He is, however, quite sure that he never received the second "Be ready" for the Accrington goods train, and when he received the "error" signal he thought it was to cancel the first "Be ready" for a goods train, and therefore accepted the passenger train, not knowing that the Hellifield goods train was standing at his home-signal.

If he did receive the "On line" signal for the Hellifield goods train, he ought to have known that the "error" signal was sent contrary to the regulations, as he had not given the "Train out of section" signal for this train, while if the second "Be ready" for a goods train was sent, he was still more to blame for accepting the passenger train.

It is impossible to say which signalman is correct in his statement, but it is quite clear from the admission of both of the men that they had been in the habit of paying no attention to Rule 28, and both are therefore to blame for a direct breach of the Regulations, leading to this accident, fortunately of an unimportant character.

The electrical interlocking of the block instruments with the out-of-door signals would have prevented this, among many other accidents of a similar character; and as the value of this system of interlocking is becoming every day more apparent, it is to be hoped that it will be more generally adopted.

I have, &c.,
F. A. MARINDIN,
Major.

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

Printed copies of the above report were sent to the Company.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade, (Railway Department,)
1, Whitehall, London, S.W.,
29th November 1884.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the Order of the 23rd September, the result of my inquiry into the causes of the accident which occurred on the 20th September in the Summit Tunnel, near Rochdale, on the main line of the Lancashire and Yorkshire Railway.

In this case, as the 1.25 p.m. passenger train from Leeds to Liverpool was running at a high speed through the Summit Tunnel, between Todmorden and Rochdale, it ran off the rails at a spot about a quarter of a mile from the Rochdale end of the tunnel, and stopped in a distance of about 204 yards, with all the wheels off the rails.

Ten passengers are reported to have been shaken.

In the train (which consisted of a tank-engine with a trailing bogie, running chimney in front, guard's break-van, composite first and second class carriage, and third-class carriage, three vehicles in all, the engine being fitted with the simple vacuum break, and the first two vehicles with the automatic vacuum break, both breaks being applied by the same tap on the engine,) the bogie pin of the engine was bent backward and slightly to the left, one plate was broken (old fracture) in the right leading spring, two (both new fractures) in the right driving spring, and two (both new fractures) in the left driving spring; there were marks on the inside edge of the left leading tyre, and a grinding mark along the inside of this tyre; there were also marks on the outside of the tyre of the left leading bogie wheel, and a deep indent on the inside edge of this tyre, as well as one smaller indent. The vehicles were all damaged, the particulars being given in the Appendix.

The repairs to the permanent way involved the putting in of new rails, chairs, and sleepers for a distance of 204 yards, the damaged permanent way having been slewed to one side and left for my inspection.

Description.

This accident occurred at about $3\frac{3}{4}$ miles from Todmorden, about 2 miles 31 chains from Walsden station, about 1 mile 55 chains from the cabin at the east end of the tunnel, and 37 chains from the cabin at the west end of the tunnel. The tunnel is 1 mile 53 chains long, is on a gradient of 1 in 332, falling towards Rochdale, there being an ascending gradient of 1 in 177 from Todmorden, and then a short piece of level to near the eastern entrance to the tunnel. The lines through the tunnel are straight. As before stated, the accident commenced about a quarter of a mile from the west end of the tunnel, close to a wet spot from drippings from the roof, and the

engine stopped in about 204 yards from the first discernible mark of a wheel having left the rail.

The permanent way consists of bull-headed steel rails in 24-ft. lengths, fished at the joints, weighing 80 lbs. to the yard, and secured by outside keys to rectangular sleepers 10 ft. × 5 in. × 4 in., nine to each rail length. Each chair is secured to its sleeper by one spike and two oak trenails.

The line is fairly ballasted, and appeared to be generally in good order. The up line (that on which the accident occurred) was relaid in September 1879.

The first mark perceptible was a slight oblique line across the top of a left rail, commencing at the sleeper next a joint, and extending for 14 ft. 4 in., after which there was grinding along the outside top flange of the rail, and the outside jaws of the left chairs began to be bruised, the bruising of the inside jaws of the right chairs commencing at the next rail from the mark. The gauge began to spread from the commencement of the oblique mark, where it was $\frac{3}{10}$ of an inch slack, gradually increasing, by the left chairs being forced outwards, till it was 3 inches slack at a distance of 27 feet from the commencement of the oblique mark. After this, the left rails were pushed more and more towards the tunnel wall for nearly 100 yards, when two rails were broken and displaced, after which for about 50 yards they were again pushed outwards from 2 to 3 ft., and thence to where the engine stopped were again broken and dispersed.

The gauge was nearly correct to the eastward of the first mark, but at this spot the outer rail had a super-elevation of half an inch over the inner rail, which super-elevation increased in 10 yards to 2 inches, and decreased to 1 inch in another 15 yards.

The front of the engine first impinged on the tunnel wall about 100 yards from where it left the rails, and then grazed along it for another 100 yards till it stopped. The projecting portion of the guard's van also grazed for some distance along the tunnel wall, and the trailing end of the last vehicle was resting against it when the train stopped, which it did without any couplings having given way.

The engine which drew the train is one of which the Lancashire and Yorkshire Company employ a large number in running their fast passenger trains. It is an eight-wheeled tank-engine, with coupled leading and driving wheels, and a four-wheeled trailing bogie. The total wheel base is 22 ft. 7 in.; the distance between the leading and driving centres 7 ft. 7 in.; between the driving centre and bogie pin 12 ft. 3 in.; and between the centres of the bogie wheels 5 ft. 6 in. The side frame of the engine measures 30 ft. The coupled wheels are 5½ ft. and the bogie wheels 3 ft. in diameter. The tanks are in rear of the driving wheels, and the coal bunker is at the back of the foot-plate.

When last sent out of the shops on December 21st, 1883, its weight in full working order was as follows:—

	Right.			Left.			Total.		
	Tons	cwts.	qrs.	Tons	cwts.	qrs.	Tons	cwts.	qrs.
Leading wheels	6	11	2	6	13	2	13	5	0
Driving wheels	7	17	0	7	17	0	15	14	0
Bogie wheels front	4	9	2	5	0	0	9	9	2
Bogie wheels hind	4	11	0	4	12	2	9	3	2
	23	9	0	24	3	0	47	12	0

After the accident the average weight resulting from weighing the engine six times (in reversed positions) was as follows:—

	Right.			Left.			Total.		
	Tons	cwts.	qrs.	Tons	cwts.	qrs.	Tons	cwts.	qrs.
Leading wheels	6	10	1	6	8	0	12	18	1
Driving wheels	8	14	2	7	5	1	15	19	3
Bogie wheels front	4	11	0	5	3	3	9	14	3
Bogie wheels hind	4	10	0	5	4	1	9	14	1
Total	24	5	3	24	1	1	48	7	0

The greatest discrepancy which occurred in any of these weighings was between the weights on the right and left driving wheels, which amounted to a preponderance

in one instance of the right over the left of 2 tons 15 cwt. This is probably to be accounted for by two plates having been broken both in the right and left driving springs, and the proper distribution of the weight on these wheels thus interfered with.

Evidence.

1. *John Crossley*, 26 years in the service, signalman all the time at the Summit Tunnel east cabin.—I came on duty at 6 a.m. on September 20th to remain until 6 p.m. The two previous trains which passed my box, before the one to which the accident happened, were an empty carriage train at 2.24, and an express passenger train at 2.37 p.m. I got the "Be ready" signal for the Leeds to Liverpool train at 2.42 p.m., "On line" from Walsden at 2.45 p.m., and the train passed me at 2.46 p.m., and I gave it "On line" to the west box at 2.46 p.m. The speed of the train when passing my cabin was the same as usual, and I expected to get "Line clear" for it in about 2½ or 3 minutes. But the line clear signal was not given at all. I got a message on the telephone from the west box, saying that the train was off the road. I had the York to Manchester express waiting at my advance-signal, and I went out of my box to tell the guard that there had been an accident with the previous train. Single-line working was commenced about 4.47 p.m. on the down road.

2. *James Lord*, relief signalman in charge of the Summit Tunnel west cabin.—I have been eight years in the Company's service, and six years a signalman. I came on duty at 6 a.m. on September 20th to remain until 6 p.m. The two previous trains which passed my signal-box were an empty carriage train and an express passenger train, which passed at 2.29 p.m. and 2.40 p.m. respectively. I received the "Be ready" signal for the Leeds to Liverpool train at 2.45 p.m., "On line" at 2.46 p.m. On finding the train did not appear, I asked the signalman at the east box, on the telephone, how the train was running, and he said in reply that it was running all right. This would be about 2.49 or 2.50 p.m. I then told him I was going out to see if I could see anything of the train. Before I left the cabin the 2 o'clock train from Manchester passed on the down line. I left the signals off for the up train, but the down line signals I put to danger. On going towards the tunnel I met the guard of the Leeds to Liverpool train coming towards the signal-box, who said that the train was off the road. On hearing this, I went back to my box, and telephoned to Littleborough for assistance. I kept the down line blocked. Assistance arrived about 3.25 p.m. If all had gone right the train ought to have cleared at 2.49½ or 2.50 p.m., the trains taking about three to five minutes between the east and west cabins, according to their character. I got no signal from the driver of either of the previous trains of anything being wrong. I am not aware that there were any platelayers near the mouth of the tunnel at the time. I began to work single line at 4.30 p.m. The up line was not clear until 11.55 p.m. on the night of 21st September.

3. *William Mates*, engine-driver.—I have been 26 years in the Company's service, and 17 years an engine-driver. I have been running constantly on the road between Todmorden and Rochdale since the year 1878. I joined the 1.25 p.m. Leeds to Liverpool express at Sowerby Bridge on September 20th. My engine was No. 115. I had had charge of this engine about five days. The engine was in good running order. I had a train of three vehicles, viz., break-van, composite carriage, and a third-class. The engine was fitted with the simple vacuum break. The automatic vacuum break was fitted to the two vehicles next the engine, both breaks being applied by the same action of the tap. Fireman Jones was alone with me on the engine. We left Todmorden at 2.41 p.m., six minutes late. We were seven minutes late from Sowerby Bridge, but one minute had been saved in the time allowed for station duties at Todmorden. Rochdale was to be the next stop. We are due at Rochdale at 2.48 p.m., being allowed 13 minutes for running nine miles. I was not checked by signals after leaving Todmorden. There was steam in the tunnel, and I did not see any platelayers in it before reaching the spot where the accident occurred. Steam was not full on when running through the tunnel. The reversing lever was in the first notch. I think the speed was about 45 miles per hour immediately before the accident. The first indication I had of anything being wrong was the feeling of a grinding for half a second or so. I immediately shut off steam and found that the engine was off the road. I do not recollect doing anything more before the train came to a stand, the engine riding very roughly until it stopped. I was able to keep my feet. I was on the left-hand side of the engine. My left arm was ground against the side of the tunnel. I have no recollection of putting on the vacuum break, but it *was* on for a considerable time, I know, before we stopped, as I saw the handle over. There was about 23 inches of vacuum before we stopped, and there was none at all when the train stopped, as the ejector had been broken off. I suppose I must have put the break-handle over myself, although I cannot remember doing so. I did not reverse the engine. The engine had been running roughly in the tunnel, but not more so than usual, before the run-off took place. I went back to examine the road, and I found chairs moved on the left-hand rail outwards towards the wall, and the road then gradually got wider until the wheels dropped in. I saw no mark at all of a wheel mounting the left-hand rail near where the accident commenced. I passed over this spot on the previous day with the same train and the same engine. The road was then no different to what it had been for a length of time. When I examined the road I did not take particular notice of the ballast, as I thought I had discovered the cause of the accident, namely, the road bursting. There were no platelayers working about the spot. No part of the train was foul of the down road. I was not running at so high a speed as I should have done when I got out of the tunnel, but I was running at such a speed as to maintain my booked time. The displacement of the chairs increased from the place where I noticed they had first moved, and the spikes remained full down in the chairs. The road appeared to be right up to the point where the chairs were first moved. The place where the run-off took place is the roughest part of the tunnel on the up road. I think the leading wheels of the engine must have dropped first. I did not feel the engine mount the rail.

4. *George Jones*, fireman to last witness.—I have been 10 years in the Company's service, and two years of that time a fireman. I have been fireman for William Mates about three months. I think we had had engine No. 115 about three or four days. It was a fair engine for steadiness. We had joined the train at Sowerby Bridge. We left Sowerby Bridge a little late. After leaving Todmorden our next stop was to be at Rochdale. We were not checked after leaving Todmorden, but had a clear road up to the time of the accident. I think our speed would be about 40 to 50 miles per hour at the time of the accident. The driver had shut off steam slightly when the accident happened. The first

feeling of anything wrong was the engine dropping. I did not feel any sensation of the wheels grinding. The engine ran along the sleepers and then against the tunnel side. I commenced applying the hand-break. I cannot say whether I got it on. I got a shake which made me leave go of the handle. The driver shut off steam, but I cannot say whether he put on the break. I did not notice the position of the break-handle between the time of the engine leaving the rails and the time it stopped. I was not hurt. I went back to protect the train, and on returning I noticed the road. The first thing I saw was a chair removed about half an inch toward the tunnel wall, and the others had gradually moved further outwards till the road became too wide and the wheels dropped inside. I did not see any mark of wheels having mounted the rail next the wall. I did not notice any platelayers at work in the tunnel when we came through. I have noticed this part of the tunnel as being a little rough ever since I have run through it. I think we ran a little faster in some parts than at the place where the accident took place.

5. *Joseph Almond*, guard.—I have been 16 years in the Company's service, and five years a passenger guard. I joined the Leeds to Liverpool train on September 20th at Low Moor. The train consisted of three vehicles, a break-van, a composite carriage, and a third-class carriage. The vacuum break, I believe, was fitted throughout the train. I had a hand-break in the van applying to the van and the next vehicle to it. I also had a tap to apply the automatic vacuum break. We were about three minutes late from Low Moor, and lost a minute in running up to Sowerby Bridge, three minutes more were lost at Sowerby Bridge in changing engines and arranging to leave there, independent of the train from York, which was running late. We left Sowerby Bridge at 2.23 p.m., or seven minutes late, and Todmorden at 2.41 p.m., six minutes late, having gained a minute at Todmorden owing to having only a short train. The next stop was to be Rochdale. There was nothing unusual in the running of the train before the accident. Having got my parcels ready to put out at Rochdale, I was seated on the left-hand seat in my van, and as I approached the distant-signal for the west box I saw it was off. The first sensation I had of anything being wrong was the train oscillating and then leaving the rails. The speed at this time was between 40 and 45 miles an hour. When I found the train was off the rails I attempted to get up to put on the vacuum break, but I was thrown down in the bottom of the van. I cannot say whether it was the grinding of the van against the tunnel or the sudden application of the vacuum break by the driver which threw me down, but I am inclined to think it was the latter. I do not know how many inches of vacuum there were when the train stopped. The train came to a stand at 2.47 or 2.48 p.m. On getting out of the van I saw a train coming on the down line, and I shouted to the passengers to keep their seats. I also arranged with the fireman for him to go back towards Todmorden to protect the train. I went forward towards the west cabin to tell the signalman what had happened. I met the signalman coming towards me. I shouted to him to block both roads as the express had left the rails. I then returned to the train to get the passengers out. The train was very full, and I had three passengers in the van with me. I think there must have been 100 passengers in the train. Some of the passengers appeared to have slight cuts and to have been shaken. One, an old lady, who got in at Todmorden, was badly shaken. I walked back to see how the accident had happened. I could not see any place where there was any indication of the engine having mounted the rails. The rails had been moved outwards the tunnel side as if the engine had dropped in. The place where the accident took place was rather a rough part of the road.

6. *William Jackson*, platform inspector at Littleborough Station.—I have been 21 years in the Company's service and 13 years at Littleborough as platform inspector. I got information from the signalman at the west cabin by telephone of what had happened, and I at once went down to the spot, taking Doctor Macgill with me. I got there about 20 minutes past 3. I saw the state of the road, but I was not able to satisfy myself as to the cause of the accident. I found that the down line was clear, and then I commenced to work single line over that road. I only saw two passengers who were hurt.

7. *Thomas Cooper*, district travelling inspector, Manchester division.—I have been 11 years in the Company's service and 12 months a travelling inspector. I reached the scene of the accident about 5 p.m. I walked down to the point where the train had left the rails. I noticed where the engine began to bite on the rails. The chairs were gradually moved away from the sleepers towards the wall. I did not notice any mark of a wheel having mounted the rail. My opinion is, that the engine burst the road. The road seemed to be wet and the sleepers pumping in the ballast.

8. *John Baumford*, foreman platelayer.—I have been eight years in the Company's service, and three years foreman platelayer. I have charge of 1¾ miles of line, commencing near the centre of the tunnel and going westward. I was at the west end of my length when the accident took place. About a fortnight previously I had been picking up joints where the accident took place. I had walked into the tunnel on the up road near the place where the accident took place the same morning and did not see it again until after the accident. After the accident I went up to the place with inspector Jackson, of Littleborough, who told me of what had happened. I counted the rails that were damaged and then sent to Sowerby Bridge for the repairing gang. I then made arrangements for repairing the line. I did not make any examination of the road until 8.0 p.m. I was then in company with Mr. Rickards, the district engineer. I found a mark across the outside rail commencing 15 inches from the joint. The mark continued for 14 or 15 feet and then dropped on the outside of the chair. When the mark appeared on the top of the rail the mark on the side of the rail ceased. I found no widening of the gauge along this length of rail. On the second rail to the west, several chairs were marked on the outside, and then they began to give way. The joint at the end of the second rail was perfect, but the gauge began at that place to grow wider. There was a slight "give" of the chairs, about one-eighth of an inch, to where the mark ceased on the top of the rail, and then they gave out more and more. After that the chairs were broken, but no rails were broken for some distance. A few yards before where the mark began, there was a wet place, and the sleepers were pumping a little. There was another wet place about the middle of the part where the train was off. It is very difficult to keep the sleepers packed at these wet places, of which there are many in the tunnel. In the ordinary course of work we should have come to this wet place to pack on the following day, Sunday. I think it must have been a bogie wheel which marked the rail and then broke the chairs, but I do not think the leading wheels dropped in before the bogie wheels mounted. Nothing whatever had been done to the road before Mr. Hunt and Mr. Rickards saw it, from the mark on the top of the rail for a considerable distance forward.

9. *John Ellison*, engine-driver.—I have been in the service for 19 years, and 10 years an engine-driver. I was driver of the 1.25 p.m. Leeds to Manchester express on the day of the accident. My train was the one immediately preceding the one to which the accident happened. I had last stopped at Sowerby

Bridge. My speed as I approached the Manchester end of the tunnel was a little over 40 miles per hour. My engine was a bogie tender-engine, No. 675, running chimney first. I observed nothing unusual in the state of the road when approaching the end of the tunnel. It was no different to what it always is. I was running at my usual speed. I did not notice whether any platelayers were working near the end of the tunnel. We are allowed 45 minutes to run from Sowerby Bridge to Manchester, Cheetham Hill ticket platform being the first stop.

10. *James Boardman*, engine-driver.—I have been 26 years in the service, and 15 years an engine-driver. I was with the 1.35 p.m. train from Todmorden on September 20th. I left there at 1.42, seven minutes late, for Rochdale. My engine, No. 86, was a bogie tank-engine, running chimney first. I stopped at all stations between Todmorden and Rochdale. The last stop was at Walsden before running through the tunnel. My speed at the Manchester end of the tunnel was about 35 miles per hour. I noticed nothing more than usual in passing over the place where the accident occurred. The engine always oscillates more at this part than anywhere else. The platelayers are often working about this place. They were not working there on this particular day.

11. *Tom Law*, building inspector.—I have been 26 years in the Lancashire and Yorkshire Company's service. I was appointed to my present position two months ago. Before that time I was a permanent-way inspector for 19 years. The Summit Tunnel was in my district. I reached the place of the accident about four o'clock. I went there to render assistance. I saw an oblique mark across the top of a rail. My opinion was that some wheel had mounted the rail before the road burst. Two days afterwards I had a conversation with the signalman who had been in the Summit Tunnel east cabin at the time of the accident. I saw in the train book that the train was booked on line from Walsden at 2.45, and clear at 2.46. The signalman remarked that the train would not be a minute in the section, but they did not book less than a minute. The signalman further said that after putting back his levers he saw that the train was near the mouth of the tunnel going very quickly. He thought it would have cleared in two minutes if no accident had happened.

Mr. Rickards, district engineer, handed in a statement of the result of his examination of the permanent way at and near the scene of the accident taken shortly after it occurred, and also a plan showing the course of the accident.

Conclusion.

From a careful consideration of the foregoing evidence, and from an examination of the permanent way, and of the engine drawing the train, I think that this accident was probably caused by oscillation having been set up (owing, most likely, to a soft place in the ballast) in a tank-engine when running at a high rate of speed, this oscillation resulting either in the left leading wheel mounting a left-hand rail (and giving rise to a mark extending for 14 ft. 4 in. across the top of the rail) and then dropping outside it, the rail being then forced outwards by the pressure of the left driving-wheel, or in the left rail being first forced outwards, and the mark on the top of the rail being caused by one of the left bogie wheels, or by a left wheel of one of the three vehicles composing the train.

With regard to speed, the train had left Todmorden by the guard's time at 2.41 p.m., six minutes late, having next to stop at Rochdale, the accident occurring (according to the guard) at 2.47 p.m. or 2.48 p.m., the distance run having been about $3\frac{3}{4}$ miles, or the speed averaging 32 or $37\frac{1}{2}$ miles an hour.

According to the signalman in the Summit Tunnel east cabin, the train occupied a minute in running between Walsden and his cabin, making an average speed of about $43\frac{1}{2}$ miles an hour; the speed, according to the driver's estimate, was 45 miles an hour, according to the fireman's 40 to 50 miles an hour, and according to the guard's 40 to 45 miles an hour. As the train was a light one, was late, and had been running down a gradient of 1 in 332 for more than a mile when the accident occurred, the speed at the spot may, I think, be safely assumed to have been at least 50 miles an hour.

In his evidence before me, the signalman in the Summit Tunnel east cabin stated that the speed of the train was as usual when it passed, but building inspector Law states that two days after the accident the signalman told him that the train was going very quickly, and that he expected to have got "Line clear" for it from the west cabin in two minutes, implying a speed of over 60 miles an hour.

With regard to the state of the up line in the tunnel, the foreman platelayer in charge frankly acknowledged that there was a wet place a few yards east of the first mark across the top of the rail, and that the sleepers "pumped" a little. He further stated that no work had been done at this place for a fortnight, but that in the ordinary course it would have been taken in hand, and the sleepers would have been packed up, on the day following the accident (Sunday). The measurements taken immediately after the accident showed a depression in the outer rail at this spot, the variation in level being as much as $1\frac{1}{2}$ inches in 10 yards.

As to whether the mark across the top of the left rail was or was not made by the left leading wheel of the engine, I am inclined to the opinion that the inference to be drawn from the marks on the permanent way and on the wheels of the engine, is that the left leading wheel did first mount the left rail, and that the shoving outwards of the left rail was caused by the pressure against it of the left driving wheel.

The occurrence of this accident (as well as of many others in which tank-engines have been concerned) tends, I think, to show that, unless on a heavy permanent way in perfect order, tank-engines are not suitable for running trains at high rates of speed; if from any cause oscillation is set up in the engine, there is the absence of the steadying influence of the tender, to help to check this oscillation, the tendency to which is aggravated by a very heavy weight on a comparatively short wheel base.

The soft spots in the permanent way, owing to the wetness of parts of the Summit Tunnel, ought decidedly to receive more attention than from the evidence of the foreman platelayer appears to be the case. Ballast of a superior description should be used in these places, and the sleepers should be packed up certainly more than once a fortnight.

It was a great mercy that the train ran off to the left against the wall of the tunnel and not into the 6-ft. space, otherwise there would probably have been a fearful collision between it and a down train which entered the tunnel just after the other train had stopped.

The break with which the train was fitted, viz., the simple vacuum on the engine, and the automatic vacuum break on the two front vehicles must have been applied by the unconscious action of the driver, (as he saw the tap over without remembering that he had moved it) and no doubt did good service in contributing to the quick stop which the train made.

I have, &c.,
C. S. HUTCHINSON,
Major-General, R.E.

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

APPENDIX.

DAMAGE TO STOCK.

Third-class, 1,584:—
1 new continuous foot-board.
3 „ axle-boxes (patent).
1 „ intermediate quarter complete.
1 „ door complete.
2 „ side lights.
1 „ door light.
6 „ bottom boards.
1 „ roof lamp glass.
Draw-bars, &c., require re-adjusting.
Cost, 40*l.*

M.B., 351:—
1 new continuous foot-board.
1 „ short bottom board.
1 „ end panel and mouldings.
Draw-bars, &c., re-adjusting.
Cost, 10*l.*

Van, 269:—
1 new headstock.
1 „ leg iron, and 3 straightening.
2 „ wood buffer casings.
4 buffer-rods straightening.
1 bottom foot-board.
2 new continuous foot-boards complete.
2 „ end panels.
1 „ bottom quarter panel.
1 „ end „ „
2 „ elevation lights.
2 „ lamp irons, and 1 new pinion wheel.
1 „ side projection complete.
2 „ axle-boxes (patent) and 1 brass step, and draw-bars re-adjusting.
Cost, 50*l.*

Printed copies of the above report were sent to the Company on the 24th December.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade, (Railway Department,)
1, Whitehall, London, S.W.,
29th December 1884.

SIR,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the Order of the 1st instant, the result of my inquiry into the causes of the collision which occurred on the 27th ultimo, at Kirkgate station, Wakefield, on the Lancashire and Yorkshire Railway.

In this case, as the 3.35 a.m. goods train from Normanton to Halifax was drawing up at the up platform at Kirkgate station, the last vehicle but one and the break-van were struck by an engine and van which had been improperly permitted to proceed along the up through line (instead of along the down through line) on their way to Normanton.

A postman in charge of mail bags, who was travelling in the van at the rear of the goods train, was injured.