

two empty trucks mounted partly upon it, while the other vehicles remained on the rails.

The only passengers in the train were two timber-loaders, servants of the Company, on their way to Mochynlleth, in one of the carriages. The guard in the goods van felt a violent shock, which stunned him for two or three minutes, and threw him on his back. On getting out of his van he stepped into the water, and seeing the engine in the water, he ran back to the mail van. The mail guard was also thrown on his back, and as soon as he could get out of his van, he met the goods guard coming towards him. The engine driver, Samuel Daniels, was jammed between the engine and the tender, and he appears to have been drowned in that position, though his head and part of his breast were visible above the water. The fireman, John Davies, fell also between the engine and the tender, but under the surface of the water; and he received a very extensive injury in the lower part of the abdomen, which was of itself sufficient to cause death.

These poor men had, as well as the goods guard, left Mochynlleth at 3.30 that morning for Newtown, with the up mail and goods train. They found a heavy flood, which covered the line, between Talerddig and Carno, six or seven miles from Caersws, and the fire of the engine was nearly put out by it before they reached Carno. In approaching the Caersws viaduct on this up journey, at 5.38 a.m., the driver had slackened speed to about three miles an hour, had left his engine, and had walked in front of it for some little distance, signalling to the fireman with his hand lamp. He was no doubt induced to take this precaution, in consequence of his having found so much water on the line west of Carno, and was probably the more confident, in returning an hour and a half afterwards, in regard to the condition of that part of the line. It would have been well if his efforts had been seconded by those whose special duty it was to look after the safety of the permanent way and works.

The flood that occurred on that particular morning was the highest that had been known in the district for 16 years, and it was accompanied by one of the heaviest gales that ever visited this country. The embankment at the east end of the Caersws viaduct was afterwards found to have been damaged or carried away for a length of 48 feet and a maximum depth of 8 feet, which was nearly its full height. It was originally constructed of gravel and silt from the river, with stones of various sizes on its slopes and at its end. Some of the larger material at the end remained after the subsidence of the flood. The valley south of the viaduct and embankment having been transformed in the course of a few hours into a lake, by a rise of water of 11 or 12 feet, waves of considerable dimensions beat against the embankment, and the south corner of it at the east end of the viaduct was particularly exposed to the combined action of the flood, the gale, and the current. It is probable that only a part of the damage above specified was done to the embankment before the accident, as I learn that the flood was at its highest about 20 minutes afterwards. The only person who observed the danger

before the train came up was a day labourer in the employment of Mr. Kinsey, of Maesmawr, named Thomas Davies. He saw, as he walked along from the viaduct, that "the earth had passed off from under the sleepers for about eight or nine yards." Running forward, he met the train, and he called out to the engine driver, and held up his hand to point out the danger to him as he passed. But the driver, though he looked at him, did not take any notice of him, or do anything that he could see towards stopping the train. The wind was so high that the driver probably did not hear him calling, and he may have understood him to be pointing to the height of the water only.

The viaduct over the Severn is a timber one, of ordinary construction. There are four timber piles in each pier, and the permanent way is carried on double baulks of timber, one under the other. Struts have also been added below them for greater stiffness. There are eight river openings of 20 feet each, besides one at each end, adjoining the embankment. The struts have to some extent diminished the waterway in time of flood, but the viaduct was nevertheless uninjured by the action of the water on the present occasion. The Company now propose to increase the waterway by shortening the embankment, or rather by not filling up a portion of that which has been washed away. It is desirable that the new end of the embankment should be secured by stone pitching in a substantial manner, and after the experience of this accident, that the other end of the embankment should be similarly treated.

But these precautions should not be considered to do away with the necessity, which also exists, for increased vigilance on the part of the inspectors of permanent way and the platelayers. The district inspector for 37 miles of this part of the line lives at Caersws, and was there when the accident occurred. It would have been better, if he and his platelayers had been up and looking after the bridges, embankments, and permanent way, with a view to the safety of the trains, on such a morning. The printed regulations of the Company require that the whole line shall be inspected by the platelayers before 7 a.m. in summer and before 8 a.m. in winter. But something more is required in such an exceptional case as a flood of this description. A most serious accident may be caused by less extensive damage, and even by the washing away of the ballast for a short distance from under the sleepers. It is very necessary, on the occasion of such extraordinary floods, either that critical points should be watched by night as well as by day, under proper supervision, by a proportion of the platelayers, or that the working of the night traffic should be temporarily suspended; and I would recommend, in conclusion, that the Company's regulations should be revised with a special view to this requirement.

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

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

LANCASHIRE AND YORKSHIRE RAILWAY.

*Board of Trade
(Railway Department),
Whitehall, 29th February 1868.*

SIR,

I AM directed by the Board of Trade to transmit to you, for the consideration of the Directors of the Lancashire and Yorkshire Railway Company, the enclosed copy of the report made by Colonel Yolland, the officer appointed by the Board of Trade to inquire into the circumstances connected with the collision which occurred on the 5th inst. near the Ossett Station on the Lancashire and Yorkshire Railway.

I have, &c.
R. G. W. HERBERT.

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

*Board of Trade,
(Railway Department),*

Whitehall, 26th February 1868.

SIR,

I HAVE the honour to state, for the information of the Board of Trade, in obedience to your minute of the 7th instant, the result of my inquiry into the circumstances which attended a collision, happily unattended with any fatal results, between a passenger train and a coal train, proceeding in opposite directions, between Horbury Junction and Horbury and Ossett station on the down line of the Lancashire and Yorkshire Railway, between Wakefield and Manchester, on the 5th instant, on which occasion about ten passengers are stated to have been injured, one of the number very seriously, and the guard of the passenger train was also hurt.

Horbury Junction is about two miles from Kirkgate station, Wakefield, and nearly two miles from Horbury and Ossett station. It is a very busy place, as the coal coming off from the Barnsley branch is from thence dispatched in an easterly and westerly direction along the main lines of the Lancashire and Yorkshire Railway. On the 5th instant an engine and tender, with a van attached, arrived at the Junction about 11 a.m., for the purpose of making up its load for the Wakefield and Bradford coal train. It was travelling on the up main line, and as it was passing over the crossing of the Barnsley branch down line the wheels of the tender took the wrong side of the fixed point rail, and passed to the Barnsley branch down line, and was at once pulled off the rails, and blocked both the up main line and the Barnsley branch down line. The draw bar of the van behind the tender broke, and the van followed the engine on the up line.

Efforts were at once made to endeavour, with the assistance of some other engines, to get the tender back on to the rails, but one pair of the wheels had the axle badly bent, so that it would not travel; and as the up main line continued blocked, the station-master at Horbury junction (Mr. Shilton) determined to work the traffic between Horbury junction and Horbury station on the down main line as a single line.

Accordingly, he dispatched porter Dewis on a goods engine, passing out to the main up line by a siding, to Horbury and Ossett station, with a block paper for the station-master, informing him that the up line was blocked, and that all trains between Horbury junction and Horbury and Ossett station would pass on the down main line; appointing Dewis pilot guard, and directing that "no engine or train must be allowed to leave Horbury and Ossett station without the pilot guard."

On the return of the engine with the pilot guard Dewis to Horbury junction, the station-master sent him back to Horbury and Ossett station in front of a London and North-western, a Lancashire and Yorkshire mail, and a Dewsbury passenger train, all apparently travelling as separate trains on the down or wrong line of rails; and when these trains reached Horbury and Ossett station they crossed over to their proper road, and the pilot guard Dewis returned a second time to Horbury Junction.

The station-master then told Dewis that he was anxious that he should take the "Sharleston and North Dean" and the "Bradford, Low Moor, and Barnsley" coal trains to Horbury and Ossett station. The latter train was then standing on the Barnsley branch, and the Sharleston and North Dean coal train was got ready, the goods engine, which was used by the pilot guard Dewis as a pilot engine, being coupled on to it, to draw it forward, in order that the Bradford, Low Moor, and Barnsley coal train might be backed off the branch line. At this time a passenger guard, named Walton, arrived from Wakefield, and he asked the station-master what his arrangements were, and was informed that Dewis was appointed pilot guard. The station-master says that Walton wanted Dewis to take the Sharleston and North Dean coal train to Horbury and Ossett station, and to return with the down passenger mail train. The station-master told Walton that the Barnsley branch down line was blocked, and that he must make a road for the 12.37 p.m. passenger train from Barnsley, and that he must send the Bradford, Low Moor, and Barnsley train away. He adds that Walton was in conversations with Dewis, and he thinks he must have given him some instructions; and this is confirmed by the driver of the pilot engine, who heard Walton tell Dewis that he was to go forward with the Sharleston train only, the down mail being due, and that when they got to Horbury he was to let the mail come and follow that train (if there was nothing else) to Horbury junction, to fetch the Bradford, Low Moor, and Barnsley coal train. This corresponds with Walton's own statement. The pilot guard Dewis replied, that if the down mail was late he would work

the Dewsbury passenger train down, and then fetch the coal train. The station-master also says that as the Sharleston train started without being coupled to any other train, he went to Dewis, and told him that the Bradford, Low Moor, and Barnsley coal train would follow him, and that he was to stop the mail at Horbury station, until it arrived, and then he was to bring the mail down. This appears to have occurred before Walton gave Dewis instructions. This statement is also confirmed by the driver of the Sharleston train, but is denied by pilot guard Dewis.

The Bradford, Low Moor, and Barnsley coal train, consisting of an engine and tender, 29 loaded waggons, and one van, was started at an interval of time, which is differently estimated by the various witnesses, after the Sharleston and North Dean coal train with the pilot engine and pilot guard had left. This interval varies from two to ten minutes, and the driver says that he travelled at a speed of eight or ten miles an hour.

In the meantime, the pilot guard Dewis arrived at Horbury and Ossett station with the pilot engine and the Sharleston and North Dean coal train. The pilot engine was placed in the siding, and Dewis told the station-master that his instructions from Mr. Shilton were to take the down mail and anything else, and then to fetch the Bradford, Low Moor, and Barnsley coal train from Horbury junction. After that he was to take the passenger train from Dewsbury, which was due at Horbury and Ossett Station at 12.40 p.m.

The 10.15 a.m. down mail train, consisting of an engine and tender, five carriages (with continuous breaks on four carriages), and a fish truck, was dispatched by the pilot guard Dewis from Horbury and Ossett station at 12.25 or 26m.; it was followed in about two minutes by a short goods train, and the pilot engine with the pilot guard left in about another minute.

The mail train was travelling through a deep cutting, constructed on a curve, at a speed which the driver estimates at from 30 to 35 miles an hour, when, just before leaving Horbury tunnel, the driver observed the buffer plank of an engine coming towards him on the same line, and about 100 yards distant, and he at once reversed his engine, whistled for the guard's breaks, and the fireman applied the tender break, and they did all they could to diminish the speed of the train, which the driver thinks he had brought down to about one half, before the collision took place at 12.29 p.m. The driver, fireman, and Mr. Myers, of the locomotive department, jumped off a few yards before they reached the place where the collision occurred. The two engines of the meeting trains were both a good deal damaged, and the tender of the mail train was lifted, and forced backwards through the body of the first carriage (a composite); and one of the passengers who was most injured could not be released from the broken carriage until the engine of the short goods train was brought up, and hooked on to the rear of the mail train in order to draw it back.

The collision was the result of a misunderstanding between the station-master (Mr. Shilton) at Horbury junction and the pilot guard Dewis; and it could not have happened if the Company's "*Instructions for working single line in event of any obstruction*" had been obeyed. An extract from the Company's regulations strictly prohibits the sending forward a train on the wrong line by a *verbal message*;—and, in consequence, the system of issuing "block papers" containing the order to which I have already referred, was adopted, directing that no "train must be allowed to leave without the pilot guard."

This order was first violated when the pilot guard Dewis proceeded from Horbury junction towards Horbury and Ossett station on the pilot engine in front of the London and North Western, Lancashire and Yorkshire Mail, and a Dewsbury passenger train, three separate trains,—and no casualty occurred in consequence of this infraction of the order by the

station-master. But when the same practice was followed with reference to the two coal trains, the pilot guard Dewis being verbally told to remain at Horbury and Ossett station until the second or following coal train arrived there, a mistake occurs which might have been attended with much more serious results.

It appeared, however, by the evidence that although this "block paper" was usually issued, it was never attended to, as the Company's servants were in the habit of working single lines on such occasions in a much more loose manner.

The order in the block paper is not a judicious one, as, strictly construed, only one train could be taken over the line by the pilot guard; whereas if either of the systems II. or III. as to the MODES OF WORKING SINGLE LINES, which are sanctioned by the Board of Trade, had been adopted, this collision could not have occurred. It is highly desirable that one or other of these modes should always be adopted when the necessity for working a single line arises.

I consider the Horbury junction station-master (Mr. Shilton) and the pilot guard Dewis are both exceedingly to be blamed for having worked the traffic in such a manner; and I also think the conduct of the guard Walton, in interfering in what was not his business, deserving of censure, as it is quite possible that except for his directions to the pilot guard Dewis he would have listened to Mr. Shilton's verbal in-

struction to remain at Horbury and Ossett station until the arrival of the Bradford, Low Moor, and Barnsley coal train from Horbury junction.

As already stated, the necessity for working the traffic on a single line between Horbury junction and Horbury and Ossett station was occasioned by a tender getting off the line at a crossing at Horbury junction. This, I have no doubt, was due to the bad state of the line at this crossing, as I found no less than one half (five out of ten) of the chairs broken under this crossing when I visited the place on the 11th instant. It was urged that some of these chairs might have been broken by the tender getting off the rails. It is possible, but my impression was in favour of their having long been broken, as I found several were kept in their position on the sleepers by iron spikes driven at the sides and ends of the chairs; and I noticed that the condition of the line was bad at the junction and between that place and Horbury and Ossett station.

I trust that the Directors of the Lancashire and Yorkshire Railway Company will take care to have the condition of the line improved without any delay.

I have, &c.

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

W. YOLLAND,
Colonel.

LONDON AND NORTH-WESTERN RAILWAY.

*Board of Trade
(Railway Department),
Whitchall, 7th February 1868.*

SIR,
I AM directed by the Board of Trade to transmit to you, for the careful consideration of the directors of the London and North Western Railway Company, the enclosed copy of the report made by Colonel Yolland, the officer appointed to inquire into the fatal accident which occurred on the 4th ultimo to a man and child whilst crossing from one platform to the other at the Nuneaton station of the London and North-Western Railway.

I am, &c.

*The Secretary of the
London and North-Western
Railway Company.* R. G. W. HERBERT.

*Board of Trade
(Railway Department),
Whitchall, 1st February 1868.*

SIR,
I HAVE the honour to state, for the information of the Board of Trade, in obedience to your Minute of the 9th ultimo, the result of my inquiry into the circumstances which attended a fatal accident that occurred on the 4th ultimo, at the Nuneaton station of the Trent Valley section of the London and North-Western Railway, when a child 22 months old was killed on the spot, and her grandfather, James Lord, in whose arms she was being carried across the line from platform to platform, received such injuries that he died on the 14th ultimo.

The booking office at the Nuneaton station is situated on the west or town side of the line. There are up and down platforms rather more than 100 yards in length, and about 21 inches in height, and the ends of these platforms are ramped down to afford facilities for passengers to cross on the level, at either end of the station, the two main lines of rails that pass between the platforms, the distance across being about 20 feet.

The up Scotch express due in London at 9.50 p.m., is appointed to arrive at Nuneaton station, where it has to stop, at 7.16 p.m., but on the 4th ultimo it did not arrive until 7.23 or 7.24, and the station-master, who was standing on the up platform nearly opposite to the booking office, informed me that he started it at 7.27. A train for Leicester is appointed to leave

Nuneaton at 7.30; this train was standing on the down line when the up Scotch express, which was seven or eight minutes late, passed into the station, and the driver of the Leicester train gradually followed the Scotch express on to the up line and came to a stand about six yards behind it, when the express stopped, and when it started the Leicester train drew up towards its usual place at the platform, at a speed which the driver estimates at four or five miles an hour; and he says, that he saw a man run across the lines in front of him, and then another with a child in his arms. The first man got safely across, but when he saw the other man leave the down platform he thought he would not get safely across, and he sounded the whistle, reversed his engine, and told the fireman to put the break on, and he did so. He also says that if his engine could have been brought to a stand when he first saw the man with the child in his arms, he would have been five or six yards in front of the engine; he does not think the man saw the engine, as the child was carried on the left arm, that next to the engine. The station-master confirms the engine-driver's statement:—He observed a man with a child in his arms jump from the down platform, crossing towards the up line as the last van of the Scotch express passed him, and he saw that he was in danger, and called out to him and to the engine-driver. He says the man seemed to quicken his pace, as if he thought he could reach the platform before the engine came up; he got to the platform just as the engine passed, and was between the engine and the wall of the platform, and seemed to be twisted round by the engine, and was knocked down by the steps and fell by the side of the engine and was very severely injured. He also states that from the time when the man jumped down from the down platform to the time of the accident did not exceed 10 seconds.

James Lord intended to leave Nuneaton by the Leicester train at 7.30, and he took the earliest opportunity of crossing from the booking office to the up platform immediately the up Scotch express left. It is stated that the proper places for crossing from one platform to the other are at the northern and southern ends of the platforms; but it is admitted that the public do not go to the proper places for crossing the line, but cross at all parts, but mostly