

breaks to the trains; but their discretion is left unfettered as to its application. On questioning the head guard of the up train, I find that he would only consider a third break to be necessary if he had more altogether than 16 vehicles; and the guard of the down train states that if he had 13 carriages he should put two break-vans with them, while with 14 carriages he would add three break-vans. Looking to the great length of steep gradients on this line, these guards certainly very much underestimate the proportion of break-power which it is desirable to employ, and the Company will act wisely in now adopting the system of continuous breaks above recommended. They may thus at once treble their break-power, and work with greater economy in wear and tear, and less delay in stopping at stations, without increasing the number of servants with their trains.

A second remedy, which is especially applicable to the Pitlochry station, is that of only admitting one

train to it at a time. The distant-signals are now always kept as a rule at danger, and are only lowered by the pointsmen when they go to work the points at each end, or in the case of crossing trains at the two ends, on the approach of the trains. If it were made a rule only to lower the distant signals one at a time and to keep the down train outside (when the two were approaching) until the up train had been brought to a stand at the station, increased safety would be obtained. And as the distant signals are worked from the points and not from the platform, it would be well to provide a means of communication such as a "bell and arm," worked by a wire between the platform and the points in each direction, so that the pointsmen might work their signals in this manner under the direction of the station master.

I have, &c.

*The Secretary,
Board of Trade,
Whitehall.*

H. W. TYLER.
Capt. R.E.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade
(Railway Department)
2nd August 1865.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you the enclosed copy of Colonel Yolland's report of inquiry into the circumstances connected with the collision at Wigan station on the 20th June last, and I am to request that Colonel Yolland's recommendations may receive the careful consideration of the Directors.

I am, &c.

W. D. FANE.

*The Secretary to the
Lancashire and Yorkshire
Railway Company.*

SIR,

Manchester, 27th July 1865.

I HAVE the honour to state for the information of the Lords of the Committee of Privy Council for Trade, in obedience to your minute of the 21st ultimo, the result of my inquiry into the circumstances which attended a collision that occurred between two passenger trains at the Wigan station of the Lancashire and Yorkshire Railway on the 20th ultimo, when about six passengers were slightly hurt.

The up and down platforms of the Wigan station are situated alongside of sidings, so that there are four lines of railway in the Wigan station yard, and all trains which are not appointed to stop at the Wigan station pass up or down one or other of the two central lines, while those intended to stop are turned by signalmen through pairs of facing points on the up and down lines into these sidings. At the west end of the station yard, and just beyond an over bridge that carries the London and North-Western, over the Lancashire and Yorkshire Railway, is a junction of the branch line to Southport, and a signalman is placed in a box close to the north-west wing wall of this bridge, and furnished with regular junction and distant signals, and he also works a short signal near the west-end of the down platform, put up some time since to bar an engine from coming out of a siding lying south of the down line when the line is not clear; but he has no special signal to prevent a down passenger train which has discharged its passengers at the down platform from leaving, as both the trains that run through the station yard without stopping on the down through line, as well as those which stop at the Wigan down platform and then leave for Liverpool or Southport, have to obey the signals which are exhibited at the junction signal box. But the signalman at the junction states, that when he lowers the junction signal for a train to leave the down platform for Liverpool or Southport, he keeps the down distant signal on at "danger," so

as to prevent any through train from approaching the junction while the down train is coming out on to the main line from the siding at the side of the down platform.

On the day in question the 1 h. 40 m. p.m. down train from Manchester to Liverpool, consisting of the engine, eight carriages, and one goods waggon in front, reached Wigan about 2 h. 38 m. p.m. about 13 minutes late, having been delayed at Bolton station waiting for the train from Yorkshire. This train should only stop one minute at Wigan station, but on this occasion it is said to have been delayed five minutes.

It had been the practice up to last April to keep this train waiting at Wigan station until the 2 h. 5 m. p.m. down express train from Manchester to Liverpool, which runs on Tuesdays only and does not stop at any intermediate stations, had passed, and then it followed the express train. But about the time I have named, instructions were given that the 1 h. 40 m. p.m. train should no longer be detained at Wigan to allow the express train to pass it, and the station master on the 20th ultimo gave the order for the train to leave the platform just about the time when the 2 h. 5 m. p.m. express train was due to pass, and up to the day on which this collision occurred the 1 h. 40 m. p.m. train had regularly preceded the 2 h. 5 m. p.m. express train on Tuesdays.

On this part of the Lancashire and Yorkshire Railway the progress of the trains is telegraphed forward and the time of passing various stations is entered in a telegraph book and on a slate, so that the station master or any other person might know what interval of time there was between any two following trains. On this occasion the station master neglected to look at the slate, or, he says he should not have directed the 1 h. 40 m. p.m. train to start when he did; but he states that he was busied with the passengers and with their luggage, of which there was a good deal that day. The evidence is somewhat contradictory as to whether the driver of the 1 h. 40 m. p.m. train did or did not whistle for the junction signal to be taken off. The station master is not certain, but allows that the signal was off for a train to pass through the yard or to leave the down platform; and the signalman at the junction says he did not hear any whistle, but that after he had been told by the ringing of a bell from the eastern end of the Wigan station that the 2 h. 5 m. p.m. down express train was coming, and after a Southport goods train that was shunting on the up Liverpool line had moved away from the over bridge, he got a sight of the Wigan station, and then saw that the 1 h. 40 m. p.m. down train stood alongside of the down platform clear of the central through-down main line, and he

then lowered both the distant and junction signals for the 2 h. 5 m. p.m. down express train to pass through the station. Subsequently he saw the station master give a signal for the 1 h. 40 m. p.m. train to leave, and then he put on both the distant and junction signals to "danger," but could not state whether the 2 h. 5 m. express train had passed the distant signal when he turned it on. He saw the steam from the engine, but he could not see the engine itself, and he noticed both trains approaching the junction, the 1 h. 40 m. moving very slow, and these two trains came into collision with each other just as the goods train on the up line was moving under the bridge into the station yard in the opposite direction.

The 2 h. 5 m. p.m. down express train consisted of engine, two first class and one second class carriage, and one van. It received a "caution" signal as it passed Bolton station, $9\frac{1}{2}$ miles from Wigan, and a "danger" signal as it passed Hindley, $2\frac{1}{2}$ miles from Wigan, so that the driver says he almost pulled up, and then the "danger" signal was turned off, which indicated that the previous train had passed five minutes before, and that when he got in sight of the Wigan distant signal, worked from the eastern end of the Wigan station, but in obedience to the instructions of the signalman at the junction signal box, it stood at danger against him, and he sounded the engine whistle and it was taken off. He then proceeded, he says, cautiously down towards Wigan station, and when he entered the station yard the 1 h. 40 m. train was standing alongside of the down platform, at which time he thinks he was not running more than eight miles an hour, and when he was within about three carriage lengths of the other engine he saw that that train was moving. He then whistled for the breaks and did all in his power to stop.

The two engines came into contact with each other just before reaching the over bridge; both were thrown off the rails, and the engine of the express train then came in contact with the waggons of the goods train and knocked two of them off the rails. This engine was then diverted to the left and got partly through the bridge.

The express engine was a good deal but the other engine not much damaged. The sides of the carriages and van of the express train were damaged, but very little injury was done to the carriages in the 1 h. 40 m. p.m. train.

The collision was evidently occasioned by the mistake of the Wigan station master, and the absence of a signal to be worked from the junction signal box to control the departure of a train from the platform at the moment when a through non-stopping train is due to pass through the station, so that the junction signal was actually a signal for both trains to proceed. No blame appears to attach to any other servant of the company.

I had occasion some five years since, when reporting upon a collision at this same station, to make some suggestions as to the arrangements at this junction. These have been partially carried out in concentrating the working of the points and signals by one signalman with the locking apparatus instead of dividing the responsibility between two. But the position of the signal box close to the wing wall is still very far from being a good one, in consequence of the over bridge carrying the London and North-western Railway interfering with the view of the station yard from the signal box.

I believe there are several stations on the Lancashire and Yorkshire Railway where the platforms are alongside of sidings, and where there are main lines along which through trains pass without stopping at those stations. Similar collisions to this one may happen at any of these stations from the absence of platform signals in addition to the usual station signals that properly apply only to the main lines. I think it very desirable that the attention of the Directors of the Lancashire and Yorkshire Railway should be drawn to this matter.

I have, &c.

W. YOLLAND,
Colonel.

The Secretary
Board of Trade,
Whitehall.

SIR, *Manchester, 10th August 1865.*

I HAVE submitted to the Directors of this Company your communication of 2nd August instant, handing copy of Colonel Yolland's Report on the collision at Wigan station on 20th June last, and beg to inform you that the Directors have ordered the recommendations therein contained to be carried into effect.

Yours obediently,

WM. S. LAWN,
Secretary.

The Secretary
Board of Trade,
Whitehall.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade
(Railway Department),

SIR, *Whitehall, 15th August 1865.*

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you the enclosed copy of the report made by Colonel Yolland, the officer appointed by my Lords to inquire into the circumstances connected with the collision which occurred near Radcliffe Bridge on the Lancashire and Yorkshire Railway, on the 1st instant, between a passenger train and an engine, and to request that in laying the same before the Directors you will more particularly call their attention to the concluding paragraph of the report, in which Colonel Yolland states it to be his opinion that the propelling of trains up inclines by means of an engine behind is most objectionable.

I am, &c.

W. D. FANE.

The Secretary of the
Lancashire and Yorkshire
Railway Company.

SIR, *Whitehall, 14th August 1865.*

I HAVE the honour to state for the information of the Lords of the Committee of Privy Council for Trade, in obedience to your minute of the 3rd instant, the result of my inquiry into the circumstances which attended a collision that occurred between Bury and Radcliffe Bridge on the East Lancashire Section of the Lancashire and Yorkshire Railway on the 1st instant, when 17 passengers sustained injuries, but it is hoped that none of the injuries will prove very severe.

It appears that when the 10.0 a.m. train from Accrington to Manchester reached Baxenden, the driver of the train heard a noise beneath the engine which caused him to think there was something wrong, and he sounded the whistle for the guard's breaks and stopped the train. On getting under the engine he found that either the driving wheel or the sweep of the crank axle had caught the buckle of the inside bearing spring and swept it from the centre towards the end of the top plate, and he took off the whole of the plates of that spring which were