

2d, That the wrought-iron tire was not in all probability properly examined by a competent person, after it was bored out for the purpose of being put on the cast-iron sole, or the defect in the weld would have been discovered, and the tire been rejected, and thus the accident would have been avoided.

I have never met with this particular description of wheel tire combining the wrought and cast iron together before; but I am informed they are common in the North of England. The lessees have no others

of the same kind, and I cannot see that there are any advantages to be derived from such construction, but consider them to be decidedly objectionable.

I should add, though I do not think it had anything to do with the accident, that the longitudinal sleepers required to be opened out and repacked.

I have, &c.

Captain Galton, R.E.
&c.

W. YOLLAND,
Licut.-Col., R.E.

CHESTER AND HOLYHEAD RAILWAY.

Railway Department, Board of Trade,
Whitehall, March 3, 1859.

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 Captain Ross, R.E., of his inquiry into the circumstances connected with the collision which occurred, on the 21st January last, between a goods train and an engine following on the same line in Penmaenrhos Tunnel on the Chester and Holyhead Railway.

My Lords direct me to call the attention of the directors to the concluding recommendation of the inspecting officer as to the desirableness of working the line by means of the electric telegraph.

I am, &c.

The Secretary to the
Chester and Holyhead
Railway Company.

DOUGLAS GALTON,
Captain R. E.

Railway Department, Board of Trade,
Whitehall, Feb. 25, 1859.

SIR, I HAVE the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, that, in compliance with your instructions, I have inquired into the circumstances attending a collision which occurred on the 21st January upon the Chester and Holyhead Railway.

An up goods train from Conway was due at Colwyn at 2.36 P.M.

The station master at Colwyn wished to have a waggon taken on from Colwyn siding, and had signalled for the goods train to stop for that purpose, but the driver having a full load whistled for the signal to be lowered, and passed on. He would appear to have come from Conway at the rate of about fifteen miles an hour, and to have lost a little time between Conway and Colwyn.

An engine, without load, on its way from Holyhead to Chester for repairs, was following the goods train; it had travelled from Holyhead at the rate of about 35 miles an hour, and had at this time arrived within a quarter of a mile of Colwyn station.

The station master at Colwyn desired the signals to be set against it for the protection of the goods train, and he then went into his office, leaving directions with the porter to detain the engine for about six minutes.

The porter seems to have acted up to his instructions; but the engine, when it started again, ran into the goods train, at a distance of about 3,000 yards from Colwyn station, in Penmaenrhos tunnel, where

the goods train was toiling up an incline through the tunnel of 1 in 100.

The guard's van of the goods train was tilted on to the waggon in front of it, and a drover in the guard's van was injured.

The tunnel is about 500 yards long, and is said to have been obscured by smoke.

A breaksman travelling with the guard had jumped down from the guard's van, when some distance through the tunnel, to fix a fog signal, but he was too late, for it is said to have exploded at the very moment of collision.

The collision took place within 100 yards of the upper end of the tunnel.

The station master at Colwyn and the driver of the light engine seem to have been to blame, the driver for following and the station master for allowing a light engine to proceed so soon after a heavy train, when the latter had an adverse gradient to surmount.

The driver, with an experience of 27 years, is, I believe, the driver of longest service-driving in Great Britain, and the station master has carried on the duties of his post without accident for 11 years; but they cannot, I think, be acquitted of an error in judgment in this instance.

The engine of the goods train was built in September 1855; it has been running since July 1858 at its present pressure of 110 lbs. on the square inch, and on the 21st January the load, though a full one, does not appear to have been in excess of that prescribed for engines of her class (with a pressure of 110 lbs.) upon the section of line between Holyhead and Crewe. The load consisted of 19 slate waggons, 4 goods waggons, 1 cattle waggon, and a guard's van.

The engine is said to have been in good working order, and to have been proceeding when the collision occurred at about her usual speed up the incline. There was no heavier gradient on that part of the line, and no train due to follow for an hour and a half. I conclude, therefore, that neither the driver nor engine of the goods train can be considered accountable for the accident. The telegraph, if established at the east of the tunnel in connexion with Colwyn station, should prevent the possibility of the recurrence of a collision in the tunnel; and I would recommend the advantage of it to the consideration of the directors.

I have, &c.

Captain Galton, R. E.
&c.

GEORGE ROSS,
Captain R. E.

EAST LANCASHIRE RAILWAY.

Railway Department, Board of Trade,
Whitehall, March 25, 1859.

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 Captain Ross, R.E., of his inquiry into the circumstances connected with the accident which occurred at the Ormskirk station of the East Lancashire Railway on the 10th instant.

My Lords trust that the directors will at once give orders that the dangerous practice of disconnecting the engine from the train whilst in motion may be discontinued.

I am, &c.

The Secretary to the
East Lancashire
Railway Company.

DOUGLAS GALTON,
Captain, R. E.

*Railway Department, Board of Trade,
Whitehall, March 22, 1859.*

SIR,

I HAVE the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, that, in compliance with your instructions, I have inquired into the circumstances attending an accident which occurred at Ormskirk station, on the 10th March, to the last passenger train from the Ormskirk, Rainford, and St. Helen's branch, due to arrive at Ormskirk station at 7.10 P.M.

The branch terminates at Ormskirk in a siding which is closed by a timber buffer adjoining the station platform.

About 150 yards short of the timber buffer there are a pair of points connecting the siding by a cross-over road with the main line, and forming facing points on the branch to an arriving train.

In bringing a train up to the platform it is the practice for the engine to be disconnected while in motion, and turned through the points on to the main line, and for the remainder of the train to be eased down to its place alongside the platform by the guard, who has the control of the carriages by means of a "Nowall's break" applied to them from his van.

There is a fall towards the platform of 1 in 264, and on this the engine is disconnected.

On the 10th March the train consisted of engine, tender, three carriages, and guard's van.

The driver whistled as usual when approaching Ormskirk station. He disconnected his engine, and it was turned through the points on to the main line. He then saw the detached carriages in the siding passing him at unusual speed, and again whistled to arouse the guard, but in vain; the guard did not apply his break, and the carriages ran with much violence against the buffer closing the siding.

There were only two passengers in the train, in the centre carriage of the three carriages. They and the guard were stunned at the time, but they are said to have received no serious injuries.

The guard has since been discharged for his neglect.

I think that the present mode of working into the station should never have been adopted; it has involved unnecessary hazard to the passengers, and this accident has been the result.

There is plenty of space at the terminus, and there seems no reason why the engine should not lead up to the platform, and thence pass to the rear by a small loop line or passing place; and I beg to recommend that the means for its doing so should be provided without loss of time.

I have, &c.

Captain Galton R.E.
&c.

GEORGE ROSS,
Captain, R.E.

*East Lancashire Railway,
Board Room, Bury, Lancashire,
April 1, 1859.*

SIR,

I AM instructed by my directors to inform you, in reference to your communication of the 25th ult., on the subject of an accident which occurred at Ormskirk station on the 10th ult., that they have given instructions that the connecting or loop line shall be made at the station, as recommended in Captain Ross's report.

I have, &c.,

The Secretary,
Railway Department,
Board of Trade.

MYLES FENTON,
Secretary.

GREAT NORTHERN RAILWAY.

*Railway Department, Board of Trade,
Whitehall, January 22, 1859.*

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 Captain Ross, R.E., the officer appointed by them to inquire into the circumstances which attended the collision that occurred on the 3d instant near Hitchin on the Great Northern Railway, and to state that my Lords trust that the observations of the Inspecting Officer will receive the careful consideration of the directors.

I am, &c.

DOUGLAS GALTON,
Captain, R.E.

The Secretary of the
Great Northern
Railway Company.

*Railway Department, Board of Trade,
Whitehall, January 18, 1859.*

SIR,

I HAVE the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, that, in compliance with your instructions of the 6th instant, I have inquired into the circumstances attending the collision which occurred on the Great Northern Railway near Hitchin on the morning of the 3d instant.

A mineral train from Peterborough, due at Hitchin at 2.20 A.M., was approaching through a thick fog, at a speed of 7 or 8 miles an hour, about 20 minutes after its proper time, and the distant signal worked from Hitchin Junction was lowered for it to pass, which it had just done when it was run into by the up mail train, due at Hitchin at 2.35 A.M.

The latter was nearly to its time, and so close to the mineral train as it passed the distant signal that the mail train driver, observing the signal at "all right," believed it to have been turned off for

his train. He only became aware of his mistake by seeing the mineral train through the fog a few yards in front of him, and the collision ensued 191 yards within the distant signal.

The mail train was a light one, consisting of an engine and tender, 4 carriages, a fish van, and 2 break-vans, each with a guard; but the notice was too short for the guards to apply their breaks. It was travelling at a moderate speed, and the coal train received nearly all the damage caused by the collision. The collision must, I think, be ascribed to the thick fog, and to a neglect or mistake in working the telegraph.

You are aware that there are two systems of telegraphing in force on the Great Northern Railway. The one is in use on the short length of main line between London and Hitchin, where the greatest traffic exists. This system is worked by means of special telegraphic stations at short intervals. The other, for general service, is employed at the regular stations of the main line. To carry out the first, there are 2 wires in circuit between London and Hitchin, exclusively applied to railway purposes. For the general service there are 4 wires, but their duty is not confined to conveying railway messages.

Two of them connect the stations between London and Peterborough, and the other two, I believe, connect all the stations on the main line beyond Peterborough with London.

Under the second system mineral trains are not telegraphed through from station to station along the line, but the regulations require that every other train should be signalled from each station to the next telegraph station towards which it is proceeding, and that an entry should be made in a train book of the time, of the signal, and of the station signalled to; and this signal has to be acknowledged and corresponding entries made at the station where the message is received.