

159

of the engine are the shortness of the wheel base, and the absence of any flanges on the driving wheels. It is also stated that this same engine was twice off the rails during the year 1868 on a comparatively new line (the Finn Valley), worked by this Company; but on one occasion it is said to have been caused by a stone having maliciously been placed on the rail, and on the other it was at or near some points.

The engineer, Mr. Stokes, is of opinion that the driver must have been travelling at very high speed, and his opinion is based on the fact of the engine having turned over on to its back, and that the tender did so also, and was reversed, end for end. I was not able to ascertain at what time the accident occurred. The train left Carrigans station, 5½ miles from Londonderry, at 10 o'clock, and the telegraphic communication was observed to be interrupted (a telegraph post was carried away) at 10.13, at which time a telegraphic message was passing between Strabane and Londonderry. There is no certainty that the clocks agreed accurately together, nor that some little delay in noticing the interruption might not have taken place. If anything like this interval of time had elapsed, the train could not have been travelling at

high speed. I found the cant of the rail about three inches at the joint where the mark was on the rail, and if the speed had been excessive the tendency would have been to get off the rail on the outside, instead of the inside of the curve, as on this occasion.

I have arrived at the conclusion, from the evidence brought before me, and the rough state of the road on both sides of the spot where the accident happened, and where new sleepers are being still put in at intervals, that the engine mounted the left rail from the bad state of the line, and immediately got off from the absence of flanges on the driving wheel; any irregularities in the road would be more likely to take effect from the shortness of the wheel base of the engine.

I trust the directors of the Irish North-Western Railway Company will not permit what the inspector of permanent way calls "half-worn sleepers" to remain longer in the line, and the sooner they can arrange to have it entirely renewed the better.

I have, &c.

W. YOLLAND,
Colonel.

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

A copy was sent to the Company on 1st March 1869.

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade,
(Railway Department),
Whitehall, 30th January 1869.*

SIR,

I HAVE the honour to state, for the information of the Board of Trade, in obedience to your minute of the 13th instant, the result of my inquiry into the circumstances which attended a collision that occurred on the 7th instant at the Bury (Market) Station of the Lancashire and Yorkshire Railway, between a passenger train and some waggons of a coal train that had become detached as it was entering the station. Two or three persons are returned as having been "slightly shaken," but no one is said to have been seriously injured.

It appears from the evidence that as the Bradley Fold coal train which left Heywood at 6 a.m. on the 7th instant, and which consisted of engine and tender, 24 loaded and 12 empty coal waggons, and 1 break van at the rear of the train, were passing inside the Bury distant signal, the guard found the speed slackening, and he put the break on, and stopped the train, as he thought the waggons had become detached. The train stopped with the van 143 yards inside the distant signal, and the guard says he told his mate, who was also riding in the van, to go forward and ascertain what was the matter, while he went back to protect the tail of his train. This guard further states that he met the foreman of the platelayers 20 or 30 yards in the rear of his train, and having ascertained that he had fog signals with him, he directed him to go back as quick as he could, and to place fog signals on the rails, as his train was stopped; and that he then determined to go to the front of the train, to ascertain what was wrong, and to shift the waggons as soon as possible. He also says, that when he reached the head of his train, 32 waggons in length, he found that a draw-bar had come out of the leading waggon, in consequence of a cotter being out, and that he had no chance of moving the waggons; and then he returned to the tail of the train, and had got 240 yards beyond it when he met the foreman of the platelayers coming back, and asked him why he was coming back, and where he had placed his last fog signal, and was told on the Bury side of the viaduct.

Now, the viaduct commences about 378 yards outside the distant signal.

The guard says that he then made an effort to go further back, but the passenger train was then close upon them.

The story told by the foreman of platelayers differs very much from that of the guard, and I am sorry to say that I do not think much reliance can be placed on either, as it appears some conversation passed as to the necessity for their both telling the same tale.

The foreman of platelayers says the coal train passed him at the distant signal, and as soon as it passed he put down a fog signal, and then proceeded towards Bury, but met the guard of the coal train, and was sent back to protect the tail of the train, and, according to his own statement, he put down two more fog signals 140 yards outside the one he had previously put down, but was then called back by the guard, and told to go and see if the coal waggons still remained in the same place, and that he went.

The guard admits that he neglected his duty in this instance in not going back to protect the tail of his train.

The passenger train which had passed these men was the 6.0 a.m. train from Rochdale to Liverpool. It consisted of engine and tender, five carriages, and one van, and left Rochdale five minutes late, and Heywood about a quarter past six o'clock. The driver states, that when the train got on the viaduct the fireman began skidding the wheels of the tender, at which time he thinks he was running 20 miles an hour; and that a little lower down the bank, running at the time without steam on, they ran over one fog signal not so much as 100 yards outside the distant signal, and two more afterwards; and that they were on the distant signal before he had whistled sharply for the breaks; and he reversed his engine about 100 yards from the place where the collision occurred. He estimates the speed at 15 miles an hour when they ran into the van of the coal train. The collision occurred at 6.25 a.m., or thereabouts. The effect was to break the buffers and buffer plank of the engine, and to throw the van of the coal train and three waggons off the road, and to break the top part of the van and some of the waggons. The morning was said to be very foggy, so that the distant signal could not be seen at more than 30 or 40 yards distance. When this is the case a

driver is not justified in running so fast, close to a station.

The guard of the passenger train did not hear the breaks whistled for at all, but noticed the flash of a fog signal just before the collision took place, but did not hear any sound. This train was well provided with break power; as the van and four carriages were continuously coupled together with Newall's breaks on them. The guard says he heard the driver whistle for the signal, but not for the breaks. I have frequently had occasion to point out the desirability of providing a distinct whistle on the engine that may be

sounded only when the guards breaks are required to be put on; a whistle that cannot be mistaken for the ordinary whistle is what is required.

I think this collision is clearly traceable to the neglect of the guard of the coal train in not going back as soon as his train had stopped, outside Bury Station, and I am not sure that the foreman of plate-layers is free from blame.

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

Secretary,
(Railway Department,)
Board of Trade.

A copy was sent to the Company on the 16th February 1869.

LONDON AND NORTH-WESTERN RAILWAY.

*Railway Department,
Board of Trade,*

SIR, *Whitehall, 19th February 1869.*

I HAVE the honour to report, for the information of the Board of Trade, in obedience to your minute of the 25th ultimo, the result of my inquiry into the circumstances which attended a collision that occurred on the 7th ultimo at Camden telegraph station on the London and North-Western Railway, between a passenger train and a pilot engine, on which occasion six passengers are reported as having received slight contusions or been slightly shaken.

The London and North-Western Railway station at Euston Square is awkwardly situated as a Metropolitan Railway station, not far from the south end of some steep inclines between it and Camden, consisting of 1 in 60 for 20 chains, 1 in 135 for 24 chains, and 1 in 75 for 17 chains.

Prior to July 1844, all trains proceeding from Euston to Camden were hauled up by a rope worked by a fixed engine at Camden, no locomotive being made use of; but at that time a change was made, locomotives were made use of to draw the trains, and frequently the assistance of a second engine was found to be necessary. This assistance was rendered in some instances by placing the second engine behind the train, and propelling it forward. But I have understood there were some slight mishaps while this mode of assisting the train was adopted; and more generally the second engine was placed in front of the train engine, and disconnected from it when the incline had been surmounted, and this second engine then ran ahead, and was turned off the main down line at Camden through a pair of facing points on to a siding, and the facing points were then set right for the down train to proceed on its course along the main down line.

There can be no doubt that there was some considerable risk involved in this mode of working the traffic, where the facing points are first held to turn the pilot engine off the main line, and then quickly reversed and put right for the main line. The Directors recently determined to do away with these facing points, and to revert to the former practice of assisting trains up the incline by means of a pilot engine propelling the train from its rear.

The facing points were not used after the 31st December last, and it is right to state that I am informed that no mishap occurred during the 24½ years they were thus in use; and the men who had been employed on that very responsible duty were then allotted to other duties as pointsmen of a less responsible nature in the same locality.

The down traffic from Euston station to Camden is worked with the assistance of the electric telegraph, and on the block system, no two down trains being permitted to be running on the down line at one and the same time.

The telegraph hut at Camden is about a mile from Euston station, and situated about 55 yards south of a

pair of falling points that lead into the engine siding, west of the main line; and seven yards north of this pair of falling points there is another pair of falling points belonging to a cross-over road that connects the down with the up main line. Just north of these points there are also facing points leading to the up line, but these are seldom, if ever, used, and they are kept locked.

It is the duty of the signalman at the telegraph hut to hold the falling points open when an engine requires to enter the engine siding from the main down line.

On the night of the 7th ultimo a pilot engine followed, but did not assist, the 9 p.m. down passenger train from Euston station, and it stopped at Camden, just north of the two pairs of falling points to which I have referred, for the purpose of going into the engine siding; and John Wardell, pointsman, who had been employed at the facing points from July 1844 until they were taken out on the 31st December 1868, who had just been engaged in holding other points for an engine to go into No. 4 shed, showed a white light to the signalman at the telegraph hut, to tell him that he would hold open the falling points to let the pilot engine into the siding, as he was then close to them.

Wardell proceeded to a pair of falling points, held them open, and the pilot engine passed along the cross-over road towards the up line, and had nearly got on to it, when it was run into by the 4.15 p.m. up Manchester express passenger train, due at Euston at 9.15 p.m., and which was running to its proper time. Wardell had made a mistake, and, in the dark, had taken hold of the lever of the wrong pair of falling points, and had thus turned the pilot engine towards the up line instead of into the siding at the opposite side.

The express train consisted of engine and tender, 2 vans, and 11 carriages, and it is said to have been travelling at its usual speed at this place of 10 or 12 miles an hour, when the collision occurred.

The effect of the collision was to throw both engines and the leading van of the express train off the rails. The express train engine ran over an old hut, in which some of the men employed in the goods department take their meals, and, it is said, some were in it at the time, but none of these men were hurt.

The pilot engine had the left end of the buffer plank broken, and the corner of the side framing, splashers, and part of the foot plate were carried away, and the engine was detached from the tender. The express engine had the right outside cylinder and the chimney damaged. Both lines of way were blocked; one was cleared by 11 p.m., and the other by the following morning.

Wardell had been 31½ years in the Company's service, and I have pleasure in stating that the Directors of the Company, in consideration of his long service, the manner in which it had been performed, and the goodness of his character, have allowed him to be con-