

the wrong direction for the sharp curve on the branch. The flanges of the tyres on a pair of wheels which were shown to me as having been under the carriage which first left the rails were much worn, and the tyres were reduced in thickness to a dimension which renders them unfit for further work.

It having been considered, at the time of the accident, that the giving way of the hornplate (which was not *stayed*) of the third carriage, or something connected with the rolling stock, was the cause of the accident, and the points having been found to work well, the relative levels of the rails were not tested; and the junction having been lifted and ballasted since the accident, it is impossible to ascertain now what was the actual condition of the rails as regards super-elevation on the curves; but, having regard to the evidence of the officers of the company, to the condition in which I found the branch curve, to the marks which were pointed out to me as having been

visible immediately after the accident, and to the nature of the accident, I have no doubt, in my own mind, that it was caused by the condition of the permanent way. I see every reason to disbelieve the evidence of the platelayers, as to damage to the end of the tongue, which would tend to show that the wheel of some vehicle had struck it, and that therefore the points were partly open when the train approached them or passed through them,—and to come to the conclusion that as the train passed through the junction, a wheel of the third carriage, travelling from the slight curve to the right to the sharp curve to the left, above referred to, on the branch, mounted a low joint at the heel of the switch on the outside of the branch curve, and thus occasioned the accident.

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

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

A copy of the above report was sent to the company on the 26th May 1869.

LANCASHIRE AND YORKSHIRE RAILWAY.

SIR,

Clonmell, 12th April 1869.

IN compliance with the instructions contained in your minute of the 16th ultimo, I have the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, the result of my enquiry into the circumstances which attended the accident that occurred on Sunday the 7th March last, at Todmorden junction, on the Lancashire and Yorkshire Railway.

Three persons are reported to have complained of being hurt.

The mail train which is due to leave Manchester at 10.15 a.m. started four minutes late on the day in question.

It arrived at Todmorden station at 11.26 a.m. (13 minutes late). The train consisted of an engine and tender, four third-class, one composite, two second-class, one first-class, a van with a guard, two horse boxes, one third-class, two second-class, a first-class carriage, and a van with the head guard of the train.

The coaches were coupled in the order above given. Before the train left Todmorden station the driver was cautioned by a platelayer, who was acting as a flagman, to run carefully through the Todmorden junction, which is at the east end of Todmorden station, where the Burnley branch joins the main line.

A gang of platelayers were engaged in renewing the points, rails, and crossings at this junction. The proposed renewals had been made on the line on which the mail train was travelling, but the points had not been connected with the signalman's box, and the connecting rods between the points had not been put in. At the time that the mail train passed through the junction the points were held in their places by spikes and a block, and the sleepers had not been boxed up.

The engine, tender, and three leading vehicles passed safely through the points at a speed of about five or six miles per hour. The engine driver then put on steam, and several vehicles left the rails. The driver felt the jerk, and stopped the train at once.

A copy of the above report was sent to the company on the 14th April 1869.

When it came to a stand the hind wheels of the fourth coach were found to be off the rails. The fifth carriage was off the rails, and partly over on its side, leaning against the signal post. The sixth carriage was also off the rails, standing across the Burnley branch. These carriages were detached from the engine and from the hind part of the train. The eight vehicles that came next were also off the rails. The two last vehicles had passed safely through the points, and remained on the line of rails that the mail train was travelling on. The whole of the witnesses that were examined by me stated, that the points were found fixed in their proper places after the accident, and that they could perceive no defect in the permanent way to account for the accident, or define the place where the coaches got off. Judging from the evidence, the carriages appear to have gone off at the second rail joint from the heel of the point rail. Some defect in this joint, assisted by the jerk given to the train when the driver put on steam, probably caused the accident. The carriages were examined by the foreman of the carriage department after the accident. The leading axle of the sixth carriage of the train was found to be bent in the centre, so that the wheels were about $\frac{3}{4}$ -inch out of gauge. This carriage could not travel to the shop without replacing the bent axle with a good one. I conclude, therefore, that the axle must have been bent by this coach getting off the rails. The ends and the break gear of two carriages were damaged. The train had been examined before leaving Manchester, and everything appeared to be right.

The gauge of the wheels, except in the case above mentioned, the springs of all the carriages, and the flanges of all the wheels are reported to have been found in good order after the accident.

I have, &c.
F. H. RICH,
Lieut.-Col. R.E.

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

LANCASHIRE AND YORKSHIRE RAILWAY.

SIR,

*Dublin,
6th April 1869.*

IN compliance with the instructions contained in your minute of the 31st ult., I have the honor to report, for the information of the Lords of the Committee of Privy Council for Trade, the result of my

inquiry into the circumstances which attended the collision that occurred on the 17th March 1869 in the tunnel next to Lockwood station on the Lancashire and Yorkshire Railway.

One passenger was cut in the head, a second passenger was shaken, and the guard of the passenger

train was knocked down and stunned; but the injuries are believed to be slight.

On the day in question a goods train, which consisted of an engine and tender, 23 waggons, and a break van with a guard, left Huddersfield for Penistone 20 minutes behind its proper time, viz., 12:10 p.m. Three more waggons were taken on at Springwood junction, and the train proceeded to Lockwood. When this goods train arrived at the Lockwood auxiliary the signal was at danger. The driver took the goods train carefully forward to the station, and was stopped at the west end of Lockwood station, as some waggons were being shunted across the line at that station.

There is a straight tunnel 200 yards long at the west end of Lockwood station. The engine of the goods train had cleared the tunnel, but the van at the tail of the goods train was about 40 or 50 yards from the west end of the tunnel. This goods train arrived at the west end of Lockwood station at 12:30 p.m.

The passenger train from Huddersfield to Holmfirth was due at Lockwood at 12:27 p.m.

This train consisted of an engine and tender, two seconds, one first, and a second class carriage, with a break compartment and a guard. It left Huddersfield three minutes late, viz., 12:23 p.m. All four carriages of this train were fitted with Fay's continuous breaks. The driver of the passenger train stated that he was detained at Huddersfield for a waggon of cattle, which was attached to his train, and was to be taken on by the Penistone goods train when the latter was overtaken.

As the passenger train passed Springwood, the driver received a caution from the signalman on duty that a train was close in front of him.

The Lockwood auxiliary signal was at danger as the passenger train approached, and was not taken off when the driver of the train whistled for it to be lowered.

The driver of the passenger train appears to have slackened the speed of his train to six or eight miles per hour as he passed the Lockwood auxiliary signal, which is about 300 yards from the west end of the Lockwood tunnel. As he approached the tunnel mouth he found that the tunnel was full of smoke and steam, nevertheless he held on at a speed of six or eight miles an hour, and ran into the goods train, which was about 40 or 50 yards within the tunnel.

None of the vehicles of the passenger train are reported to have been thrown off the rails, but the engine of this train was damaged. The guard's van

of the goods train was broken into, and forced on to the waggon next in front of it, which was also damaged.

The goods train had come to a stand one or two minutes before the passenger train ran into it. Two guards and two men belonging to the Huddersfield goods department were travelling in the van of the goods train. They had fortunately got out before the collision occurred. The assistant guard of the goods train was going back to stop the passenger train when he heard it approaching, but he had only got a few yards from his train when the collision took place. This accident was caused by the driver and guard of the passenger train disregarding the signals. The regulations of the Lancashire and Yorkshire Railway Company direct that "station-masters or inspectors are personally to be on the look-out 15 minutes before a passenger train is due," and, further, that the lines should be kept clear for passenger trains ten minutes before they are due. This accident, though fortunately unattended with disastrous results, proves how completely the rules of railway companies are set at defiance by their servants, or construed by their servants as mere forms that do not deserve the least attention.

The passenger train was detained to put on a cattle truck, and started from Huddersfield three minutes behind its time, with the object of overtaking the Penistone goods train. The Penistone goods train had been despatched from Huddersfield exactly ten minutes before the passenger train was due, to start on the same line of rails. The station-master at Lockwood was in his office, and was allowing shunting to go on at his station three minutes after the passenger train was due to arrive there, instead of looking out 15 minutes, and having the line clear 10 minutes before it was due to arrive.

The driver and guard of the passenger train allowed their train to run on, although both of them observed the Lockwood auxiliary signal to be at danger.

I recommend that Lockwood be provided with station as well as auxiliary signals, and that the station signal for the line from Huddersfield be worked with a repeating signal placed at the west end of the tunnel.

I have, &c.

F. H. RICH,

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

*Lieut.-Col. Royal
Engineers.*

A copy of the above report was sent to the company on the 9th April.

LONDON AND NORTH-WESTERN RAILWAY.

*Board of Trade,
(Railway Department),
Whitehall, 4th May 1869.*

SIR,

IN compliance with the instructions contained in your minute of the 13th 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 between a passenger train and an engine which occurred near Bedford Leigh station on the Tyldesley and Kenyon branch of the London and North-Western Railway on the 30th March last.

One passenger is returned as having been slightly shaken by the collision.

As the 8.12 p.m. passenger train from Tyldesley to Kenyon junction was running between Tyldesley and Bedford Leigh stations, at a speed of from 15 to 20 miles an hour, on 30th March, the off coupling rod of the engine broke; the train was at once pulled up, without any further damage than the breaking of the near coupling rod, about three quarters of a mile short

of Bedford Leigh Station, and half a mile short of a goods-yard junction signal box, there being cross-over roads between the up and down lines both at the station and signal box. The guard (Evitts) went back towards Tyldesley, to protect his train with fog signals, and the passengers alighted, and walked to Bedford Leigh station with one of the station porters who had gone to the spot on seeing that the train had broken down. On hearing from the porter what had occurred Mr. Leatherbarrow, station master at Bedford Leigh for 4½ years and previously for 18 years at Leigh, sent the following telegram at 8.32 p.m. to Mr. Kniveton, station master at Tyldesley:—"Engine broken down near Bedford Leigh signal box; send goods engine at once." A goods train from Manchester having arrived at 9.10, Kniveton took its engine, and started with it at once for Bedford Leigh, not knowing on which line the obstruction had occurred. About 1000 yards from the train he ran over the fog signals left by guard Evitts, and picked up Evitts himself 500 yards further on, as