

me-signal west of, but worked from, the Westbourne Bridge box, which is distant about 500 yards on the west end of the Great Western arrival platform, standing at caution, the usual signal for the train to proceed; and he passed it, travelling at the rate of 8 or 9 miles an hour. After he had got through the Westbourne Bridge, which is but 95 yards east of the up home-signal, he felt as if some one had put the break on, and taken it off again, so as to give a little check, and on looking back and seeing the dust flying, he thought something was amiss, and he pulled up as quick as he could; stopped a minute or so, and then went on to the station, following to a curve in the line, he could not see what had taken place west of the Westbourne Bridge, and he did not afterwards go back to ascertain. It appears, that about 55 yards west of the Westbourne Bridge box, the up line leading to the Bishop's and Metropolitan station leaves the main up line of the Great Western Railway, by means of a single facing point at the right rail, and a fixed point at the left rail,—and that this facing point, worked from the Westbourne Bridge box, is interlocked with the other points and signals, so that before the up home-signal could have been lowered to caution for this main line train to proceed into the Great Western station the point must have been set open to allow the flange of the left wheels to pass between the stock rail and the movable point; and from the fact that the engine had 15 vehicles of the train passed on to the Great Western station it is certain that the point must have been so opened.

The signalman on duty states that the up Windsor train was signalled to him by telegraph from the Lord's signal-box, about 11.7 a.m., and that he put the points right and lowered the signal for the train to proceed;—and when the train was about passing the signal-box, at 11.10 a.m., he put the up distant-signal at "danger," and, as the train was passing, he heard a noise, and on looking out saw, that one of the wheels was off the rails, but he does not know which it was; that at that time, the up home-signal was at all right for that train to proceed, as he had then shifted or touched the lever: that he could not be positive, that the catch of the lever was in the teeth, but he believes it was,—and as soon as he saw what had happened he threw the home-signal up to danger," before the carriages which got off the rails had passed over the rods, so as to break the connection. He states that the three last vehicles got off the rails. He is also very positive that he did not touch the home-signal, nor put it at "danger," before the last vehicle had passed the facing point. It seems so certain that the leading vehicle of the three last of the train (a carriage) appears to have been proceeding along the Great Western up line, but it is uncertain which vehicle it was, whose right wheel was in contact with the point of the right moveable

switch, and struck it heavily, and was then thrown off the rails;—but it is highly probable that it was the last vehicle, as it was found with the two left wheels between the rails of the up Hammersmith line, having had the leading end stove in apparently by the buffers of the van in front, which van had, after getting off the rails, come in contact with the west end of the pier of the Westbourne Bridge, which pier stands between the up Hammersmith and up Great Western main lines, and been shattered to pieces. The guard was riding in this van.

It is also highly probable, that whichever vehicle came in contact with the right moveable switch, and got off the rails, was also the cause of throwing the other vehicles off the line. The Great Western Railway Company have been engaged in making extensive alterations in the station yard for some time past, and in introducing the interlocking of points and signals; and in going through the Westbourne Bridge signal-box, when looking over these alterations, I noticed, with respect to the main line up home-signal, worked from the Westbourne Bridge signal-box, that it was possible to take off this signal when this right moveable switch was not set right for either up line, and with the lever standing so that the spring catch was not in either notch of the quadrant.

I cannot say that this was the case on the day of the accident, as the rods and connections with the levers in the box had then been broken, and subsequently repaired;—but, in passing through the station yard, I noticed that other points did not stand quite close to the stock rails, in some instances, unless the levers were shifted over by a sharp jerk. The locking was not as close as it should be.

I have no doubt that the accident was occasioned by some such looseness in the interlocking as I have mentioned, or, what is still more likely, that the signalman moved the up signal, and thus liberated and possibly moved the right switch before the last vehicle had passed it, from his inability to see exactly when that vehicle had actually passed the points. I understand that the Company's instructions are very strict that this should not be done until the last vehicle has passed the signalman's box, but it is well known that these instructions are not always obeyed when trains are following quick upon each other, from the anxiety of the men not to delay trains. If the facing point or moveable switch had been controlled by a locking bar it is certain that the accident could not have occurred;—and the facing point at this spot would not have been in existence if the lines sanctioned by the Company's (Additional Powers) Act of 1865 had been constructed.

I have, &c.,
W. YOLLAND,
Colonel.

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

Copies of the above report were sent to the Company.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department,
Board of Trade,
Manchester, 17th May 1872.*

In compliance with the instructions contained in your minute of the 4th ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances which attended the accident that occurred on the 27th inst. at the north end of Knottingley station on the Lancashire and Yorkshire Railway. There are two junctions, close together, about a quarter of a mile to the north of Knottingley station. The lines from York and from Doncaster join the Lancashire and Yorkshire Railway from Wakefield to

Goole at these junctions, which are called the north junctions.

The line from York to Doncaster runs parallel to the line from Wakefield to Goole from the north junction to Knottingley station.

There are separate up and down platforms for both lines in the station.

The Lancashire and Yorkshire Railway Company run over the lines from Wakefield to Goole and from Wakefield to Doncaster, and the Great Northern Railway Company run over the lines between York and Doncaster.

There is a set of three-throw facing points at the north end of Knottingley station, which are worked

by a Great Northern Railway Company's pointsman, who is stationed opposite to the points. These points are not interlocked with the signals. One set of points leads from the up line to Doncaster on to the line from Goole to Wakefield, and the second set of points leads to a second up line of rails to Doncaster, which run through the station. These three-throw points are called the middle junction.

The south junction is at the south side of the station.

On the day in question the train that is due to leave Wakefield at 3.15 p.m. for Goole consisted of an engine and tender, a guard's van with a guard, a composite, and two third-class carriages.

The coaches were coupled together in the order in which they are given with Fay's continuous breaks.

The train arrived at the north side of Knottingley station at 3.48 p.m.; it was about three minutes late.

It could not run into the station on its proper line, as that part of the railway between the north and middle junction was occupied with a goods train.

The passenger train was therefore turned at the north junction on to the line to Doncaster, and it was to be turned back on to the line to Goole at the middle junction. The pointsman at the middle junction turned the points in the proper direction for the passenger train to pass. It approached the middle junction at a speed of about four miles an hour. The engine passed safely through the points on the line towards Goole, but the tender split the points and got off the rails, the guard's van next to the tender took the line towards Doncaster, the couplings between the van and the tender gave way, the composite carriage got off the rails in the direction of the line to Doncaster, the front third-class carriage got off the rails in the direction of the line towards Goole, and the last carriage came

to a stand partly on the rails and partly off the rails. The engine-driver, fireman, and guard noticed that the tender got off the rails at the moment that it did so, and they stopped the train at once. The engine did not go above 25 yards beyond the points. No persons are reported to have been hurt. The engine and tender were driven twice through the points after the accident, and on both these occasions the off leading wheel of the tender mounted and split the points. The off leading spring of the tender was found to be broken, and the tire of the off leading wheel was very sharp in the flange.

These defects caused the accident. The pointsman held on to the points and endeavoured to push them back into their proper place, but he was thrown back by the tender splitting the points, and he could not succeed in putting the points back in their proper position before two of the coaches had taken the wrong direction. This man was at last thrown forward against the train.

The engine No. 103 and tender No. 84 that were attached to the passenger train do not appear to have been in a fit state to run. The engine-driver had previously reported them as not safe to run, and there appears to have been great neglect in the locomotive department at Wakefield in sending them out to work in such a state.

I would recommend that the cross-over road between the line to Doncaster and the line to Goole at the middle junction should be taken out, and that the points and signals at this junction should be arranged on the locking principle and worked from a raised cabin.

I have, &c.,

F. H. RICE,
Lieut.-Col., R.E.

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

Copies of the above report were sent to the Company

LANCASHIRE AND YORKSHIRE RAILWAY.

*Railway Department,
Board of Trade,
Manchester, 17th May 1872.*

SIR,

IN compliance with the instructions contained in your minute of the 19th ult., I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances which attended the collision that occurred on the 14th ult. at Chatburn station on the Lancashire and Yorkshire Railway.

One person is reported to have been slightly hurt.

On the day in question a train that consisted of an engine and tender, a milk truck, five third, one second, one first, one composite carriage, and a guard's break-van, with a guard, left Manchester at 1.15 p.m.; it arrived at Chatburn station five minutes late, viz., at 3.35 p.m.

The five last coaches of the train and the guard's break-van were coupled together with Fay's continuous breaks. Chatburn station is the terminal station of a single line of rails.

There are two lines of rails from a point about 200 yards to the south of the station, into the station, but there is only one passenger platform, which is at the west side of the station. The second line of rails is used solely for goods. The station building is a shed, one side of which covers the passenger platform, and the opposite side of the shed is used as a goods store. Both lines of rails terminate against a bank, on the top of which the booking office is placed. There is a distant-signal but no home-signal.

There are numerous sidings at each side of the railway at the south end of the station, and there is a cross-over road between the goods line and the passenger line.

It is customary for the passenger trains to be stopped at the south end of the station.

The engine is unhooked and fastened to the train by a rope. The engine is then started and directed on to the goods line as soon as it reaches the points where the single line becomes a double line. The points are shifted as soon as the engine and tender has passed through them, and the rest of the train is pulled by the rope along the line that leads to the passenger platform.

As soon as the engine-driver has given the train sufficient impetus he checks his engine, the rope is detached by the pointsman, and the train is allowed to run forward to the passenger platform.

The bank where the passenger line ends is about 160 yards from the place where the rope is usually detached.

On the day of the accident there was a horse-box at the end of the passenger line. The train consisted of three vehicles more than usual. The guard was a relief man, who had done duty on Sundays since last autumn.

The train is reported to have been going at a speed of three or four miles an hour when the rope between it and the engine was detached. It ran forward to the platform, and was not stopped before it struck the horse-box at the end of the line.

The collision appears to have been slight, as no injury was done to the rolling-stock and no vehicle left the rails.

The accident was the result of a very dangerous mode of working, and the want of judgment of the guard of the passenger train in not applying his breaks in sufficient time.

This man probably forgot that his train was longer than usual, and he no doubt intended to apply his break and stop his van at the usual place.

I submit that the engine should always run up to the platform in front of the train, and that Chatburn