The guard of the passenger train states that he saw the distant-signal towards the south at danger before the collision occurred ; that as it was a very clear afternoon, he could see it distinctly from the back of his train ; and that the arm stood straight out, fairly in the position of danger.

The signalman, also, who was on duty at the Hampton station, states that he turned his distant-signal to danger as the passenger train passed it, and his platform-signal to danger when the train arrived at the station. He was unable on the one hand, to see the arm of the distant-signal from the platform, because it was getting dusk ; and it was not, on the other hand, dark enough for him to see the light of the lamp at the distant-signal, which he had lighted more than an hour before. This distant-signal had been working all day, and worked for four hours after the collision, without any alteration, and perfectly well. He was in the habit of altering it frequently, morning and evening, as the wire expanded and contracted, but he had no occasion to adjust it either on that morning or on that evening.

There appears to be no doubt that the lever of this distant-signal was turned in due course to danger. The station-master satisfied himself that it was so, before he allowed the passenger train to be pushed from the station ; and a platelayer in the employment of the Midland Company looked at the lever just after the crash of the collision, and saw that it was then in the same position. It would seem certain, also, that the arm on the signal post failed to fly, when the lever was worked, altogether to danger. A foreman platelayer who was engaged on his length, and who was called by one of his men from a point half a mile on the south of the signal, to go and assist at the station, found the balance-weight lever on the signal post, as he passed it, about two inches above the stop ; and noticed that a little, but not much, green was visible from the front of the signal lamp, together with red, as he approached it. He pushed the balance-weight down, and therefore the arm and the glasses up, and they remained in those positions. The platelayer, William Page, (who called this foreman,) was standing about 250 yards south of the distant-signal post when the ironstone train passed him. He saw the engine-driver cross over to the off-side of his engine, and noticed that the driver and the fireman were looking at the signal. This induced him to look himself at the signal, and he observed that the semaphore arm stood half-way between danger and caution, but he did not notice the lamp. He saw the engine-driver shut off steam after he had passed him, and just before he reached the distant-signal, but he did not hear him whistle. A minute or two afterwards he heard the crash of the collision.

Immediately after the collision the engine-driver of the ironstone train excused himself to the station master by saying that the distant-signal was not properly at danger, or something to that effect; and he told the signalman, about 20 minutes later, that the signal was not *on*, and added, "But no doubt you turned your lever over to danger." This engine-driver stated to the officers of the company, when first examined by them, that he shut off his steam *before* passing the distant-signal ; while his evidence to me was that he had shut i off on seeing the light at the tail of the passenger train, after passing the distant-signal. I incline to the conclusion that after finding the semaphore arm at more than caution, but less than the horizontal position of danger, he somewhat miscalculated his distance in pulling up, not expecting, probably, to find the passenger train so far to the south of the platform-signal.

This portion of the London and North-Western Railway from Rugby, past Hampton, to Marston Green is worked by time intervals only ; while between London and Rugby on the south, and between Marston Green and Birmingham on the north, the permissive, or train-telegraph system of the London and North-western Company is still in force. Trains are telegraphed also past Hampton, from Birmingham to Coventry, and from Coventry to Birmingham ; but the telegraph-instruments at Hampton are not used, except in cases of emergency, for train purposes. The mineral train left Coventry about 12 minutes after the passenger train, and appears to have run at nearly the same speed as that train between Coventry and Hampton. Not stopping at Berkswell, it would have passed that station more than 10 minutes after the passenger train left it, and no caution signal would therefore have been required by the regulations to be exhibited there to the engine-driver. It was the delay of a quarter of an hour to the passenger train at Hampton, for the purpose of attaching the horse-boxes, which caused it to overtake the passenger train ; and it was, probably, as I have said, the pushing back of the passenger train so far to the south of the passenger platform which misled the engine-driver of the mineral train. Under the train-telegraph (permissive) system, the collision might equally have occurred, but under a good block-system of working, it would have been the duty of the telegraph-signalman to have blocked the line towards the south during these shunting operations, and the collision would thus have been averted.

I have, &c.,
H. W. Tyler.

The Secretary,
Railway Department,
Board of Trade.

Printed copies of this report were sent to the company on the 11th January 1871.

LONDON AND NORTH-WESTERN RAILWAY AND LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade
(Railway Department),
Whitehall, 7th January 1871.

Sir,

In compliance with the instructions contained in your minute of the 21st ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances attending the collision which occurred at the Victoria station, Manchester, on the 12th ultimo, between a passenger train belonging to the London and North-western Railway Company, and another belonging to the Lancashire and Yorkshire Railway Company.

One passenger in the London and North-western Company's train is returned as having been slightly injured.

The eastern half of the north front of the main platform at this station is used by the Lancashire and Yorkshire Company for their trains starting for the west ; and the line leading from it crosses the lines by which the London and North-western Company's trains, arriving from and starting for the east, run to and from the western half of the north front of the same platform. A raised signal cabin is erected close to the crossings in communication with two other cabins east and west of it, at each of which the points and signals are interlocked.

In order to indicate to drivers the actual fouling points of the crossings, a signal post has been erected 55 feet north of and opposite to the west end of the Lancashire and Yorkshire portion of the platform.

The signal post being north of an engine standing near the fouling point, the signal arms and lamps which face the east are not well visible by the driver, particularly in dark foggy weather.

On the 12th ultimo, at 1.34 p.m., a driver of 17 years' service in the Lancashire and Yorkshire Railway Company backed his engine through the crossing, and attached it to a train of carriages standing at the platform forming the train due to start for Blackburn at 1.40 p.m. The engine was at this time between 20 and 30 yards clear of the crossing; seeing which, a ticket-collector asked the driver to draw ahead, so as to get the train more conveniently placed for passengers entering it. The driver put on steam without observing the condition of the London and North-western arrival signal, but just as he had got into motion heard the whistling of the engine of an approaching train; upon this he at once reversed, and tried to move back, so as again to clear the crossing which he had slightly fouled. He did not, however, succeed in doing so, and a London and North-western engine caught the corner of his right cylinder, knocked off its cover and one of the ends of the buffer beam, and forced its leading wheels off the rails to the left.

The driver of the London and North-western train was entering the station at 1.35 p.m. (correct time) from Leeds. His train consisted of engine and tender, two break vans (with guards in each), one front and one rear, and six passenger carriages. The signals were right for him, and he passed the distant signal (about 200 yards from the crossing) at a speed of seven or eight miles an hour. He saw the Lancashire and Yorkshire train drawing up the platform, but its engine not at this time foul of the crossing. It, however, continued to move forward, and when about 40 yards from the crossing the London and North-western driver perceiving that the other was foul of his road, opened his alarm whistle, and used every means to stop his train. He was unable, however, to avoid a collision, which took place when his speed was, he thinks, about three miles an hour, and which resulted in his buffer beam, side framing, and sand box being damaged.

The signalman on duty in the crossing cabin received at about 1.35 p.m. a gonged message of the approach of the London and North-western train. Having observed that the Lancashire and Yorkshire engine, which had just before backed up to its train, was well clear of the crossing, he lowered his signals in answer to the gong. His attention was then directed to a goods train standing to the left of his cabin, and he lowered a signal for it to proceed; while this latter train was in motion he heard the break whistle from the London and North-western engine, and on looking out saw both passenger engines making for the crossing, the Lancashire and Yorkshire one being reversed and trying to get back. He then saw the collision occur as above described.

This collision was caused by a want of caution on the part of the Lancashire and Yorkshire driver in fouling a dangerous crossing without either noticing the condition of the signals protecting that crossing, or communicating in any way with the signalman.

As I before observed, the stop signals are not now well placed for being seen by a driver standing at the west end of the Lancashire and Yorkshire portion of the platform, and I should recommend their being slightly turned. There is also need, at both the east and west ends of this portion of the platform, of a fixed point (such as a lamp suspended from the roof), close to the platform edge, to indicate the precise spots at which the crossings are clear, and no engine or train should be allowed to pass these spots without express permission from the signalman.

I am, &c.

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

The Secretary,
Railway Department,
Board of Trade.

Printed copies of this report were sent to the London and North-western and Lancashire and Yorkshire Railway Companies on the 23rd January.

LONDON AND NORTH-WESTERN RAILWAY.

Railway Department,
Board of Trade,
Whitehall, 2nd January 1871.

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 attending the collision which occurred on the 16th ult. at Peasley Cross station, on the St. Helen's section of the London and North-Western Railway, between a passenger train and a train of empty waggons.

The personal injuries sustained, as the consequences of this collision, are returned by the company as consisting in three passengers having been shaken.

The St. Helen's Railway between St. Helen's junction (on the Warrington and Liverpool line) and St. Helen's is very crowded with traffic, principally mineral and goods, though between 6.50 a.m. and 10.30 p.m., there are 22 passenger trains each way between the junction and St. Helens. With one or two exceptions these trains all stop at the intermediate stations, Sutton Oak and Peasley Cross. The traffic is not worked upon any telegraphic system; but the length being only 2¼ miles, in which, beside the two intermediate stations, there are several junctions of mineral lines, a block system of working by means of wire signals only might be readily, and, as regards safety, beneficially adopted.

Peasley Cross station (1½ miles from the junction) is protected by the usual home and distant signals; the latter being visible, to an engine approaching from the junction, at the platform of the previous station, Sutton Oak, a distance of about 500 yards, the signal itself being 490 yards from a water column at the St. Helen's end of the station platform. An over-bridge crosses the line 120 yards on the Sutton Oak side of the distant signal, which bridge may under certain circumstances interfere with its visibility. The gradient at this part of the line falls from the junction towards Peasley Cross on gradients of 1 in 146 and 1 in 517.

At about 9.32 a.m. on the 16th, a train consisting of engine and tender, 34 empty waggons, and a break van, arrived at Peasley Cross station from Ditton, (having entered the St. Helen's line at Sutton Oak junction), bound for a colliery between St. Helens and Wigan. The engine stopped at the water column to take in water, the main and distant signals being put to danger to protect it. The van of the train was 310 yards inside the distant-signal, and was well visible from the overbridge, a distance of 430 yards. The train had been standing in this position some three or four minutes when the van was run into by a passenger train from the junction, which had been seen approaching (and heard to whistle) both by the breaksman and station-master, but at such a pace as never led them to suppose it would not have stopped. The latter, however, (who was standing on the platform,) hurried the driver of the waggon train, who had just got the front of his train in motion when the collision occurred. One waggon buffer was broken, and the break-van knocked forward about a yard; but nothing left the rails, and the train went forward on its journey almost immediately.

The passenger train consisted of a six-wheeled tank