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Great Northern Railway

Accident Involving Joseph Payne.

Hatfield 4th February 1875.

Sir,

In compliance with the instruction contained in the Order of 1st instant, 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 19th ultimo near Wheathampstead station, on the Hatfield and Luton section of the Great Northern Railway.

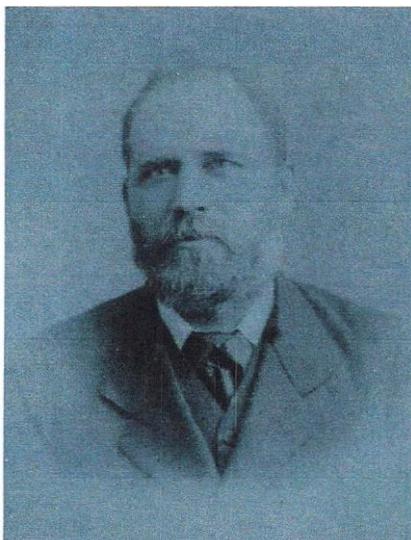
In the case, the 7.35 p.m. passenger train from Luton for Hatfield came into collision at 9½ Miles from Luton and 2 miles from Wheathampstead, with the preceding 7.10 p.m. goods train, also from Luton for Hatfield.

The engine of the passenger train, after mounting the break van at the tail of the goods train, fell over to the left down the slope of an embankment, to a depth of about 40 feet. The rest of the train remained on the top of the bank.

Three passengers have complained of injury and the fireman and guard of the passenger train were also injured. There are steep gradients and sharp curves on the greater part of the line between Hatfield and Luton which is a single line, working on the train-staff system. The gradients near the point where this collision occurred are, first 1 in 90, falling nearly to the point of collision (which was 6 yards on the east of the gradient post), and then 1 in 59 for 160 yards, all rising to a point, to which it will be necessary hereafter to refer, 960 yards in advance of the point of collision, at which the goods train first came to a stand.

Evidence.

The passenger train in question left Luton punctually at 7.35, and consisted of an engine and tender and four carriages, of which three were break-carriages, and in the last of which rode the guard.



The engine driver, **Joseph Payne** (picture) states that he stopped at all stations in due course, and left Wheathampstead punctually. He learned at Wheathampstead from the station master that a goods train had preceded him by 13 minutes. He was travelling at a speed of from 20 to 25 miles an hour, round a curve and through a cutting about 2½ miles from Wheathampstead, when he suddenly saw in front of him a man with a red light; and immediately afterwards he saw three red lights at the tail of the goods train. He was then proceeding down the falling gradient above referred to, of 1 in 90. He shut off steam opened his whistle and did his best to bring the train to a stand. He reduced his speed perhaps to 15 miles an hour, before his engine struck the tail of the goods train. Just before he did so, he jumped off the engine to the left

about 40 yards from the goods train. He ran over two fog signals, close to one another, very near the spot where he passed the guard with the red light. The fireman Richard Barnby, states that he saw the guard with the red light about the same time as the engine driver, and immediately began to apply his break. He thinks he was not above 50 yards from this guard

when he caught sight of him. He also saw the red lights at the tail of the goods train, which appeared to be about 100 yards from the man with the red light. He thinks they were running at 12 to 14 miles an hour when they struck the goods train. He remained on the engine, and he believes that he was thrown off from it as it fell down the slope of the embankment. When he came to himself afterwards he was in the field at the bottom of the slope. He escaped without any bones being broken, but he was bruised and contused all over, and has received a shock to his system.

The guard of the train, George Pryor, states that he was riding in the break compartment of the last carriage. He heard no whistle, he did not feel the speed of the train slackening and he was not aware of any danger until he felt the shock of collision. He was busy sorting his parcels and luggage, and was disturbed in that occupation when the collision occurred. He was thrown down and bruised on the back and knee, but was obliged to leave his duty. The engine of his train fell down the slope of the embankment, but the leading end of the tender mounted the framework of the break van of the goods train, and remained standing upon it after the engine fell down the embankment. The trailing wheels of the tender did not, however, leave the rails, and all the carriages remained on the rails without being seriously damaged.

The goods train in question left Luton punctually at 7.25 p.m. and was not due to stop at any intermediate stations. It passed through Wheathampstead in due course, consisting of an engine and tender, 12 loaded wagons and a break van. All the wagons were loaded with coal, and their numbers and weights were:-

		Tons	cwts.
Waggon Number 638	contents	22	16
Waggon Number 739	"	22	16
Waggon Number 671	"	22	16
Waggon Number 586	"	22	0
Waggon Number 667	"	22	0
Waggon Number 753	"	22	0
Waggon Number 671	Total weight of		
Waggon Number 725	contents combined.	14	4
Waggon Number 387	Contents	9	5
Waggon Number 149		9	3
Waggon Number 1,210	"	9	9
Waggon Number 199	"	8	16
Break Van Number 11028			

And the total weight of the train was thus 165 tons, including weight of wagons and break van.

The engine driver Thomas Jones has been working on the same branch for eight or nine years as an engine driver. The rails were very slippery on that night, with drizzling rain. He travelled at a speed of 15 or 16 miles an hour down the gradient of 1 in 90 above referred to; but in mounting the rising gradients of 1 in 50, 1 in 61, which succeeded it, he gradually lost his speed, until his train came to a stand, about 960 yards from the gradient post. He whistled for the guard's break to be applied, preparatory to reversing the engine and slackening the couplings, in

order to get a fresh start; but as soon as he reversed his engine, his train ran back upon him, and he could not again get command over it, until he had descended to the bottom of the bank. Whilst descending, he called out to the guard to run back and protect the train; but he does not know whether the guard answered, because the engine was "blowing off so hard". As soon as he got to the bottom of the bank, he called to the guard to slacken off the break, in order that he might start ahead; and he had just begun to get his train into forward motion, when he saw the passenger train, coming round the curve and through the cutting, within 300 yards of him. He had not been able to move forward more than 10 or 12 yards when the engine of the passenger train struck the van at the tail of the train. He states that he was totally unable to prevent his train from running back. He reversed his engine and put steam against her, and the tender break was hard on. He had plenty of steam- it was blowing off. The wind was blowing very hard, and it blew the sand off the rails as fast as it was applied, in mounting the bank. He thinks that if the guard had put spraggs (a piece of wood or metal wedged beneath a wheel or between spokes to keep a vehicle from rolling) in the wheels of the wagons, the train would not have run back.

Henry Goodspeed, the fireman, confirmed the statement of his engine driver, and states that there was plenty of steam in the engine, and it was only the slippery state of the rails that prevented them from mounting the bank. He has been four months with the engine driver, and with the same engine. The tender with the engine was one they had been using for five or six weeks whilst their own was gone to be repaired, and it had been leaking very much all that time. The water dropping on the break block preventing the break from acting as well as it might have done.

The guard of the train, John Warren, states that he left Luton 7.22, 12 minutes late, and that his train came to a stand at the spot which he pointed out, on Hunter's Bank, at 7.48 p.m. Finding that the train was at a dead-stand, he got his fog -signals and his hand lamp, and started, after seeing that his break was properly applied by another brakesman who was with him in the van, to run back to protect it against the passenger train, which he knew would be following it. He ran back as fast as he could, and at 600 yards from the train he put four or five fog signals on the rails. He then proceeded more slowly until he heard the fog signals which he had left on the rails exploded by his own train, which had run back over them. He went further still, until he saw the passenger train coming, and then he showed his red light and put down two fog signals; and almost as soon as he had got them down the passenger train passed him and exploded them. He heard the engine driver of the passenger train whistle three or four times just as he was passing him. He gave two or three slow whistles, and then one long one, and then the next instant "he was into my break van". The van was in good working order. It was a ten ton van.

An assistant brakesman, Charles Watford, was travelling with the previous witness to learn the duties of a brakesman. This was his second day. He noticed that the train came to a stand on Hunter's Bank. He heard one whistle from the engine, and he applied the break on being told to do so by Warren, whilst Warren got out the fog signals and ran back to protect his train. He then noticed that the train went back down the bank. He had already put on the break as tight as he could, and he did nothing more. He remained in the van until the train came to a stand at the bottom of the bank. When he found that the engine driver was trying to start the train again, he released the break; and then he jumped out of the van, not knowing that the passenger train was approaching, in time to avoid the collision. As the train was backing down the bank it stopped once, and the engine driver was evidently attempting to go ahead, but failed, and then the train ran back further again.

The engine attached to the goods train was a six wheeled engine with four wheels coupled, with cylinders 16 inches in diameter, and a stroke of two feet. The driving wheels were five feet in diameter, and the trailing wheels were 3 foot 6 inches in diameter. The number of the engine was 108. It had been running about four months since it came out new in place of another

engine of the same number. It was fitted with a tender break only. The tender originally supplied with the engine had a loose tire and was sent away, and the tender in use at the time of the accident was Number 24. It was a six wheeled tender. It had a leak over the one of the break blocks. The weight of the engine in working was 30 tons, and that of the tender 18 tons, making a total weight of 48 tons.

The break van was a ten ton break van, of the ordinary description used on the Great Northern Railway, and it appears to have been in good order. It was weighted with cast iron.

Conclusion.

In considering the circumstances of this accident it would appear that the goods train came to a stand on a stormy night, on which the rails were very slippery on a gradient of 1 in 61, and that in his endeavours to get a fresh start the engine driver allowed his train to run back for about 960 yards to the bottom of the bank.

The guard of the train appears to have left his van, and to have run back with his fog signals and hand lamp to protect the train as soon as it came to a stand; but his efforts in this direction were rendered useless by the train running back upon him, and exploding the fog signals which he had placed upon the rails for its protection; and he had not time apparently, after it came to a stand at the bottom of the bank, 960 yards from the point at which it first came to a stand, to go more than 170 yards further towards Luton; and he thus could not afford sufficient warning to the engine driver of the passenger train, so as to enable him to stop his train.

The only servant of the Company to whom it would be possible to attach blame in this case is the engine driver of the coal train, who allowed his train thus to run back 960 yards when he knew that the passenger train would be following him; but this man was no doubt, doing his best after his train came to a stand to make a fresh start, and he laboured under some disadvantage in having a tender break not in thoroughly efficient condition, as above described.

With a view to the prevention of such accidents in future, it is desirable that this portion of the line should be worked by the block-telegraph-system as a means of avoiding collisions between following trains, in addition to the train-staff-system which is already employed to prevent collision between meeting trains; and this is the more necessary in consequence of the steep gradients and sharp curves with which it has been constructed.

I have &c.,

H. W. Tyler

The Secretary,

(Railway Department),

Board of Trade.

Printed copies of the above report were sent to the Company on 23rd February.