I brought the pilot out of No. 4 with the carriages to form the 6.25 p.m. to Wigan to put it in No. 5. After placing the carriages in No. 5, I sent the engine on the bank to get hold of the rear of the York train and place it into No. 1. A light engine, which was signalled to me at 6.14, I brought up to my down home-signal. After the pilot got clear into the siding I set my points for the engine for No. 5. I lowered the signal for it to do so, and after the light engine had passed No. 5 signal, I put back No. 11

facing point lock, freeing 22 and 23 points. I pulled off 25 and 41 signals for the train to leave No. 6, and then sat down to finish my tea. Before I did so the 6.20 p.m. Liverpool had passed No. 41 starting signal. I instructed the train booker "Pickering" to let the light engine into No. 5 road, and the Crosby train, which was then approaching, into No. 6. I did not tell the boy to pull over any particular lever, but merely to turn the light engine into No. 5, and the Crosby train into No. 6. I thought the light engine had not passed 23 points when I saw the lad had hold of the lever, and I jumped up to prevent him doing so, but was too late. I feel sure I put No. 5 signal at danger, and withdrew the bolt block for No. 11 freeing points No. 23. I recollect an order being issued by the superintendent prohibiting train bookers interfering with the points, or signal levers, or block instruments. In the face of this order I have allowed the train booker to do so, and I now very much regret my disobedience to the order. I know the rule prohibiting a signal being put to danger until the whole of the train has passed it. I told the boy to let the Crosby train into No. 6, after the engine had gone into No. 5.

Robert Forrest, chief inspector, Liverpool, states : I have been in the service of the Company 28 years, and 17 years at Liverpool. I have from time to time watched the working of cabin A, but I never have seen the train booker working the point or signal-levers, and in fact, I have prohibited the boy from using a green flag to call the engine off the bank. I recollect reading the superintendent's order prohibiting train bookers interfering in any way with the points or signal-levers, or block instruments. I should not allow anyone to do so, did I know of it. I was in charge of the platform on the 22nd July and started the 6.20 p.m. train. When I got to the scene of the

accident I found the engine buried in the third-class carriage, the last vehicle but one on the train. Mr. Ingham came up at once, and I left him to attend to the injured passengers, and went and prepared a train to take the people away. I am sorry to say that it is a common practice for signalmen to put back signals before a whole train has passed. I have often seen it done, but I have never reported the cases, although I have repeatedly cautioned the signalmen.

James Ingham, station-master, states : I was on duty on the 22nd July when the 6.20 p.m. passenger train Liverpool to Preston was due to depart, and I heard the crash of the collision. I was in my office. I ran to see what had happened. I went to the end of No. 6 platform at "B" cabin, and saw that a light engine had run into the 6.20 p.m. train. I attended to the passengers who were injured, and sent for a doctor, and the ambulance. Three passengers were conveyed to the hospital. I ordered a train to be prepared to take the passengers forward. All the persons went on but one, a youth, who was taken to the Northern Hospital, and was retained an inmate, suffering from concussion of the brain. I am perfectly aware that the signalmen ought not to allow the train bookers to interfere with or work the signals and point levers. I have never seen them do so on any one occasion; had I done so, I should have stopped it at once. Since the last accident occurred I have personally cautioned each signalman to be very careful in the discharge of his duty, and carry out in every detail the regulations for safety, without regard to delay. I have to state that pointsman "Peasley" is one of the best men I have ever had, and I have found him very efficient in the discharge of his duties. I agree with what inspector Forrest has said about signalmen putting back signals to danger. I have often seen it done.

Conclusion.

This collision was caused by a mistake of the train booking lad in B signal-box, at the Central station; but the signalman in charge of the box is the person most to be blamed, for, in permitting the lad to work the points and signals, he was disobeying a recently issued and stringent order of the Company forbidding such a practice.

At 6.18 p.m. a light engine was signalled "On line" from the next block signal-box outside the Central station, and this engine was brought to a stand, first at No. 4 signal, the down home-signal, and then at No. 5 signal, the splitting-signal applying to the line (No. 5) which it had to enter, passing on its way over No. 21 facing-points, No. 22 facing-points, and No. 23 facing-points, the last being facing-slip points on a cross-over road leading to No. 6 line. When this line was clear the signalman lowered No. 5 signal, and as soon as the engine had passed it, put it back to danger, thus releasing the lock on the facing-point lever and locking-bar lever for No. 23 points, leading to No. 6 line, then putting back the locking-bar lever before the engine had reached it. He then took off the signals for the passenger train to start from No. 6 line at 6.20 p.m., and sat down to take his tea, telling the lad to let the engine into No. 5 line, and afterwards to make the road for a down train from Crosby to enter No. 6 line.

The lad put back the starting-signal from No. 6 line before the whole of the passenger train for Preston had passed it, and having thus released the lock on No. 23 points, turned these points, and allowed the light engine to run across, and into the side of the Preston train.

The accident was therefore entirely due to irregularity in working, and to disregard of rules.

If the signalman had not allowed the booking lad to work the levers, it is most improbable that he, as an experienced man, would have pulled over No. 23 points until the engine had passed over them into No. 5 line; and if the rule that a signal is not to be put to danger until the whole of a train has passed it, had been attended to, the interlocking would have prevented No. 23 points from being moved until the whole of the Preston train had passed the starting-signal, and it would not have been possible for the light engine to be turned across to No. 6 line until this train had got out of danger.

It seems to have been a common practice for the booking lad in this box to work the levers in spite of the order prohibiting it, and, although the station-master and inspector declare that they were unaware of the practice, I cannot think that it could have escaped their notice if they had been alert and observant.

However this may be, it is admitted by them that the very common custom of putting a signal back to danger before the whole train has passed it was not unknown to them, and they are much to blame for not reporting to the proper authorities such cases of the infringement of a very necessary rule whenever they detected them.

The fact is that unfortunately this rule is on many lines almost a dead letter, and the safety which is aimed at by a proper system of interlocking, and can be secured if the rules of working are properly carried out, is thus very much reduced. When anything happens from the disregard of the rule the signalman is blamed, but if no accident occurs it is too often the case that no notice is taken; and it is this want of a strict system of discipline which is the primary cause of far too many casualties.

The signalman and booking lad bear very good characters, the former having no entry against him during a period of 28 years' service.

He had been on duty for 4½ hours when the collision took place.

The continuous break with which the passenger train was fitted seems to have acted well, and being fortunately one with automatic action remained on after the collision, instead of being rendered useless by the division of the train, as would have been the case if it had been a non-automatic break.

The Assistant Secretary,
Railway Department, Board of Trade.

I have, &c.,
F. A. MARINDIN,
Major.

APPENDIX.

DAMAGE TO ROLLING STOCK.

Engine No. 909.—Coal bunker, tank, and framing damaged; buffer-plate and hand-railing bent; main vacuum-pipe, drip-valve, and bunker lamp stand damaged.

Break-van No. 37.—Projection damaged, buffer-rod bent.

Composite No. 294.—One headstock, 1 bottom side, 2 doors, 6 standing pillars, 20 panels, 4 handles, 6 quarter lights, 1 bearing-spring, 16 axle-guard bolts, 2 axle-boxes, and 1 buffer-head broken.

Third-class No. 1,630.—Generally broken up.

First-class No. 57.—Buffer-rod bent.

Printed copies of the above report were sent to the Company on the 18th September.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade, (Railway Department,)
1, Whitehall, London, S.W.,
22nd September 1886.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the Order of the 11th instant, the result of my inquiry into the causes of the collision which occurred on the 8th instant near Todmorden station, on the Lancashire and Yorkshire Railway.

In this case, the 4.40 p.m. passenger train from Blackpool for Leeds and Bradford, due at Todmorden at 6.20 p.m., came into collision (a short distance to the west of the station) with the rear portion of the 2.35 p.m. goods train from Liverpool to Openshaw, due at Todmorden at 6.8 p.m.

One passenger has complained of his arm being bruised. The front guard of the passenger train was hurt in the back, and the rear guard in the face.

In the passenger train—which consisted of engine and tender, and a train of 11 vehicles, all (but one) fitted with the automatic vacuum break—the engine and three front vehicles were damaged.

In the portion of the goods train which was run into—consisting of 25 waggons and a break-van—the train was broken into two parts, and the five rear waggons and the break-van were destroyed. The front of the engine of the passenger train mounted on the débris of the van and waggons, and the tender wheels and the front wheels of the first vehicle left the rails.