

which he turned off, although he had not received a gong from No. 3, and that this did not arrive till the train had nearly reached his cabin; that he passed the message on to No. 1 at once, giving the driver a green flag as he passed, and trusting to the platelayer to stop the train, if necessary.

With reference to a circular of December 1867, specifying that no train shall pass a cabin till an answer has been received from the one in advance, he states that not a signalman about Wigan attends to the rule in clear weather.

The platelayer acknowledges that he was sent by No. 2 signalman to see if the mineral train had gone on; that he came back and told him the line was clear, although he had not gone far enough to see No. 1 cabin distant signal.

This platelayer must therefore be primarily charged with the occurrence of this collision, for had he acted with reasonable intelligence it could hardly have taken place.

No. 2 signalman is also to blame for not having stopped the passenger train with a red flag, as he had received no message back from No. 1 cabin as to line being clear. He should also not have turned off his

distant signal before receiving the gong from No. 3 cabin.

The collision would most probably have been prevented had the signal arrangements been more complete. The up distant signal of No. 1 cabin, instead of being only 100 yards from it, should be close to No. 2, and should form a main signal for No. 2 by a slot arrangement. The use of flags would thus be dispensed with. Similarly, the starting signals worked from No. 3 cabin could be made the up distant signals from No. 2, by which means a signal could be dispensed with.

I am sorry to say that it transpired during the inquiry upon which this report is based that the signalmen in No. 2 cabin are on duty once every other week, at the time when they exchange night for day work, for 23 hours at a spell.

The rules laid down for the guidance of the signalmen in Circular of December 1867 appear to be but partially attended to.

I remain, &c.

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

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

Printed copies of this report were sent to the company on the 8th February.

## LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,*  
(*Railway Department,*)  
*Whitchall, 14th January 1871.*

Sir,

In compliance with the instructions contained in your minute of the 23rd ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending a collision which occurred on the 17th ultimo at Ashton station, on the Lancashire and Yorkshire Railway, between a portion of a goods train belonging to that company and a passenger train belonging to the London and North-western Railway Company.

Three passengers are returned as having been shaken in consequence of the collision.

Ashton station is situated between Manchester and Stalybridge, six and a half miles from the former, and one and a quarter from the latter. The London and North-western Company have running powers over this line, which they use for their Yorkshire traffic.

About 550 yards on the Manchester side of the Ashton station there is a junction between the Manchester, Sheffield, and Lincolnshire Railway, from the London Road station, Manchester, to Guide Bridge, the trains of which company, after running on the Lancashire and Yorkshire Railway for about 50 yards, branch off by another junction to Guide Bridge. The junction cabin, which is raised high above the rails on the level of an over-bridge close by the latter junction, is not provided with locking apparatus, and has only four signals for the eight different directions trains may take,—four being, it is said, sufficient, as the Sheffield Company's trains never run for more than the 50 yards on the Lancashire and Yorkshire Railway, and the other companies' trains never on the Sheffield Company's line. For covering Ashton station in the Manchester direction there is a distant signal close to the junction signals, and therefore, about 500 yards from the station signals, the view of this distant signal being very good to approaching trains. Between the junction and station the line curves, and there is an over-bridge, 200 yards from the junction, which impedes the view. The station itself is on a falling gradient towards Manchester of 1 in 199; previous to which for 14 chains it falls in the same direction at 1 in 133, being then level for 24 chains. The junction signalman and station signalman (who has also charge of a level crossing) communicate by telegraphic bells, it being understood that the junction signal is not

lowered for a train approaching from Manchester, unless, in reply to a bell signal, the station distant signal has been previously lowered.

At 8.55 a.m. according to the Ashton station signalman, or at 9.3 according to the breaksman, on the 17th a mixed train, consisting of engine and tender, 9 goods, 12 coal waggons, and a break-van from Miles Platting, going to Stalybridge, drew up just outside Ashton station, where it had some waggons to leave. It was half an hour late, the engine having been detained at Miles Platting for moving waggons not forming part of its own train. The van and 12 coal waggons were left upon the main line, protected by the distant signal (put to danger by the station signalman), about 300 yards inside which the van was standing; and the engine then drew forward the nine goods waggons up to the points of a cross-over road leading, through the line to Manchester, to a goods yard on the south of it; eight waggons were then allowed to run into the goods yard, and the remaining one back against the coal waggons, the falling gradient of 1 in 199 permitting of this operation without necessarily requiring any assistance from the engine. The foreman in the yard then ordered the driver to go into a coal siding on the north side of the line to take some coal waggons from thence to the goods yard, where some carts were waiting for coal. As the time was now, according to the breaksman, 9.10 to 9.12, and a London and North-western passenger train was due to pass Ashton at 9.15, he very properly demurred, and said that they had better go on at once to Stalybridge, and move the coal waggons when they returned, which would be shortly. The foreman, however, repeated his orders in the presence of the passenger inspector of the station, who made no remark, and the breaksman replied, "Very well." The engine then got the coal waggons, and took them across into the goods yard, and was returning to rejoin its train, when, in passing over a waggon turntable in the goods yard, it got off the rails with all its wheels. On seeing this the breaksman said that some one had better go back to look after the London and North-western passenger train; upon which, a goods inspector, who had now appeared on the scene, said the passenger department would look after that. The breaksman then ascertained that a platelayer had, of his own accord, gone back with a red flag. While this was going on in the goods yard the station signalman, a man of 22

years' service, received a message from the junction, that the London and North-western passenger train was approaching. He was at the time talking to the driver of a London and North-western passenger train from Leeds (who had stopped his engine close to the signal cabin); and candidly admits that, forgetting for the moment the fact of part of the goods train standing on the main line, although it was well within his sight, he lowered his distant signal. He remembered his mistake almost immediately, and restored his signal to danger, but too late, for, in less than a minute, he heard the collision; which took place about 9.20.

The London and North-western train, consisting of engine and tender, three composite carriages, a third class, and break van; left Victoria station, Manchester, for Leeds (having first to stop at Stalybridge) at 9.5, two minutes late, and was detained a minute or two near Miles Platting. On approaching Ashton the junction signals were right for going on, and 'just' after passing the junction distant-signal the station distant-signal was seen by the driver to drop to all right. He ran through the junction at a speed of 23 miles an hour, and, when about 130 yards past it, caught sight at the same time of the van of the goods train (170 yards off), and a man running towards him with a red flag. He gave the alarm whistle, and took immediate means to stop, but struck the van at from 10 to 12 miles an hour. Neither the driver nor fireman was hurt. The guard says that on hearing the alarm whistle he got his break on; he was thrown down in his van, but not injured.

The only damage to the passenger train consisted in the buffer plank of the engine being broken and the foot-plate bent up. In the goods train the van (which had its break on) had its four buffers broken. Its end next the coal waggons and the last coal waggon were injured.

The immediate cause of this collision was the forgetfulness of the station signalman in lowering his distant-signal while a portion of the goods train, for the protection of which he had himself put the signal to danger, was still occupying the main line.

Other circumstances connected with the collision show, on the part of officers holding the superior position of passenger inspector and foreman of the yard at an important station, no effort to have the company's rule enforced (and, in the case of the latter,

an actual overruling of a protest raised by the breakman of the goods train) as to the occupation of the main line in the face of a nearly due passenger train. The rule as to an engine engaged in shunting accompanying waggons into the siding in which they are intended to remain was here again (as in the Stoneclough collision) openly violated, with the additional aggravation that in this case a waggon was allowed to run down an incline of 1 in 133, on the main line, against a portion of the train held there on the same incline by the van breaks, thus running the risk of setting the whole in motion, and of causing a very bad collision. When one sees these violations of rules taking place under the eyes of and indeed by order of those officers of a company whose duty it is to see the rules upheld, it is impossible to avoid the conclusion that the discipline maintained in this company is by no means what it ought to be.

The remark too of the goods inspector, to the effect that the passenger department would look after the protection of the line, the safety of which had been endangered by the act of his own subordinates, seems to indicate some want of cordiality of working between the goods and passenger departments, which can hardly co-exist compatibly with the safe working of the line.

The enquiry into this accident brings to light the existence of an important double junction, through which about 270 regular trains pass during the 24 hours on the Lancashire and Yorkshire line alone, unprovided with locking apparatus, and but imperfectly signalled. I trust that by now drawing attention to the fact, the requisite improvements will be effected before some serious collision occurs to demonstrate their necessity. In any re-arrangement of the signals, those at the junction and the station should be made to mutually "slot" each other.

I regret to add that, notwithstanding the large amount of traffic of a very mixed character which runs over this line, I do not hear that it has yet been decided to apply to it the block-telegraph system.

I have, &c.

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

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

Printed copies of this report were sent to the company on the 31st January.

## LANCASHIRE AND YORKSHIRE RAILWAY

*The Woodlands,  
Dulwich Common,*

SIR,  
21st January 1871.

In compliance with the instructions contained in your minute of the 10th inst., I have the honor to report, for the information of the Board of Trade, the result of my inquiry into the circumstances that attended the collision that occurred on the 30th December last at the east side of Sandhills station, near Liverpool, on the Lancashire and Yorkshire Railway.

Two passengers are reported to have been cut in the face, and three or four more to have been shaken or bruised, but their injuries are believed to be slight.

About 600 yards to the east of Sandhills station there is a large bridge over the Lancashire and Yorkshire Railway.

The bridge spans five lines of railway. Two of these are the main up and down lines to Liverpool, and the three other lines are sidings.

Two of these are at the north side of the main lines of railway, and one at the south side.

Kirkdale signal cabin is situated at the south-west angle of the bridge. The points of a cross-over road which leads from the coke and engine shed sidings (which are situated at the north-east side of the bridge) to the several lines under the bridge, and to the goods

yard at the south-west side of the bridge, are worked from Kirkdale cabin.

This cabin is provided with home signals and distant signals in each direction; as well as an intermediate signal towards Liverpool, for the protection of the various crossings, and for the protection of the lines to the goods sidings. There are four other signals, to control the several lines which lead to the engine shed sidings, to the machine siding, to the East Lancashire engine shed, and to the north docks. There is also bell communication with Sandhills station to the west, with Bootle Lane to the east, and with the Lancashire and Yorkshire engine shed cabin, which is about 60 yards distant. The Lancashire and Yorkshire engine shed cabin is at the north-east side of the bridge, at the junction of the coke and engine shed sidings with the main lines.

The signalman on duty there, works the levers which move fourteen pairs of points. Four of these levers move points connected with the main line, and the ten others move points connected with the sidings. He works no signals. When enginemen require to take their engines in or out of the coke and engine shed sidings, they communicate by means of their engine whistle with the signalman on duty at Kirkdale cabin. The latter then lowers a semaphore signal, at the engine