

cabin, and 2 electric balls; one to Blackburn junction, and the other to the next cabin in the Bolton direction. He remembers the goods train arriving at 5.43. He did not take off his signals for it, but called the driver on with a green light. He had signalled this train on with three beats to Blackburn junction, and had received back the usual acknowledgment, one beat. The driver whistled for the loop line as he passed the cabin; two other trains then passed towards Bolton on the up-line. On the London and North-Western Company's passenger train, for which he was on the look out, whistling for the signals, he signalled it on with two beats to the Blackburn junction signalman, who acknowledged the signal, and took off his slot, releasing Wood's home-signal; upon which Wood lowered first his distant and then his home-signal, having no notion that the goods train (of which he could see nothing) was standing with its van close to his cabin, but hidden by the over-bridge.

The signalman at Blackburn junction, Benjamin Watton, of 24 years' service, had come on duty at 2 p.m., to remain till 10 p.m. He states that after a London and North-Western Company's goods train from Warrington had passed at 5.39, he had received no notice from Wood of any other train till he got two beats for the passenger train at 5.49; that he had pulled off his slot on Wood's home-signal at 5.42 without any communication with Wood (the way in which they then worked); that on receiving Wood's signal for the passenger train he acknowledged it, passed it forward to the station cabin, and was pulling off his home-signal (not having a notion that the goods train was standing at this signal), and not having looked towards Wood's cabin—as, having received no signal from Wood, he had thought the

line must be clear—when the collision occurred; that he had heard no whistle for the loop line from the goods driver, but was busy at the time with a train shunting on the other line.

This collision was caused by a want of due caution on the part of signalman Watton in omitting to see that the line was clear between his cabin and Wood's before acknowledging Wood's signal for the passenger train, and proceeding to lower his own home-signal. Had he only taken the precaution of looking towards his home-signal, he would have seen the head lights of the goods engine standing there, and have had time to put up his distant-signal (which slotted Wood's home-signal) to danger.

There is a discrepancy in the statements of Wood and Watton as to the signalling of the goods train and as to the time at which Watton took off the slot. I think it probable that the slot was taken off at the time (5.42) stated by Watton, and that though Wood may have forwarded the signal for the goods train, Watton neither heard nor acknowledged it, and that Wood assumed that as Watton did not put on his distant-signal, the goods train had at once passed into the loop line.

The proper mode of working is that which is now adopted, viz., that the slot is not taken off until the approach of a train is announced.

A continuous break in the hands of the driver of the passenger train might have very probably prevented the occurrence of this collision, or at any rate have much mitigated its effects.

I have, &c.,

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

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

Printed copies of the above report were sent to the Company on the 28th December.

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,*  
(*Railway Department,*)  
15th December 1875.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the order of the 23rd ultimo, the result of my inquiry into the circumstances connected with the accident which occurred on the 15th ultimo, at Brighouse, on the Lancashire and Yorkshire Railway.

In this case, as the 10.15 a.m. passenger-train from Manchester to Normanton was passing over a set of facing-points just after starting from the platform at Brighouse, the engine and tender left the rails, and after running a short distance along the ballast of a loop-line to which the facing-points lead, came into slight collision with a light-engine standing in the loop, inside a set of catch-points, 45 yards from the facing-points. The other vehicles kept the rails of the main-line, with the exception of the front wheels of the first carriage.

No passengers have complained of injury.

The engine of the passenger-train had its buffer-plank damaged, and the first carriage an axle-box broken. The light-engine had its side-framing injured.

The facing-points at which this accident happened are situated at the Normanton end of Brighouse station, and are 115 yards from the signal-cabin, in which there are 27 interlocked levers. They are provided with one of Messrs. Saxby and Farmer's patent locking arrangements, the points being moved by No. 15 lever, and the locking-bar and plunger by No. 16 lever. The starting-signal, which cannot be lowered till No. 16 lever is pulled completely over, is nearly opposite the signal-cabin.

The 10.15 a.m. train from Manchester to Normanton left Brighouse on the day in question at 12.15, eight minutes late, consisting of engine, tender, five coaches, and a break-van; the last four coaches being coupled to the van with continuous breaks.

The driver states that the starting-signal applying to the main-line was lowered for him before he started; that he did not observe the position of the loop facing-points as he approached them, having been engaged in moving his reversing-lever, but that he felt the right leading-wheel of the engine strike the right switch, while the left wheel took the wrong side of the left switch, and then left the rails, followed by the other wheels of the engine, all the tender wheels, and the first wheels of the first carriage, the remaining wheels being all on the main-line rails; that the engine ran along the ballast about 45 yards from the facing-points, until it struck a light-engine standing on the loop-line, its right wheels being then outside the left main-line rail and its left wheels inside the right rail of the loop line; that he examined the points and found that the toe of the right switch had been struck, and that of the left one pared off a little on the inside, but that they were lying right for the main-line. The couplings had all held good.

The signalman on duty had served in that capacity for 24 years at Brighouse. About five minutes before the accident he had opened the loop-line points (No. 15 lever) to let a light-engine into the loop-line, and had locked them in that position by pulling over the locking-bar lever (No. 16); when the engine had passed into the loop-line he put back No. 16, then No. 15, then locked No. 15 in its new position (i.e., right for the main-line) by again pulling over

No. 16 (in doing which he declares he felt no unusual difficulty), and then lowered the starting, rear, and distant signals for the passenger-train; the passenger train then arrived and departed, and he did not, he says, put back the starting-signal to danger till the tail of the train had passed it; he did not see the engine leave the rails, nor did he notice any of the levers rattle in the cabin when it did so. Before the occurrence of this accident he was not aware that it was possible for him to have pulled over No. 16 lever far enough to liberate the starting-signal lever, unless the facing-points were lying right for the main-line; he however saw this done after the accident. Constant work had been for some time going on in connection with the point rods.

A signal-fitter in the Lancashire and Yorkshire Company's service, in charge of the Brighthouse signal apparatus, was on the spot about 1½ hours after the accident. He found that it was possible, though in his opinion difficult, to pull over No. 16 (the locking-bar) lever, without the plunger entering the slot in the cross-bar between the points, and that thus the starting-signal might be lowered while the points were

not properly closed. A good deal of work had been lately going on in connection with the rods, in the course of which those worked by No. 15 and 16 levers had been altered.

There is no doubt but that this accident was caused by a want of proper adjustment in the rods worked by No. 15 and 16 levers, the points not having been properly closed by the movement of No. 15; and this imperfection not having been detected as it ought to have been by the signalman, who, had the apparatus been in proper order, should have been prevented from pulling over No. 16 lever sufficiently far to release the starting-signal.

The best arrangements will of course fail if not kept in proper working order, but the greater the distance between cabins and the facing-points worked from them, the greater the risk of something going wrong, and it seems therefore only right to restrict this distance within reasonable limits.

I have, &c.,  
*C. S. HUTCHINSON.*  
*The Secretary, (Railway Department,) Lieut.-Col. R.E. and*  
*Board of Trade. Colonel.*

Printed copies of the above report were sent to the Company on the 22nd December.

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,*  
*(Railway Department,)*  
*Whitehall, 15th December 1875.*

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the order of the 30th ultimo, the result of my inquiry into the circumstances connected with the accident which occurred on the 16th ultimo, at a public road level-crossing at Smithy Bridge station, on the Lancashire and Yorkshire Railway, a girl who was crossing the railway having been knocked down by a passing train, and so seriously injured that she died 21 hours afterwards.

A public road crosses on the level the main lines of the Lancashire and Yorkshire Railway at the down end of Smithy Bridge station. The gates close alternately either the road or railway, and are worked by an interlocked lever in a raised signal cabin on the down side of the crossing, but on the up side of the line. The wickets for foot passengers are not in any way controlled from the cabin, but it is the duty of the signalman to look out of his window on the approach of any train, for the purpose of warning any persons who may be about to cross. The view of the line from the crossing towards Manchester is good, towards Leeds moderately good.

At about 5.45 p.m. on the evening in question, the driver of the 5.21 p.m. up passenger train from Todmorden to Manchester was running through Smithy Bridge station at a speed of 14 or 15 miles an hour, having been checked by signal, when as he passed the level-crossing he heard the fire-irons rattle on the front of his engine, (which was a tank engine running coal box first,) but he heard no screams, and felt no shock; it was quite dark at the time. He thought one of the fire-irons had fallen off, and went on to Rochdale without stopping; he there examined his engine, and found the paddle (one of the fire-irons) turned partly round, but no marks of it having struck any one.

The signalman on duty had kept his signals on (not having received "line clear") against the up passenger train until it approached the home-signal,

when he lowered it, and the train passed at a speed of about 10 miles an hour. Just at this time a down cattle train had drawn over the level-crossing preparatory to setting back into a siding off the down line, the points of which are close to the crossing and on the up side of it. He says that he was at his window, but from the van of the cattle train being in the way was unable to see the wicket on the down side of the crossing, or he should have warned any one who might have been there of the approach of the up passenger train. As it was, he was unaware that there had been any accident until afterwards informed of it by the station-master.

The station master, who lives in a house close to the level-crossing gates on the down side of the line, was at tea when the accident happened; hearing a rattling noise he thought there was something wrong, and looking across the line saw a girl lying in the middle of the 4 ft. space of the up road, in a line between the wickets. He thinks the whole train must have passed over her. She was badly hurt about the head and body, and died in less than 24 hours. Two girls who had been with her informed the station master that they had told her to stop, but that she persisted in running across. The cattle train had no doubt prevented her from seeing how close the up train was.

As this crossing is stated to be largely used by workpeople going to and from neighbouring mills, it is certainly most desirable that a subway or over-bridge for foot passengers should be provided. As it is impossible for a signalman in a raised cabin some little distance from the wickets to keep back incautious people, he should I think have the power (until a subway or bridge is provided) of keeping the wickets closed when necessary by means of a lever in his cabin.

I have, &c.,  
*C. S. HUTCHINSON,*  
*The Secretary, (Railway Department,) Lieut.-Col. R.E. and*  
*Board of Trade. Colonel.*

Printed copies of the above report were sent to the Company on the 3rd January 1876.