

The
VIRTUAL MUSEUM
of the
LANCASHIRE & YORKSHIRE RAILWAY

Accident Reports.

23 April, 2 May & 8 May 1874

BoT Report into Accidents at

Thornhill Junction.

(2 Pages).

going down the bank, and recollected nothing more till he found himself on the engine, where he had been carried by the driver and fireman. He had looked at his watch a minute before the collision, when the time was 5.59; this gives 12 minutes for running the $3\frac{3}{4}$ miles from Three Cocks junction, which allowing for slackening speed at Glasbury, would not make the average speed exceed 25 miles an hour. The coupling between the third-class carriage and waggon in front of it must have given way immediately after the former left the rails, as all of the waggons remained on the rails attached to the engine and tender.

When the ganger reached the spot, soon after six o'clock, he found the road crooked, with about four twists in it, for two rail lengths on the Brecon side of the quarter mile post. The gauge was right. The first wheel mark was close to the inside of the off rail, on a joint sleeper very near the quarter mile post, the left wheels of the carriage having apparently jumped the left or high rail of the curve; the carriage appeared then to have run along the ballast for about 55 yards, when the coupling probably gave way, and the carriage shot off to the left down the bank, and the van to the right.

The train which had passed the spot next before the one which met with the accident was a down

goods train from Hereford to Brecon, due at Brecon at 4.10 a.m. I was unable to learn that the servants of the Midland Company with this train had noticed anything unusual in passing the $2\frac{1}{4}$ mile post; but it admits of little doubt that, owing to a deficiency of ballast about the sleepers in the 33 chain curve near this quarter mile post, this train must have stoved the rails in passing over them so as to have produced the crook noticed by the driver of the up train. This stoving of the rails set up oscillation in the engine, &c. of the up train, causing the additional zigzags observed after the accident, and although the engine, tender, and waggon got safely past, the oscillation of the third-class carriage caused it to leave the rails followed by the van.

The state of the road when the accident occurred was no doubt such that all trains should have been warned to reduce their speed in passing over it.

The sooner a quantity of new ballast is placed upon the line the better. There appear also to be a good many unsound sleepers in the line, and as little time as possible should be lost in replacing these by others.

I have, &c.,

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

C. S. HUTCHINSON,
Lieut.-Col. R.E.

Printed copies of the above report were sent to the Hereford, Hay, and Brecon, and the Midland Railway Companies on the 24th June.

LANCASHIRE AND YORKSHIRE RAILWAY.

Board of Trade,
(*Railway Department*),
5th June 1874.

Sir,

I HAVE the honour to report, for the information of the Board of Trade, in compliance with the instructions contained in your minute of the 15th ultimo, the result of my inquiry into three slight accidents which occurred at Thornhill junction station, on the Lancashire and Yorkshire Railway, on the 23rd April, on the 2nd ultimo, and on the 8th ultimo respectively.

In the first case the wheels of a carriage forming part of the 6.15 p.m. down passenger train from Bradford to Dewsbury left the rails at a pair of siding points, as the train was passing out of the siding.

In the second case as the 9.10 a.m. up passenger train from Dewsbury to Bradford was being backed along the main line the trailing wheels of a carriage left the rails at the points leading to a passenger dock line.

In the third case the leading and driving wheels of the engine which had just been detached from the 5.15 p.m. down passenger train from Bradford to Dewsbury left the rails at a pair of sidings points through which it was slowly passing.

No personal injury resulted in either case.

The point and signal levers at Thornhill junction station are concentrated and interlocked in a raised cabin, situate at the up end of the station, near the junction of the lines to Bradford and Manchester. The present locking frame was put up about 18 months since, and in order to give as much freedom as possible for shunting operations the siding points leading from two sidings to the main down line (distant respectively 96 and 126 yards from the cabin), at which the first and third accidents respectively occurred, are not worked from the cabin, but are controlled by levers attached to rods which should prevent the points being opened for the main line unless these levers are previously pulled over and the main line down signals thereby locked at danger. In the case of the points on the up main line leading to the passenger dock, at which the second accident occurred, these are immediately under the cabin and are worked from it.

Notwithstanding the short time this signal apparatus has been in use it is much out of order, and it is

possible by the exertion of a little force to set the points for one line and the signals for another, and in the case of the siding points leading to the down line, to take off the down main line signals when these points are free to move. These defects are owing to unusually rapid wear and tear, and not to original faults, in the apparatus, which was constructed by one of the best signal manufacturers, who are going (the engineer informs me) to put the frame to rights at their own cost.

In the accident of the 23rd April the 6.15 p.m. down train from Bradford to Dewsbury, consisting of engine, tender, and five coaches, arrived punctually at Thornhill at 6.50, and was put back into one of the sidings leading from the down line to allow the main line train from Manchester to Normanton, due at 6.55, to draw up to the platform. This train also arrived punctually, and upon its departure a porter went to the siding points and held them open so as to allow the train for Dewsbury again to draw up to the platform. One carriage had passed the points safely when the porter's foot slipped and he lost his hold of the point lever, so that the points fell back and allowed the front wheels of the following carriage to pass along the siding; before the hind wheels of this carriage reached the points, he was again holding them open, having shouted to the driver to stop, which he immediately did. Only the one carriage left the rails, and this was got on again without difficulty by setting the train back. It then started for Dewsbury at 7.4, four minutes late.

In the accident of the 2nd May the 9.10 a.m. up train from Dewsbury to Bradford, consisting of engine, tender, and five coaches, arrived at Thornhill at 9.17, two minutes late, and was put back into a dock leading from the up passenger line, to allow of the main line train from Normanton to Manchester, due at 9.22, drawing up to the platform. This train arrived at 9.21 and started at 9.23, having left on the up line a through carriage for Bradford which the train from Dewsbury was to take on. The signalman in the cabin, who had acted as such at Thornhill for about one year, called the Dewsbury train out of the bay, and as soon as it had cleared the points moved them over and waved the driver back along the main up line. The two rear

carriages passed safely, but (according to the signalman) owing to the dock-point lever springing forward—as he was moving the lever next it in the frame, preparatory to letting a goods train standing on the Bradford line back into the dock—the trailing wheels of the centre carriage took the wrong side of the points and this carriage left the rails, the train being stopped before any further harm was done. Matters were soon put to rights, and the train started for Bradford only a few minutes late.

This accident must have been caused by the signalman prematurely or accidentally moving the dock-points before the train had all passed over them; the motion of the lever which he said caused the dock-point lever to spring out of its place was most unlikely to have had this effect.

In the accident of the 8th May, the 3.15 p.m. down train from Bradford to Dewsbury, due at Thornhill at 5.43, arrived at 5.50, consisting of engine, tender, and six coaches. After discharging passengers, it was backed into one of the sidings leading from the down line out of the way of the main line train due at 5.55, for which train it had, next to its tender, a through coach for Wakefield. After getting clear into the siding the tender was uncoupled from the through coach by one of the porters, who, without looking to see if the points (not those which caused the accident of the 23rd April) had fallen right for the blind siding

after the train had passed through them, shouted to the driver to go ahead along the siding. The driver started, not noticing how the blind siding points were lying, and found that the leading wheels of his engine took the direction of the down line, while the driving wheels passed properly along the siding. He stopped before the trailing wheels reached the points, and was able, by reversing, to right his engine at once, and took on his train a very few minutes behind time.

This accident would not have happened had the points been properly oiled, and had either the porter or driver looked to see that they were properly closed before the latter started.

The occurrence of these three accidents so closely following each other is singular, and especially so considering the defective condition of the locking frame at Thornhill. There is not, however, evidence to show that the state of the frame had anything to do with causing the accidents; they might have equally well occurred with the most perfect apparatus, as the signals being at danger the points were necessarily free to be moved. No time, however, should be lost in rectifying the defects before alluded to, as they might lead to some serious collision.

I have, &c.,

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

C. S. HUTCHINSON.
Lieut.-Col. R.E.

Printed copies of the above report were sent to the Company on the 3rd July.

LONDON AND NORTH-WESTERN AND GREAT WESTERN JOINT RAILWAY.

Sir,

Shrewsbury, 19th May 1874.

In compliance with the instructions contained in your minute of the 9th ultimo, I have the honour to report, for the information of the Board of Trade, the result of my inquiry into the circumstances connected with the collision that occurred on the 3rd ultimo, between a London and North-Western goods train and a London and North-Western excursion train, at Abbey Foregate junction, on the London and North-Western and Great Western Joint Railway.

Abbey Foregate junction is situated about half a mile from Shrewsbury station, on the line to Wellington. The sidings of the goods yard join the passenger line at Abbey Foregate Junction, which is protected with home-signals and distant-signals that are worked from a mixed cabin and interlocked with the points.

The Potteries junction is about half a mile to the east of the Abbey Foregate junction; it is also protected with home and distant signals. The railway from Wellington to the Potteries junction is worked on the "absolute-block" system, but between the Potteries junction and Shrewsbury station a clear interval of space is not maintained. The signals are so close to each other that they should be sufficient in clear weather to protect the approach to the station. The line as it approaches Abbey Foregate from Wellington is perfectly straight, and the signals at Abbey Foregate junction can be distinctly seen by an engine-driver approaching from the east. The railway falls on a gradient of 1 in 80 from the Potteries junction down distant-signal to Abbey Foregate junction.

On the day in question a mineral train, which consisted of an engine and tender, 21 waggons and a break-van, was (by permission of the signalman on duty at the Abbey Foregate junction) backed out of the goods yard at Abbey Foregate on to the down main line in order to be passed by a cross-over road on to the up line and go away to Stafford. At the time that the signalman made the points and signals for the goods train to leave the yard, he had not received notice of any passenger train approaching, but immediately after he had allowed the goods train to come out of the yard, he received notice by tele-

graph that an excursion train from Birmingham was approaching. The Abbey Foregate home and distant signals were at danger at the time, but the excursion train ran past them, and came into collision with that part of the goods train which had reached the down road, and four or five goods waggons were thrown off the rails and damaged.

The passenger train consisted of an engine and tender, five coaches, and a break-van with a guard at the tail of the train. Two or three of the coaches were damaged, but no part of the train left the rails. About 16 passengers in the excursion train have complained of being hurt, and the guard of this train got a black eye.

The down distant-signal from Abbey Foregate junction is close inside the Potteries junction. It is about 450 yards from the Abbey Foregate junction home-signal, which is close to the junction points, and both these signals can be seen for a considerable distance by the driver of a down train. The excursion train left Birmingham at its proper time. It left Wellington about four minutes late, at 10.9 p.m., and it passed the Potteries junction about 10.25 p.m., at which time it was due at Shrewsbury. The signals at the Potteries junction were at "all right" as it approached, but the guard of the train observed that the Abbey Foregate junction signals were at "danger" before his train reached the Potteries junction, and as he thought that his train was going at too great a speed, he stated that he applied his break before he reached the Potteries junction. After the train passed the Potteries junction he heard his engine-driver first whistle for the Abbey Foregate signals and then whistle for the breaks, but the train was not stopped before it ran into the goods train at the Abbey Foregate junction at a speed of about 10 or 12 miles per hour.

The station-master and a London and North-Western inspector at Shrewsbury station, went to the spot immediately after the accident and saw the engine-driver and fireman of the excursion train, who appeared to be intoxicated. The station-master gave the engine-driver in charge to a sergeant of the Shrewsbury Borough Police, who arrived at the spot about the