

*Railway Department, Board of Trade,  
Whitehall, 2d January 1864.*

SIR,

I HAVE the honor to report, for the information of the Lords of the Committee of Privy Council for Trade, that in compliance with your instructions of the 21st ultimo, I have inquired into the circumstances connected with the accident that occurred on the 15th December 1863 near Copmanthorpe, when part of a train belonging to the North-Eastern Railway Company ran off the road, and four of the passenger carriages fell down the embankment, which is about 9 feet high.

Eight passengers are reported to have been bruised or shaken, but none seriously injured.

The 7.15 a.m. train left York for Normanton at the appointed time on the 15th ultimo. It consisted of engine and tender, 1 horse box, a guard's van, a second, a first, two third, a second, a first, and two third-class carriages, a guard's break van, and three empty horse boxes, coupled in the order given. It proceeded all right to Copmanthorpe, the first station on its way. It left Copmanthorpe at the proper time, 7.30 a.m., but when it had gone about a mile, and had reached a point 70 yards short of the 5 mile post from York, the driver felt a sudden jerk, as if he had run over something. He sounded the whistle for the breaks, and desired the fireman to apply the tender break. About 50 yards from the point where he felt the first jerk, his engine was suddenly brought to a stand, and he was thrown forward. He thought the crank axle of his engine had broken, but on his attention being directed to the train, he saw that a part of his train had left the line on the near side. The first four carriages were on the rails, the fifth, a third class, was off on the near side, but standing upright; the 6th, 7th, 8th, and 9th, had run down the embankment and fallen over on their sides. The 10th carriage and the guard's van behind it were also off the rails, but standing on their wheels. The only couplings broken were those between the fourth and fifth carriages, and but little injury was done to the rolling stock or permanent way. The driver detached his engine and ran back to York for assistance, and the guards took measures for protecting their train. The train at the time of the accident was travelling at a speed of about 25 miles per hour. The accident was caused by a rail on the near side of the up line having broken.

From the appearance of rubbing at one of the points of fracture (about 2 ft. 10 in. from the south joint), there appears to be little doubt, that this fracture had occurred a short time previous, probably during the night, and that several trains had passed over it after it had broken. The gangers in charge had observed nothing wrong on walking the line the previous evening, and had not got that far on the morning of the accident. After the accident, the rail was found broken in four pieces, besides a fracture at the end of the fish plate.

The rail was a very defective one. The inspector of permanent way stated, that he ordered it to be turned on the 11th ultimo, 4 days prior to the accident, in consequence of a lamination and bulge, about 11 inches long, in the top flange. This order was carried out, but the rail did not break at the defective part, which was the cause of its being turned. The inspector of permanent way and the ganger who executed the order state that they did not notice any other fault in the rail, or consider that the part that was defective rendered the rail unfit for turning.

The rail was probably crusted with mud and rust when taken out, which prevented its defects being observed, as it is evident that both sides of the top flange were almost detached from the web when the rail was turned, and had been nearly so when the rail was first supplied, the amalgamation or welding of the top flange and web being most imperfect.

This part of the North-Eastern Railway was relaid in July 1860, with a double headed rail weighing 82 lbs. per lineal yard, supplied in lengths of 24 and 27 feet. It is fished and carried in 42 lb. chairs which are spiked to sleepers, laid transversely about 3 feet apart.

The upper and lower surfaces of the rail are case hardened or steeled.

From the evidence on the number of rails broken during the first year, and on the number which have required turning, as also from the appearance of imperfect manufacture shown in the broken section of the rail, I would suggest that in future all defective rails be examined most carefully. The evidence shews that this is the first breakage under similar circumstances.

I have, &c.,  
*The Secretary*  
*of the Board of Trade,*  
&c.    &c.    &c.

F. H. RICH,  
Captain R.E.

**PRESTON AND WYRE RAILWAY.**

*Railway Department, Board of Trade,  
Whitehall, 25th August 1863.*

SIR,

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 Capt. Tyler, R.E., the officer appointed by my Lords to inquire into the circumstances connected with the collision which occurred on the 3d instant, near the Blackpool Station on the Preston and Wyre Railway, and to request that you will call the attention of the Committee of Management to the observations of the inspecting officer, and particularly to his recommendations that the line of railway between Poulton and Blackpool should be doubled, and that in the meantime the single line should be worked according to the Train Staff system, the regulations for working which are herewith enclosed, and should also have a separate wire with the necessary telegraph instruments for greater convenience in working.

*The Secretary of the  
Preston and Wyre  
Railway Company.*

I am, &c.,  
W. D. FANE.

Committee of Privy Council for Trade, the result of my inquiry into the circumstances which attended the accident that occurred on the 3rd instant near Blackpool, on the Preston and Wyre Railway.

This line is leased by the London and North-Western and Lancashire and Yorkshire Railway Companies. It is worked by the engines and trains of the latter company, but the staff on the line are under the control of a superintendent and secretary who takes his instructions from a joint committee of the lessees.

There is a double line from Preston to Poulton, the junction of the branches to Blackpool and Fleetwood, but a single line only, about three miles long, between Poulton and Blackpool. This single line has been open for traffic for upwards of 17 years. The traffic has increased very largely since it was constructed, and is still increasing every year. For six months in the best season, great numbers of excursionists visit Blackpool (as well as Lytham and Fleetwood on the same coast) for the sake of the sea air. During the summer months 3,000 or 4,000 passengers a day for three days in the week, and on special occasions, three or four times a year, from 8,000 to 9,000 people are carried to Blackpool alone in the day. There are 15 ordinary trains each way in summer, and 13 in the winter; but there are sometimes as many as nine excursion trains in addition to them, making 24 in the day.

SIR,

*Blackpool, 22d August 1863.*

In compliance with the instructions contained in your minute of the 12th instant, I have the honour to report, for the information of the Lords of the

There is also an express train weekly, leaving Manchester at 1.35 p.m. on Monday, and returning from Blackpool at 8.15 a.m. on Tuesday; and another leaving Manchester at 1.15 p.m. on Saturday, to return at 8.15 a.m. on Monday.

Safety has hitherto been secured on the single line between Poulton and Blackpool through the instrumentality of the branch engine-driver. The station inspector at Blackpool informs the engine-driver before he goes to Poulton of the number of trains that will follow him before his return; and the station-master at Poulton gives him similar information in regard to his station. When any unexpected train arrives at Poulton, however, for Blackpool, the station-master works by time. If there is a clear half hour before any train is due from Blackpool, the special train so arriving goes forward; if not, it is delayed for an opportunity to proceed. The departure of a train is signalled from one station; to the other, when the wire is disengaged, by electric telegraph; but there is no separate wire for the purpose, and no dependence is placed upon the working of the telegraph. The station-masters trust entirely to the verbal arrangements which they make with the regular driver on the branch, with a general understanding that a clear half-hour from Poulton may, as I have described, be taken advantage of for the despatch of an extra train when necessary.

It is a remarkable fact, very much to the credit of the station-masters and the engine-driver, that no mishap, or even misunderstanding, had occurred in this system of working for upwards of seventeen years previously to the present accident.

On the day in question, the 3rd August, there were four excursion trains running to Blackpool and back, besides the 15 ordinary trains, and the express trains to and from Manchester. The train at 1.35 p.m. from the latter place was only running for the fourth time in the present season. A special printed notice, of which I enclose a copy, was issued to announce it before the first train ran on the 13th July, and it was further advertised in the excursion time-table, also enclosed, and included in the service time-tables from the 1st August. When it commenced running a doubt arose in the mind of the Poulton station-master as to whether it ought to be allowed to leave Poulton for Blackpool before the arrival from Blackpool of the Yorkshire excursion train which was due to leave that station at 3.10 p.m. every Monday on its return journey, and that officer telegraphed to the superintendent of the Lancashire and Yorkshire Company at Manchester for instructions. The superintendent replied that the Yorkshire train was to await the arrival of the Manchester train at Blackpool. The station-master at Poulton telegraphed to the station-master at Blackpool "Keep Yorkshire trip until express arrives," and this arrangement was accepted as general, and as intended to apply to the following Mondays.

On the 3rd August the engine-driver of the branch, Joseph Sergeant, who acted to some extent, as I have explained, also as a pilot, drove the 2.55 p.m. ordinary train from Blackpool. The train was a heavy one, containing 17 carriages filled with passengers and luggage, and it did not get away till 3.2, seven minutes late. The station inspector is under the impression that he told Sergeant that there was an excursion (the Yorkshire) train to follow it, and he admits that he forgot entirely that the Manchester express was due to arrive before the starting of that (Yorkshire) train. Sergeant states that he went to the station inspector on the platform before he started, and told him that he should remain at Poulton till the Yorkshire excursion train had passed. The question of the Manchester express does not appear to have occurred to him at that time any more than to the station-inspector, though he had heard from him previously that there had been an order for the Yorkshire train to await its arrival at Blackpool. At all events nothing was then said about the Manchester train.

After the departure of the 2.55 ordinary train at 3.2, the station-inspector went round to the excursion platform, looked through the couplings of the Yorkshire train, promised to keep it for a minute or two for a passenger who had forgotten his luggage, and finally started it, after hearing from the guard that he was ready to go, with an instruction to the driver to go slowly along the side of the platform. There were a great number of people on the platform, and the station-inspector feared that they might, some of them, endeavour to get into the carriages whilst they were in motion. He therefore carried the train down to the bottom of the platform, and only gave the final signal to the engine-driver to proceed on his journey when he saw that all was safe in that respect.

The train consisted of an engine and tender, 11 carriages, and a break-van. The van was third from the tail of the train, but was connected by a continuous break with the two carriages behind it. The extra engine-driver had been four times previously on the branch as a fireman, but not with that particular train, and was driving on the branch for the first time. He knew nothing of the Manchester train, any more than the guard, who had not seen the special notice under which it commenced running. They had got up to a speed of about 10 miles an hour when they saw the Manchester train coming in the opposite direction, round a curve on which the station is approached, and they managed to reduce their speed materially before they came into collision with it, at about 420 yards from the station buildings. The collision was fortunately a slight one, owing to the action of the continuous breaks with which both of the trains were provided, and which, besides causing their speeds to be rapidly reduced, also prevented the rebound of the buffers of the carriages. The body of one of the carriages in the Yorkshire train was shifted on its framing, and two of the carriages became uncoupled from each other. Five of the passengers in that train were slightly injured.

The Manchester train was composed of an engine and tender, six carriages, and a break-van. The van and three carriages were supplied with continuous breaks working together. It left Manchester at 1.35 p.m. and reached Poulton at 3.7. The station-master detained it there till the ordinary 2.55 train arrived from Blackpool, and started it towards that station at 3.14, as it was his duty to do. He directed the telegraph clerk to announce its departure, as usual, to Blackpool, but the needle of the instrument was blocked over, probably from some other station, and the message could not for that reason be transmitted.

This train had already passed the Blackpool distant signal, where the steam was shut off, and was running into the station at a speed of from 15 to 18 miles an hour, when the engine-driver and guard saw the steam of an engine before them. They supposed at first that it must be in a siding; but soon saw in passing round the curve on which they were travelling that it was coming towards them. They did their best to pull up, and almost brought their train to a stand before the collision occurred.

Both of the guards in these trains made good use of the raised compartments in their vans, as well as of the ample break-power with which they were provided. They were enabled, not only to see the danger for themselves, without waiting to be informed of it by the engine-whistle, and to apply their breaks promptly; but also, as I have said before, materially to reduce the speed of their respective trains, and thus to save the passengers from much injury that they would otherwise have experienced.

The site of the collision was about half way between a pair of facing points 300 yards from the station buildings and the distant-signal which is worked from those points, and is about 240 yards from them. These points were not regularly attended, as they ought to have been, by a pointsman. The man who was designated as the pointsman, was also employed to clean lamps, to do porter's duty at the station, to carry messages into the town, and to clean the other

ation switches. During his absence, one of the other porters was sent to work the points as might be convenient. On the present occasion, when one train was going out and another coming in he was first employed to couple-up carriages and breaks in the station, and was then directed to go into the town to advise a gentleman there of the arrival of his chimney pots, while the points were left unattended. If he had been at his points he might possibly have heard the whistle of the engine of the Yorkshire train as it started from the station, have seen it approaching him, and, by keeping up his distant signal against the Manchester train, have averted the collision.

This accident has been directly caused by the forgetfulness of the station inspector at Blackpool, in starting an excursion train from one end of a single line when another train was due to arrive at it from the other end. It is another proof, if proof were wanted, of the danger of trusting to the memory of a man occupied by various duties, or indeed of any man, in cases where the safety of trains is concerned. It is far more surprising that this man should, under the system that I have above described, have gone on for so many years without a mistake, than that he should at the end of them have forgotten an exceptional train, recently put upon the line, and running on certain days only.

I would now recommend the company to add a second line of rails between Poulton and Blackpool as soon as they can make arrangements for doing it, and in the meantime to introduce the train-staff system of working on the single line (under the regulations contained in the Board of Trade Circular) for securing safety, and a separate wire with the necessary telegraph-instruments for greater convenience in working.

The pointsman at the entrance to the station yard to whom I have referred, should undoubtedly be kept at his post, at least during the summer months; and should be supplied with a cabin, a main signal with two arms, one applying to the excursion and the other to the ordinary train platform, and a good means of communication with the station.

It is further desirable that the time-tables for the excursion trains, which are now drawn up in different districts of the Lancashire and Yorkshire Railway, should be finally prepared by one individual, placed in one list, and made more convenient for reference by the officers and servants who are required to make use of them.

I have, &c.

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

The Secretary,  
Board of Trade,  
Whitehall.

## WEST CORNWALL RAILWAY.

*Railway Department, Board of Trade,  
Whitehall, 5th October 1863.*

SIR,

I AM directed by the Lords of the Committee of Privy Council for Trade to transmit to you, in order that the same may be laid before the Directors of the West Cornwall Railway Company, the enclosed copy of the report made by Capt. Rich, R.E., the officer appointed by my Lords to inquire into the circumstances which attended the collision between a passenger train and a waggon which had been blown out of a siding near the Penwithers Bridge on the 30th August last; and to express their Lordships' hope that the Directors will take into their immediate consideration the propriety of adopting precautions against the recurrence of the like accident in future.

I have, &c.

JAMES BOOTH.

The Secretary of the  
West Cornwall Railway Company.

SIR,

*Dublin, 27th September 1863.*

I HAVE the honor to report, for the information of the Lords of the Committee of Privy Council for Trade, that, in compliance with your minute of the 3d inst., I have inquired into the circumstances connected with the accident that occurred near Penwithers Junction, on the West Cornwall Railway, on the 30th ultimo.

The engine driver and breaksman lost their lives, the fireman escaped with some injuries to his back; but no passengers are reported to have been injured.

Penwithers Junction is situated about three quarters of a mile west of the town of Truro. It is the point of junction with the branch to Newham, and the place where the Cornwall Railway to Falmouth separates from the West Cornwall Line going to Penzance.

The 7.15 p.m. down passenger train, from Truro to Penzance, left Truro about twelve minutes late on the 30th ultimo. The delay was caused by the train having to put back into Truro Station, to take off three empty passenger carriages, as the rails were greasy, and the load was too great for the engine to take up the incline from Truro.

The train started the second time on her way to Penzance about 7.27 p.m. It consisted of engine and tender, two third-class carriages, three second-class carriages, two third-class carriages, one first-class carriage, and a guard's van, coupled in the order

given. The carriages were each fitted with breaks, so that each guard or breaksman could apply the breaks to two carriages.

A breaksman travelled in front of the train, and a guard in the van at the tail of the train.

The breaksman, in consequence of the greasy state of the rails, was engaged with the fireman, on the front of the engine, in sanding the rails.

The train passed Penwithers Junction all right. The West Cornwall Railway on leaving Truro Station is on a rising gradient of 1 in 66 for 27 chains, or about one third of a mile. The gradient then falls 1 in 264 for 8 chains, and from thence to Penwithers Junction, a distance of 15 chains, the line is level. After passing the junction the line again falls about 1 in 200, till it reaches the points of a new siding, about 14 chains west of the junction; thence to an under bridge, about one and half chains further on, the line falls 1 in 760.

This bridge was the scene of the catastrophe.

A new goods siding, about 13½ chains long, has lately been constructed between the junction and the bridge.

It was not completed at the time of the accident, which occurred on a Sunday evening. A tipping waggon, which had been used in constructing the siding, was left on it. The ganger, who was in charge of this work, states that he left the tipping waggon, on the 28th ultimo, about 130 yards from the western points of the new siding, having secured the wheels with stones. He saw it again on the 29th ultimo, before leaving work, about 3.50 p.m.

It had been pushed a few yards further from the western points, and he supposed that it was secured with stones, but he did not examine it.

A plate layer, who assisted in placing some goods waggons in the siding, moved the tipping waggon on Friday the 28th after the ganger, and says that he secured it with stones.

The West Cornwall porter, who is in charge of the signals and points near Penwithers Junction, came off duty at the junction after the train which is due to arrive at Truro from Penzance at 10.52 a.m., had passed, and did not return to his station till about 5 p.m. that evening. He then lit all the West Cornwall lamps except the distant signal lamp on the Penzance side, which he deferred till the 6.15 p.m. down train should have passed. He states that he