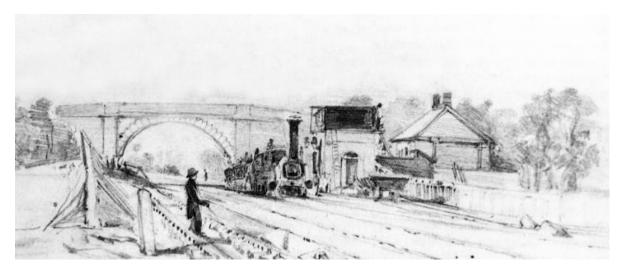
### Harrow: Accident Nov. 12th 1840:



# Harrow Station, 1837.

The Harrow accident resulted in the tragic demise of the two men Simpson & Dawson. The inquest and the degree of media attention attending such a serious incident does however give us a fascinating insight into the early workings of the London & Birmingham, especially the little discussed night time freight or as they called it in those days 'luggage' trains.

A derailment of a luggage train due to the breaking of a freight wagon axle, early in the day, set off a chain of events resulting in a serious double fatal accident late into a foggy evening.

Joseph Simpson was a driver and William Dawson a stoker or fireman. Both men lost their lives largely through Simpson's not taking enough care with signals, this was not the first time for Simpson but it was his last. We can have considerable sympathy with the crews of these trains struggling to see small light signals in difficult conditions, remember they had no cab, not even a spectacle plate, no protection of any sort. The point is made that their hearing may have been 'muffled' by the them wrapping their heads, presumably against the cold, so they may have missed whistled signals between the engines. Simpson however had a something of a history of missing or ignoring signals.

There was also much to be developed to improve the safety of railway workings. There is no mention of a break van, more common in later years, although there is a breaksman, who rode with the train usually in the last wagon. The time interval working, signals and the poor functioning of breaks, were very much the source of early railway problems and accidents.

Bury's engines were the product of an early 'small engine policy' and it was not uncommon for trains to be double headed or 'piloted'.

The inquest took place in Harrow at the Queen's Arms which was an old Elizabethan Tudor Inn that survived until 1972.

Loco	Whyte	Description	Date / Builder
No.	notation		
1	2-2-0	Passenger Engine Cylinders 12' x 18' Wheels 4', 5'6"	7/1837 Bury
3	2-2-0	Passenger Engine Cylinders 12' x 18' Wheels 4', 5'6"	8/1838 Bury
15	2-2-0	Passenger Engine Cylinders 12' x 18' Wheels 4', 5'6"	7/1838 Hick
82	0-4-0	Goods Engine Cylinders 13'x 18' Wheels 5'	12/1838 Maudsley
90	0-4-0	Goods Engine Cylinders 13'x 18' Wheels 5'	11/1839 Maudsley

## Locomotive Data: Harry Jack, Locomotives of the LNWR Southern Division, RCTS, 2001

Loco No.	Driver	Fireman/Stoker
1	Martin Brown	Quinlan
3		
15	Bradburne	William Finch
82	Joseph Simpson	William Dawson
90		

#### **Locomotive Crews**

Name	Position
David Peek	London & Birmingham Railway Policeman
Mr. J. Bedford	Superintendent of London & Birmingham Railway Police
Parker	
George Adams	Breaksman (on the train)
John May	Porter, Harrow Station
Henry James Mitchell,	Clerk at the Boxmoor
Mr. Richard Creed	Secretary of the London and Birmingham Railway Company
Mr E. Bury	London & Birmingham Railway Locomotive Superintendent

# **Railway Employees**

A dreadful sequence of events was set in motion when an 'over loaded' wagon of freight train from Burton from the Midland Counties line, broke its axle tree at Woodcock-hill. With several other wagons derailed the down main was blocked and subsequent trains had to switch over to the up line to negotiate the accident. In the meantime a light engine shuttled between Harrow station, the northerly point at which trains crossed over, and the stricken wagons where 40 or so workers were clearing the tracks. This loco, No. 15, then at a critical moment became an obstruction on the line, it having been left with only the fireman in attendance. This offence would have been less serious if a following freight train hadn't failed to see warning lights and ploughed into it causing the death of a driver and fireman.

Mr. Wakley, M.P., the coroner for the western division of Middlesex, and a jury of fourteen gentlemen resident in the parish of Harrow, assembled at the Queen's Arms Tavern, Harrow station, to investigate the circumstances attendant on the deaths of Joseph Simpson and William Dawson.

The catastrophe created a lamentable sensation throughout the neighbourhood of the occurrence, and the inquest-room was densely crowded by the surrounding gentry. Several of the directors of the company, Mr. Creed, the secretary, Mr. Bruyers, the chief superintendent, and Mr. Bury the chief of the locomotive department of the London and Birmingham Railway, were also present. The rules of an inquest at this time rather macabrely required the jury to be sworn in the presence of the bodies of the poor victims. The jury, having viewed the bodies,

which lay in an anteroom of the tavern, and which presented a truly shocking appearance of mutilation, and the formality of swearing the jury in their presence second time being gone into, they returned to the inquest-room'. In the style of the time the bodies were graphically described: 'One had both thighs fractured, and the feet nearly severed from the legs; the other had fractures of the thighs, and a boot hanging to the leg only by a ligament. There were scars and bruises on the other parts of the body'

Examination of William Finch stoker/fireman: Finch who lived at No. 2, Barclay-street, Somerstown, next to Euston, stated he was the fireman of the London & Birmingham railway engines 69 and 90, suggesting that he was regularly assigned these engines. On the day of the accident Finch arrived on No. 90 from London, pulling a freight train. On arriving near Harrow the crankaxle broke. He stayed with the loco when engines No. 15 and No. 3 'came up' presumably bringing a luggage train. 'Mr. Parker, a foreman of the locomotive department station, ordered me to go on 15, as the regular fireman was not with her.'

The train of No.15 and No.3 then went on to Tring with Finch and driver Bradbourne on the footplate of number 15, leaving Harrow sometime after midnight. It seems they then returned, presumably light engine to Harrow, about 2:30am. 'We received the red signal to stop there.' The signal was visible from about \(^{4}\) of a mile before the Harrow station. On getting up to the station, the policeman on duty told Bradbourne to go on slowly to Woodcock-hill, and see what had happened, as there was a break down.' The engine was ordered by Mr. Bedford, to make several return trips between the scene of the accident at Woodcock Hill and Harrow. This was seemingly achieved by reversing on the main and managing three or four such trips, on one occasion even without Finch. 'Bradbourne told me he had orders to go and get three gallons of ale and bread and cheese for 46 men, who were at work getting the carriages off the line. On arriving at Harrow I saw Bradbourne speak to the policeman and ticket collector, but I did not hear what he said.' The engine was left 'opposite the Harrow station' so presumably on the 'up main'. Finch stated that Driver Bradbourne told him 'to get out of the way if I saw anything coming', a somewhat ambiguous suggestion but I think this meant move the engine forward. 'He did not say how long he should be gone' but 'had left the engines several times before to go into the station to give orders on that day. He had not been gone from the engine two minutes when May, the porter, said to me, "There's something coming—you had better go on." At that time the policeman had a red light in his hand, and there was another one up at the post. On hearing what May said, I shifted the regulator and put on the steam; when May again called out, " Make haste, or they'll be into you." I turned round and saw the train so close to me that I was sure there was no chance of escaping—so I shut the steam off and jumped off I had at this time reached within about a dozen yards of the Birmingham side of the bridge.' Finch states that he jumped off the loco himself landing on the down line. He didn't see if the front engine had a lamp on. 'There ought to have been one on the near side of the tender. I did not see the fire of the engines or hear their beat until May called out.' Finch didn't actually see the collision between engines No.82 and No.1 with No.15 but saw No.82 turning over as he 'as I was getting up off the ground'.

Another engine driver, Martin Brown, was then examined: Brown, a London & Birmingham railway driver from Wolverton, was driving No.1, the loco behind Simpson and Dawson, who driving no.82- in other words, the two locos double heading the freight train.

Their train started for London from Wolverton about a quarter to four o'clock in the early morning. 'On our way up one down train passed us. It was a passenger train. There was no light on that train to Warn us of any danger on the road. I think about six o'clock we came from within

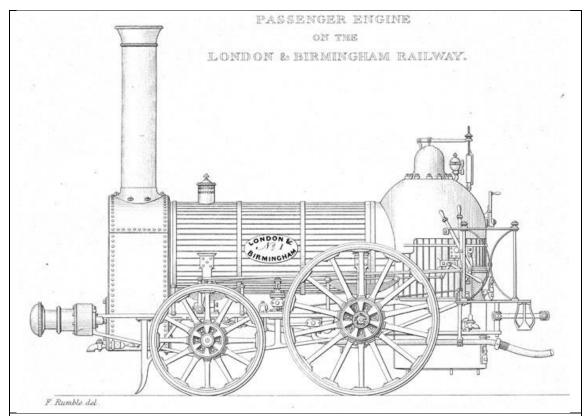
a quarter to half mile of Harrow station. I then saw that the red lights were up. I did not see them before, although I kept a good look out. I cannot account for why I did not see them before in any other way than that there was fog between us and the station. I saw no other signal than the red lights. I knew by that there was some obstruction, and I immediately gave a signal to the deceased, Simpson, who had charge of No. 82 engine. The signal I gave him was opening the valve of engine. I repeated it once or twice, but I don't know whether Simpson saw it. He ought to have done so. I never sounded the whistle. The signal I gave was one of danger, and when I gave it Simpson ought to have shut off his steam and reversed his engine, and used every other means to stop. I did so myself, but Simpson did not shut off his steam at all. If he had done so, there would have been plenty of time after I gave the signal, so as to have stopped before arriving at the Harrow station.'

Bradburne, the driver of no.15 stated later that he had a red light at one side of the tender to his engine which was the usual warning light. A white light would be to move on, " all's safe." I had a white light in front towards London.

Brown states that Simpson's train received no warning of the Woodcock Hill breakdown at Watford but proceeded with caution due to the seeing the previous red lights however Simpson's engine which was piloting did not respond. 'Having shut off my steam and reversed the engine, I had the break also put down by the stoker, and kept a look out myself.'

The engine whistle is the usual signal amongst us. 'I can't say whether Simpson heard it. Lifting the valve makes a loud and sharp sound when there is much steam. If he had heard my signal, there was time to shut off the steam, and we should not have gone by the station as fast as we did.' Brown stated that there was no indication that Simpson switched off his steam.

'As I approached Harrow station I saw an engine on the line before me, but I could not tell if it was moving or not. My engine, No.1, first struck No. 15 within about 12 yards of the archway. As we approached a collision appeared to me to be inevitable, and I slung myself on to the step of the engine. I jumped off and was saved. Dawson, the fireman, remained and was killed. He had done all he could with the break to stop the engine. I



Whishaw, F, (1840) The Railways of Great Britain and Ireland: Practically described and illustrated London: Simpkin, Marshall and Co.

The driver James Bradburne was then called, and having been sworn in stated he was the driver of the engine, No. 15 on the night of Thursday last. He was at the Harrow station, about 10 minutes past 6 o'clock. 'I left my engine in the care of my fireman, Finch, and I went into the station house to speak to the clerk. While I was there I heard the sound of engines as 'going towards London'. I did not hear them till they were close up to the station. I ran out and saw engine No. 82 off the line.'

Bradburne, a driver of 7 years experience, had to run a distance to catch up to where his engine had been moved by Finch to get it out of the way. 'I had not left my engine, more than two minutes when the occurrence took place. I had orders to keep the line clear between the Harrow station and Woodcock Hill, where the goods waggon had broken down.'

Bradburne then described the arrangements that were in place for the working to avoid the stricken train at Woodcock Hill. 'The train coming in from Tring was to cross over to the other side at the Harrow station, to avoid the place where the luggage ' train had broken down.' So Simpson and Brown's train, drawn by engines No.1 and 82, were to move over to the down line, to pass the blockage at Woodcock Hill via the reverse working of the down.

'I was told to go and give orders to stop the up trains till the 6 o'clock down train had passed Harrow station. I gave the order to a policeman. The ticket collector and the porter were present. I was on my engine at this time. I said to the policeman, "I have another message to deliver—namely, to get some refreshment for the men down below Woodcock-hill." I then got off my engine to tell him what quantity of refreshments was wanted. I did this because the collector did

not like to go by himself, and as I got down, he said, "Come along with me." I went with the collector to the Queen's Arms, to give the order, but just as I got upon the steps of the door, I heard an engine coming up, and I ran down to my engine. I had left it in the care of William Finch, the fireman, with orders not to leave it. He got off when I did, but I made him get on again. I also told him, if he heard any noise at all of a train coming, to move on towards Woodcock-hill. It was Mr. Bedford who told me to order the refreshments, and that at the station they would tell me where to get them.

When Bradburne got back to the station he saw that No. 82 had been in a collision, it was lying on its side, but that no.15 had moved on. He then mounted engine No.1 and pursued his own engine, No.15, which Finch had abandoned, with the steam shut off to 'prevent the engine coming on the men below at Woodcock-hill.' but which presumably, still had enough power to continue on some distance.'

'A gentleman connected with the company here observed that there was a copy of the printed instructions hung up in the office, but they were often given verbally to the men, as in many cases they (the men on the engines) could not either write or read.' Bradburne admitted to not being able to read or write.

Coroner (to Bradburne): 'Do you attribute any blame to anyone in this case?'

Bradburne: 'Yes, I do, to Simpson.'

Coroner: 'Why?'

Bradburne: 'Because I don't believe he had ever shut off his steam.'

Coroner: 'When two engines are attached to a train, what means has one driver of letting another know that there is danger in front?

Bradburne: 'By blowing his whistle.'

Coroner: 'Did you hear a whistle blown?'

Bradburne: 'There was never a whistle blown at all; I am certain of it. The driver of the second engine could see the red light in front distinctly.'

Coroner: 'I am anxious that you should repeat what instructions were given to you on your being appointed a driver?'

Bradburne: 'I really cannot recollect. I have been following up the rules as to keeping sober, and so on. The observance of the signals, viz., red lights, "a sudden stop;" green light, "a gentle stop;" and white light, "all clear." We knew the speed at which we were to travel by the time allowed.'

Interesting the coroner drew attention to the fact that a driver should be fined for leaving an engine, on the line.

Finch stated that he had known Simpson about five weeks and in that time had never made a complaint against him for being a careless driver. He added however that did not think Simpson was a careful driver. In Finch's opinion Simpson 'was a very fast driver, and he was very fond at sitting down on the seat by the hand railing of the foot plate' but he 'never knew him to go to sleep on duty.'

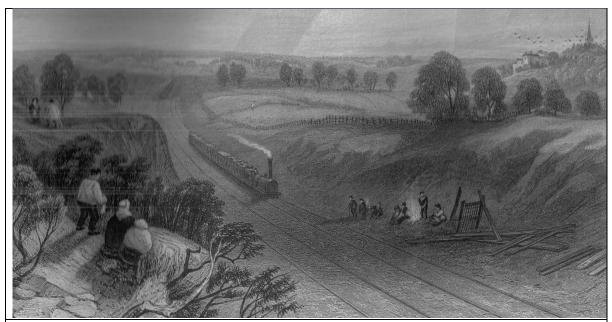
The coroner pointed out that it is the duty of both driver and fireman to look out but also that a copy of the "rules" usually put up at the stations. A copy was handed to Finch who said he could read it, but could not say that he had ever seen those rules before. 'When he was appointed to go as fireman to Simpson, he got no particular instructions except that he was to keep the fire up'. A gentleman connected with the company here observed, in answer to a question from the coroner, that there were no special instructions for firemen. The instructions were for both engineers and firemen.

The Coroner asked: 'To what circumstances do you attribute the deaths of Simpson and Dawson?' Finch responded stating the cause of the accident was due to their going downhill so fast, and not shutting the steam off. Finch stated that Bradburne was less at fault for the accident since the other train should have stopped when its driver saw the signal even though he confirmed that the instructions 'were to leave an engine when stopped on the " siding," that is, off the regular rails'.

The Coroner asked how it was that when the first accident (the breaking down of the luggage train at Woodcock hill) was known so early as half past 2 o'clock, p.m., notice should not have been sent down to warn the upcoming trains?—A Gentleman connected with the company said, that a notice had been sent down to Watford as soon as it could, and all the up-coming trains had crossed over at Harrow except the one by which the accident occurred. Finch added that he and Simpson had had some 'words of difference' to do with Finch not making sufficient 'fire' for him. Finch clarified that although he did not consider Simpson a safe driver, but did not make this complaint to any persons in authority in the company

Mr. Wakley stated that the jury on Monday had unanimously resolved that it would be advisable to have Sir Frederick Smith (Government Inspector). He had accordingly written to the President of the Board of Trade, requesting the attendance of Sir F. Smith; but through a mistake at his house, the letter was not sent until the previous morning. He had not received any answer to the letter. Mr. Creed (secretary to the company) said that Sir Frederick had left town to examine into the cause of the accident on the North Midland Railway, and would probably not return until the I beginning of next week. Mr. Wakley said he hoped he would be in - time for their next sitting.

George Adams examined: 'I am in the employ of the Company as breaksman. My duty as such is to see the proper greasing, coupling, and trimming of the lamps belonging to the engines. I can hear when the steam is shut off. On the night in question the first thing I saw on approaching the Harrow station was the red light, distant about 400 or 500 yards, or a quarter of a mile. As soon as I saw this I let down my " break" instantly, I could not tell then whether the steam was beating or not, as the wind blew so very high. I saw two red lights, one with the policeman another the stationary. The policeman (who was about 250 yards beyond the station on the Birmingham side) hallooed out to "hold on." At the rate we were then going it would require a notice of from half a mile to three quarters to enable us to stop.' In answer to another question, witness said, that the policeman was about 300 yards from the "points" where the engine was to turn off to the "down line." We left Wolverton at 10 minutes past 4. We met the 5 o'clock train from London about a mile from Harrow. We also met the 2 o'clock train from London at Denbigh Hall. I had conversation with Simpson and Martin Brown; the drivers of the two engines attached to our train. Neither of them said a word to me in respect of any obstruction on the line. I did not hear or see at either of those places, anything which led me to think there was any obstruction on the line.



The site of the accident was not far from this point behind the artist. Harrow on the Hill cutting on the London & Birmingham Railway. 'The London & Birmingham railway'. Thomas Roscoe, Charles Tilt, 1838



The location of the accident somewhere south of the overbridge, approximately centre of the map. (Credit Steve Kirby). Note Woodcock Hill labelled to towards the right. South Kenton station is to the south of this bridge.

Mr. Bury: 'The greatest difficulty with which we have to contend in railway travelling is the want of means to throw a light far enough'.

A Juror: 'And therefore the greater, caution should be used.'

The Coroner continued to question George Adams the breaksman: 'Can you account why it was that at Leighton or Boxmoor you did not hear of the accident which occurred at Woodcock hill at a quarter to three?'

Adams replied: 'I suppose they had not heard of it. I saw several policemen on the line all of whom exhibited white signals, except at Boxmoor and Harrow station, where red lights were held up. As soon as the red light was seen I saw the engine 82 roll over.' Adams also attested to the fact that 'Simpson was a very fast driver' and 'with a goods train he ought not to exceed twenty miles an hour.' He added 'there is no exact time fixed' for a goods train's arrival, 'because sometimes we are more heavily laden than at others, and sometimes we stop to let ether trains pass us. Simpson used to drive faster than any other man I have known drive with goods'

Henry James Mitchell, clerk at the Boxmoor station, said he had not heard of the accident near Woodcock Hill till half-past eight that evening. He stated that he had 'no official notice of it'.

David Peek, a policeman employed on the railway, stated, that after the notice of the breakdown of the luggage train at Woodcock Hill, he kept up the usual signals of danger in advance—viz. a red flag while it was daylight, and after dusk a red lamp. He had in consequence stopped three passenger trains. They all arrived within the hour.

The Coroner enquired with regard to time interval working—What is the interval at which the trains start? Mr. Creed answered that trains leave with at least half an hour between them with at only one exception, which starts at an interval of a quarter of an hour after the morning mail train.

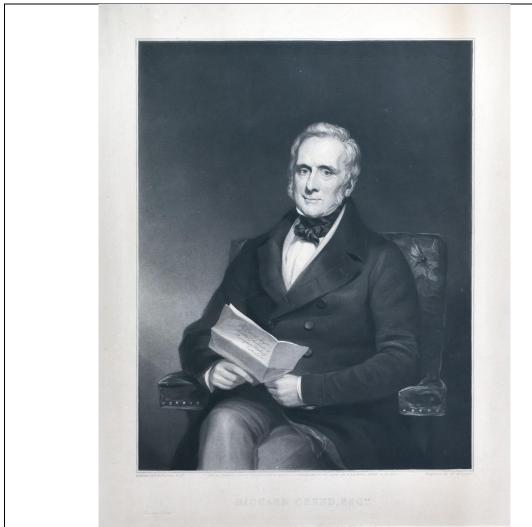
David Peek, the policeman continued—'I crossed the three trains on to the down line, and then, according to orders from Mr. Bedford, I stopped all trains coming up to town. I saw the upluggage train. There were two engines, one in front (No 1) and one behind (No. 82). To me it appeared that the front one had reversed her gear and shut her steam off, but the other seemed to have her steam on. They passed me very rapidly. I hallooed to them as loud as I could to hold on, but they did not seem to hear me

Peek stated that Mr. J. Bedford, superintendent of Railway police had heard of the breakdown at Woodcock Hill. As soon as he could he sent directions by Callan, the driver of the Aylesbury down train, to tell the policeman at the Harrow station to stop all trains until he heard further from him. He gave directions that no trains should be allowed to pass until the 5 and 8 o'clock down trains had passed. He sent Bradburne with instructions to get some refreshment for the men. He could not say whether he told Bradburne to call at the Queen's Arms himself, or told him to call at the station, but did not give Bradburne any instructions about his engine that he was aware of. Did not send any account of the stoppage on the up train on beyond Harrow. I am of opinion that an accident, and [one] of a much more serious nature might have occurred, had the engine No. 15 not been so stationed. In other words, that if the engine had not been in the way, the up-train would have passed on, and coming on the 40 or 50 men who were at work in clusters at Woodcock-hill, when a most serious loss of life would probably have occurred. It was not a usual thing, for a train to pass a station where a red light was exhibited. Mr Bedford had one report of Simpson's having passed without having noticed the red flag. This was about two months back for which he was fined 1l.

Mr. Rotch: 'Would you consider it against rule to have two engines —one on the up, and one on the down line—on Sunday last, with their steam up, and no person with either, for the space of an hour?'

Peek: 'I certainly should say that was very irregular; but less dangerous on a Sunday than on any other day, as the regular trains do not go on that day.'

Mr. Rotch (in an under tone, to the Coroner); 'But that was the case last Sunday, after this accident, and the men were drinking in this house; and when I, who saw the thing, made a noise about it, the people at the station blew the whistle, and when the men heard it they rushed out.—The inquiry was then adjourned to Wednesday next.'



Richard Creed, who attended the inquest, was the Secretary of the London & Birmingham Railway

Sir Frederick Smith now attended the inquest (that had been adjourned for the third time); but the coroner said that considering the position occupied by Sir F. Smith, and the report he might have made to the Government, which might place him in a situation of some difficulty, he did not think there was any necessity for examining him. The jury concurred with the coroner, and Sir F. Smith retired. Mr. Horace Jago here addressed the coroner. He said he attended as the agent of Lord Northwick, the lord of the manor. Lord North-wick held the manor by charters coming down to him from the earliest of the Norman Kings. The Coroner; I cannot hear you on that subject. It may be all true; but has Lord Northwick held any inquests here within the last fifty or sixty years?

Mr. Jago: 'I cannot say; but the whole of the goods and chattels of a murderer were given up to him in 1812.'

Coroner: 'If there be a deodand, you may apply to the Court of Exchequer.' Mr. Jago said no Court of any kind could legally take place without Lord Northwick's consent.

Coroner: 'If he does not give his consent, he cannot get the deodand.' (A laugh.)

Several witnesses were examined, but not many facts of importance were elicited. The wheels of the train that broke down it appears were made of cast iron. The cost of No. 1 engine is 1,330L the engine 1,150L, and the tender 180L. The engine has been very little hurt by the accident, but the tender is a good deal damaged. The cost of engine No. 8 is 1,250L, it is but little injured, but the tender is much injured and cost the same as that of No. 1 engine.

Mr. Bury, superintendent, deposed that he received a good character with Simpson but had received a complaint against Simpson for not obeying signals. He was fined one sovereign for so doing. Mr. Bury believed from Simpson's statement that the police were in fault.

Simpson had previously continued driving past the Harrow station in defiance of the red signals when a bullock was seen hanging by the neck outside of the train. Bury considered him a good driver so there was no official report made of Simpson's neglect on this occasion. If a driver does wrong it is in my power either to fine or discharge him.

I came up with the mail train from Birmingham last night, and it was very frosty. The stokers and drivers and guards were muffled up for warmth, and it was almost impossible to hear any noise, owing to the swiftness with which they passed through the air.

Mr. Richard Creed, Secretary of the London and Birmingham Railway Company, stated that the directors met on the 14th inst., and an entirely new list of regulations was agreed to. He read then to the Court the following new regulations.

- " 1. Engines, in all cases, whether acting as pilots, or having gone out as assistants to trains, to carry tail lamps.
- 2. Weights of all loaded waggons to be ascertained by weighing machines, on coming upon the London and Birmingham Railway, and the necessary number of machines to be ordered.
- 3. The luggage trains to work to a timetable, and the times of arrival at the respective stations to be observed and reported, whether stopping at such stations, or only passing through.
- 4. For carrying on the foregoing suggestion (3), the number of waggons in each luggage train to be limited.
- 5. Waggons found by the weighing-machine to exceed the regulated load not to be permitted to go with the train. Mr. Bury, as superintendent of locomotive machinery, to examine and report on the state of the waggon wheels and axles, and immediate provision to be made for replacing all that are in any way defective.
- 7. All parties supplying wheels and axles, or other iron work for the carriages or waggons, to send a declaration of the particular manufactory of the iron which they have used.
- 8. Clause 195 of the Act of Incorporation, with reference to the approval of carriages coming on the London and Birmingham line, to be strictly enforced as in the case of clause 196. 9. The

police and station clerks to report as to the state of the taillight of every train, whether luggage, passenger, or ballast.

- 10. The pneumatic signal apparatus to be applied to the tunnels, and to such of the stations on the line as from local circumstances may require it.
- 11. Lodgings to be provided for the station clerks and servants of the company at the stations on the line, that their services may be at all times available." The Coroner observed that many of these regulations he had no doubt would be found most useful in preventing accidents.

It was, therefore, important they should be made known to the world. The Coroner said he would now, in company with one or two of the jury, if they pleased, visit the poor man Quinlan, who was Simpson's stoker on the night of the fatal occurrence, and ascertain, if possible, if he was in a fit condition to undergo examination. The coroner then, in company with Mr. Rotch, the foreman, and one or two other jurors, retired to an adjoining apartment of the tavern in which Quinlan lay. On their return Mr. Rotch stated, that it was evident that although the poor fellow was fast recovering from the dreadful injuries he had received, still his condition was such as to preclude the possibility of his then enduring the fatigue of an examination.

In fact he had no remembrance at present of the late occurrence, but he expressed his opinion that he must have been thrown off the engine by the shock. The Coroner said they had as yet not the slightest evidence to show what the deceased, Simpson, must have been doing before arriving at Harrow station on the night of the occurrence, and therefore the evidence of Quinlan, who was with him on the same engine, was of more real importance than the whole of the other evidence put together.

The inquiry was again adjourned until Wednesday next.

Quinlan, the injured stoker of engine no.1 who was on the footplate with Martin Brown, having been sworn in, stated as follows: 'I reside at No. 4, Camden street, Camden town, and have been in the employ of the London and Birmingham Railway Company for two months as a fireman. I had been for two years before working in the sheds of the company. Latterly I have been fireman to Simpson. Simpson only once went out without me since my appointment under him, when I was late. I was with him last September when the bullock jumped off the waggon.'

Apparently in the melee the bullock lost his horns but was not killed. Quinlan stated that after the accident with the bullock, there was only one other accident that occurred while he was with Simpson. He relayed that on one occasion a red board was put up between the rails near Harrow station as a warning to stop the train and Simpson failed to stop. 'The board upon that occasion was raised about five feet, and we passed over it, and it was knocked into the ashpit of the engine.'

Coroner: 'What were you doing at that time?'

Quinlan: 'We were going after a luggage train to Watford, and had ourselves but a single engine and tender, and were upon the down line.'

Coroner: 'Did not Simpson stop at all, in compliance with that signal?'

Quinlan: 'Oh yes, he did. He could not pull up in time, but he pulled up very near it, after he had passed on a little way. The signal was then hoisted for us to stop because one of the metals was off the rails farther down.'

Coroner: 'Do you recollect leaving Wolverton on the evening of the 12th of last month?'

Quinlan: 'I do. I set out for London with Simpson. Martin Browne and Joseph Dawson were in the engine No. 1, and immediately before our engine, No. 82, and attached to the same train.'

Coroner: 'Do you remember who the breaksman was that night?'

Quinlan: 'I do not. **Sometimes we do not know whether or not we have a breaksman until we come to a station**; and we seldom know the name of the breaksman. Upon the day on which the fatal accident took place we left Wolverton between twelve and one o'clock in the afternoon, and stopped successively at the Watford, Leighton, and Boxmoor stations.'

Coroner: 'Referring to the breakdown of the luggage train, which it will be recollected occurred at Woodcock hill the same afternoon, but between two and three o'clock) Were you told of an accident at either of these stations?'

Quinlan: 'We were not; but at Boxmoor the policeman told us to go by Harrow station gently. I do not know the name of that policeman; but I am quite positive that he gave that caution.'

Coroner: 'Did he say that to Simpson, or to you?'

Quinlan: 'To Simpson.'

Coroner: 'Did either you or Simpson ask the reason why you were to go slowly by Harrow station?'

Quinlan: 'Not that I remember. Simpson made no answer that I could hear when the instructions were given to him, but he got blamed with the policeman. The policeman gave this caution directly as he stopped at the Boxmoor station; but I did not hear what Simpson said in reply, as I was then busy taking in water.'

Coroner: 'Do you recollect what happened after you left Watford?'

Quinlan: 'I do.'

Coroner: 'Do you recollect that you sow a red light?'

Quinlan: 'I do. We saw that signal fully half a mile before we got to the Harrow station.'

Coroner: 'Did Simpson say anything to you when you saw it?'

Quinlan: 'No but I told him I saw it, cautioned him to let the steam off, which he did, until we got it down to about an inch, in which state he kept it. It was here stated in explanation, that the full force of steam is four inches in depth. so that at this time Simpson had let off three fourths of the power of his engine.'

Quinlan continued: 'I am positive that we kept about an inch of the steam on.'

Coroner: 'Did Martin Brown of No. 1 engine give you any signal?'

Quinlan: 'Yes, he kept lifting the valve up.'

Coroner: 'Did be turn his steam off?'

Quinlan: 'Yes, quite.'

Coroner: 'Did you feel the bumping of his engine at all?'

Quinlan: 'We did; but not until it bumped against ours.'

Coroner: 'At what rate were you going when you first saw the red light signal?'

Quinlan: 'At the rate of about twenty-five miles an hour.'

Coroner: 'Did Simpson tell you why he did not let off his steam entirely?'

Quinlan: 'He did not; and though, he let off three-fourths of the steam, the fourth that remained was enough to keep the waggons on at full swing, as from that point to the station here is all downhill.'

Coroner: 'Could you have stopped at the Harrow station then with so much power on, and teeing at such a rate as you have stated?'

Quinlan: 'I am sure that it was impossible.'

Coroner: 'When you saw the red light continuing up and the train still going at the same time, did you speak again to Simpson?'

Quinlan: 'I did; I told him again a second time to let the steam off, but he took notice of me, he did not shut the rest of his steam off.'

Coroner: 'Do you recollect passing the policeman as you approached the Harrow station?

Quinlan: 'I do; I remember that he hallooed to us to hold on.'

Coroner: 'Did Simpson make any answer to that shout?'

Quinlan: 'Not that I could hear.'

Coroner: 'Can you tell us whet Simpson did, or whether he did anything when the policeman hallooed?'

Quinlan: 'I did not see that he did anything.'

Coroner: After you had passed the policeman, and as you came up to this, the Harrow station, do you recollect that Simpson did anything or said anything to you?

Quinlan: 'He neither said nor did anything.'

Coroner: 'What did you then?'

Quinlan: 'I then perceived that we were coming close upon Bradburne's engine, No. 15, so seeing that there was not a moment to be lost, I shifted to the other side and jumped off.'

Coroner: 'Before jumping off, did you speak at all to Simpson?'

Quinlan: 'Yes; I said, "It is time for us to be jumping off now." Simpson never spoke again. He was then standing between the hand railing and the boiler.'

Coroner: 'Are you quite sure that Simpson made no alteration in the moving power of the engine as you were passing the Harrow station?'

Quinlan: 'I am sure that he made no change whatever.'

Coroner: 'Did you hear the valve lifted up?'

Quinlan: 'No, not our valve; but I heard Martin Browne lifting his valve a second and a third time.'

Coroner: 'Do you think Simpson could have pulled up between the time he saw the red light and the time he came to the Harrow station?'

Quinlan: 'Yes, he might; but not while he had so much steam on.'

Coroner: 'Are you quite certain that Simpson saw the red light time enough to have pulled up at the Harrow station?'

Quinlan: 'Yea, we might have come in quite easily and comfortably.'

Coroner: 'What kind of a driver was Simpson?'

Quinlan: 'He used to run very hard, seldom or never looking before him. We had had the red light showed to us many times to stop to take on a waggon, but he always passed on, not pulling up until he had also been hallooed to, and then be used to work the engine back.'

Coroner: 'Do you know whether any complaint was ever made of Simpson to the superintendent?'

Quinlan: 'Yes, I know that he was complained of when the bullock jumped off, but I do not recollect that he was complained of at any other time.'

Juror: 'When at Hatchend bridge can you see the light at the Harrow station?'

Quinlan: 'Not until we have passed it.'

Juror: 'But is there not generally a signal light at the Hatchend bridge, near Pinner Park gate?'

Quinlan: 'There is not a light fixed there, but there is generally a man there who has a light.'

Juror: 'Was the man there that night?'

Quinlan: 'He was not, if he was there I must have seen him.'

Juror: I wish to direct your attention to this important point, Mr. Coroner. The man who should have been at Hatchend-bridge when the witness passed with Simpson, was, in fact, taken away and sent to the break down at Woodstock-hill, and, after this accident, he was sent back to his former post at the bridge.'

Coroner: 'Was Simpson sober the evening of the lest accident?'

Quinlan: 'He was.'

A Juror: 'Was he at all deaf?'

Quinlan: 'No.'

Juror: 'Could he see well?'

Quinlan: 'He could.'

The evidence being now closed, the jury returned to the court room, and the Coroner addressed them with a view to the verdict they had to give. After some observations, he said in this case the unfortunate author of the calamity, Simpson, who was now no more, and whom no verdict could reach, and whom, therefore, Mr. Wakley would speak of with less scruple. Simpson it

seems beyond a doubt to have been actuated by a wicked recklessness of his own life and of the lives of others.

Mr. Wakley stated that he believed that in consequence of Simpson's criminal wantonness his life and that of the unfortunate Dawson were lost.

After nearly three hours' deliberation the following verdict was at 12 o'clock delivered to an audience who listened with intense anxiety: "We find a verdict in the case of 'Wilful Murder' against Joseph Simpson: in the case of Joseph Simpson, Felo de se.'

We impose a deodand of £2,000 on the engines and tenders Na. 15 and No, 82." With respect to Bradburne, the jury had felt considerable difficulty in not agreeing to a verdict of manslaughter, and they beg to express their sense of the great impropriety of his leaving his engine without putting it on the siding, and of his leaving it at all in the situation which proved so dangerous.— Mr. Rotch, the foreman, then read the following observations:—" The jury cannot conclude their labours without expressing their surprise and regret at the manifest inefficiency of the executive of the company as connected with the matters that have come before them in this inquiry. The directors seem to have passed and printed many excellent rules and resolutions, -which have been neglected to be carried out and enforced; while, in some instances, printed instructions have been given to a class of men, unable from want of education to read them; and in some cases persons appear to have been put on as drivers of engines, having the whole conduct of the trains, without being duly qualified for the purpose.

The jury consider great blame, is attributable to the directors, for continuing in their service such a reckless driver as the unfortunate man Simpson; and they are forcibly struck with the ignorance, of the executive of the numerous acts of disobedience and wanton carelessness on his part which have been produced before them in evidence.

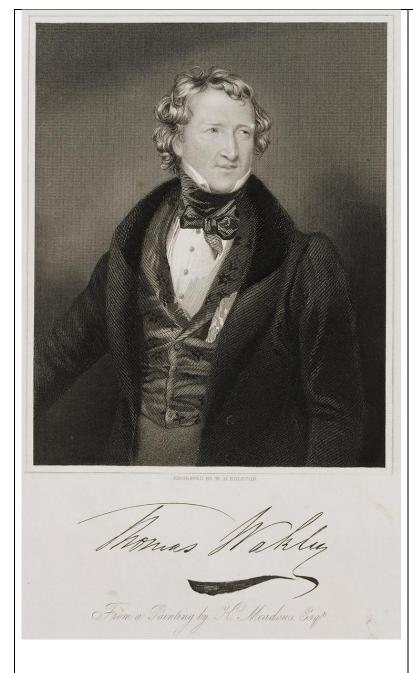
Considering the immense importance of the public safe conduct in a mode of conveyance, over which they are deprived of all control, or when in motion even of the power of remonstrance or complaint, but are entirely at the mercy of the engine driver, the jury feel that the public have a right to expect that some person of superior education and attainments, as an engineer, should be appointed as the captain of each train, and should proceed with it and conduct it to its final destination.

The night signals are evidently insufficient, and yet no efficient means seem to have been adopted to improve them; while it is manifest that no security can be attained until a means of communication between the guards and the engine drivers is established; to all which matters the jury feel it is the bounden duly of the directors to turn their immediate and earnest attention."

The Coroner now said, that in consequence of the verdict that had been returned, the inquisition would occupy a considerable time in its preparation, so that it should be drawn with requisite care. The Court was therefore adjourned until next Saturday week, when the inquisition will be signed.

Mr. Wakley then sent for Bradburne, the driver of the engine No. 13, but he had left.

Mr. Jago, the solicitor to Lord Northwick, made a claim, pro forma, for deodand, for the noble earl, who is lord of the manor by virtue of a charter dated since the reign of Stephen.



The Coroner of the Harrow Accident was Thomas Wakley (11 July 1795 – 16 May 1862) was an English surgeon. He gained fame as a social reformer who campaigned against incompetence, privilege and nepotism. He was the founding editor of The Lancet, a radical Member of Parliament (MP) and a celebrated coroner. Six years after presiding over the inquest of this accident Wakely presided over a more famous inquest, that of Private John White known as the Hounslow Incident.

The exposure of the circumstances surrounding Private John White's death at Hounslow Barracks in 1846 scandalized the British public. At the first inquest, the coroner's jury, upon hearing the testimony of a military surgeon, ruled that White died from natural causes. But Thomas Wakley, coroner of Middlesex, convened another inquest. That investigation found that White's death was caused by the 150 lashes he received. The re-opening of the case received much notice in the British press, where it was cited as a vindication of the argument that justice could only be served if coroners were democraticallyelected, medically trained, independent and fair-minded. Public uproar over the killing of John White eventually spurred the reform of Great Britain's military disciplinary codes: White was the last British military man to suffer death by flogging.

Report of the Coaching and Police Committee on the Accident of the 12<sup>th</sup> Nov at the Harrow Station at a Special Meeting held at Euston Station on the 13<sup>th</sup> Nov. 1840

Present: Mr Glyn, Mr Calvert

The first of the Merchandise Trains which reaches London about 3 o'clock pm had arrived at 1 ¾ miles this side of Harrow when one of the wagons broke down and 5 others were in consequence thrown off the rail.

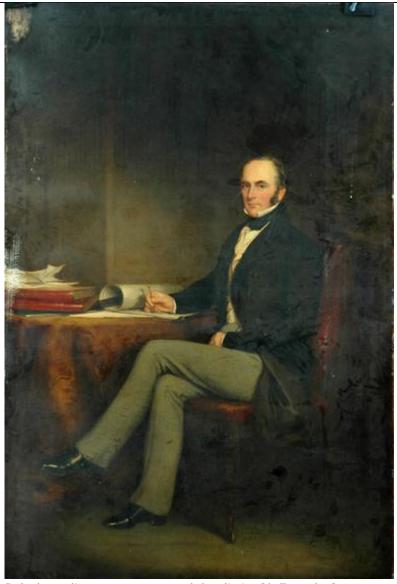
Immediate notice of the occurrence was sent to the Watford, Harrow and Camden Stations to prevent the possibility of any collision with the Trains then passing along the line, and accordingly three successive passenger trains arrived in London at the appointed time – On the first intelligence of the occurrence an Engine was despatched from the Camden Station with assistance for clearing the Up line, the necessary measures were in progress for this object and the Engine from the Camden Station had proceeded to Harrow for further aid, when the second Merchandise Train which arrives in London at about ½ past 5pm drawn by 2 engines was seen approaching the station.

The drivers of the leading engines of the train noticed the signal to stop, shut off this steam and gave notice to the driver the next engine to do the same but this from the concurrent testimony of the Policeman and Porter at the Harrow Station, was unfortunately not attended to, although the Policeman ran forward and put up his Lamp close to the Engine.

The Driver of the engine waiting at the Harrow Station was at the moment in communication with the Station Clerk but the fireman put the engine in movement towards London as soon as he saw that the train notwithstanding the signals was still advancing – He could not however get the engine sufficiently ahead to prevent the Train running into it about 50 yards from the spot where he had been waiting:- His engine and the leading Engine of the Train received very trifling injury from the collision but the second Engine was thrown off the Railway with several of the wagons – the Drivers, Simpson, it is supposed from jumping off, was killed and the Fireman [Quinlan] hurt – the Driver of the leading engine escaped without injury, but the Fireman [Dawson] was found dead under the wagon wheels having it is believe, also jumped off.

All the necessary precautionary measures which were promptly taken in the first instance for the prevention of accidents, having been properly attended to by the passenger trains, no other inconvenience was sustained by them than what arose from the delay caused by the impediment on the line.

TNA RAIL 384/94 London & Birmingham Railway, Coaching & Police Committee, 1839 Dec.-1840 Dec., p221



Painting, oil on canvas, portrait in oils by Sir Francis Grant, R.A, 1845. © The Board of Trustees of the Science Museum

George Carr Glyn, first Lord Wolverton, Chairman of the London & Birmingham Railway 1837-1846 and Chairman of London & North Western Railway 1846-1852.

In 1830 Glyn turned his attention to a new form of transport: railways. The successful demonstration of Stephenson's rocket the previous year had given a taste of what might be possible, and although some investors remained cautious, George Carr Glyn showed no trepidation. In 1830 he became one of the promoters of a proposed London & Birmingham Railway, placing his full weight – and that of his bank – behind it. His support gave other investors confidence, and by 1834 the first part of the line had opened. In 1837 he became the railway company's chairman. He went on to play an instrumental role in building it through amalgamation into one of the largest joint stock companies in the world, London & North Western Railway Company.

REPORT of Sir F. Smith on the London and Birmingham Railway. Royal Engineers Office, 2IJ James Street. Buckingham Gate, 13 November 1840.

5.—REPORT of Sir F. Smith on the London and Birmingham Railway.

Royal Engineers Office, 21, James Street, Buckingham Gate, 13 November 1840.

To the Lords of the Committee of Privy Council for Trade:

The Report of Lieutenant-Colonel Sir Frederic Smith, of the Royal Engineers, on the Accident which occurred on the London and Birmingham Railway, on the Evening of the 12th November.

My Lords.

I HAVE the honour to acknowledge the receipt of your Lordships' orders of this date, directing me to inquire into the causes of the accident which occurred on the London and Birmingham Railway yesterday evening; and pursuant to your directions, I proceeded to the terminus at Euston-square, and afterwards to the Harrow station, at which places I obtained the information that enables me to lay before you the following Report.

It appears that two luggage trains leave Birmingham daily for London, one at 6 A. M., and the other at half-past 10 A. M.

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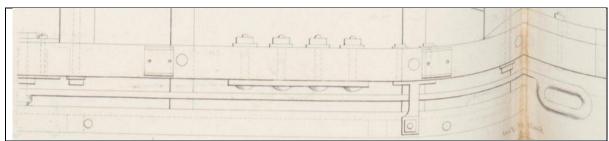
The North Midland train which yesterday consisted of 14 wagons left Birmingham at the usual hour, and proceeded without interruption until it arrived at about a mile and three-quarters on the London side of the Harrow station. Here a waggon, which is said to have been overloaded at Burton, broke both its axle trees, and was in consequence thrown off the line) dragging with it three other waggons which were immediately behind it. The waggon with the fractured axles was the seventh from the engine, and as its coupling-chains broke, the six preceding waggons were liberated and after a short delay continued their journey to Camden Town, where, as well as at the Harrow and Watford stations, notice was given of the accident.

The 11 0'Clock passenger train from London to Birmingham had been assisted up to Tring by engine No. 15, driven by a man of the name of Bradburne; and on arriving at Harrow station, on its return to Camden Town, the driver was directed to proceed to the spot where the axletrees above alluded to had broken in order to aid the workmen who were collected on the spot in clearing the line for the trains expected up from Birmingham.

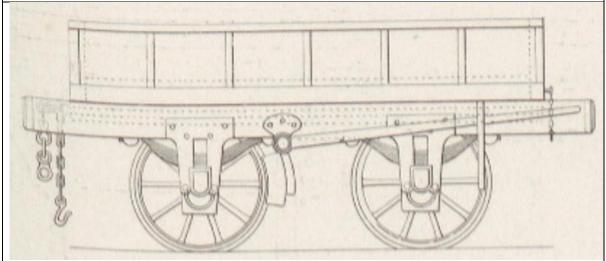
The Red signal was immediately exhibited at Harrow station to inform approaching trains of the danger of proceeding beyond that point, and a police man was sent to the first crossing to the north ward of Harrow to direct trains or engines destined for London to cross to the down line. In consequence of this arrangement three passenger trains did so cross, and after travelling a few miles on the down line, and thus avoiding the obstruction caused by the waggons that were off the rails, they re-crossed to their proper line and reached Euston square at the hours respectively appointed for them. Between five and six o'clock in the afternoon engine No. 15 was sent back to the Harrow station, from the spot where the up-line was obstructed; the driver Bradbume being charged with a message to the clerk of the. Harrow station, directing him to stop any trains that might arrive there till after the five and six o'clock trains from London should have passed that station. .... It appears that Bradburne stopped at the station, quitted his engine, and accompanied the clerk out of the station-house to give directions upon some other matter. It also appears that the fireman [Finch] went into the office for a few minutes, and that the porter (John May), who was outside, and saw a luggage train approaching from Watford at great speed, called to the fireman to put his engine in gear and move from the station. John May states that the fireman acted according to this advice but observing that the luggage train was continuing on its course, notwithstanding the signals that were made to arrest it, he jumped off the engine and left it to its fate. This luggage train, which consisted of 18 waggons, had left Birmingham at half-past 10 a.m., and was drawn by engines No. 1 and No. 82, the former being driven by a man of the name of Brown, and the latter by Simpson, John May and the enginedriver Brown state, that the red light was exhibited, warning the train to stop, and that in consequence the steam was shut off from engine No. 1, and the break applied to the tender.

Brown states that the driver of No. 82 did not shut off his steam or apply the break. John May, on the contrary is of the opinion, that the driver of No. 82 had shut off his steam. Be this, however, as it may, this train proceeded at a sufficient velocity to overtake engine No. 15, and a collision ensued, in consequence of which the engine-driver of No. 82 [Simpson] and the fireman [Dawson] of No. 1 were killed on the spot, and the fireman [Quinlan] of No. 82 seriously injured.

On inquiring into the character of the drivers, Brown and Simpson, I was informed that they were both considered steady men; but that the latter had on a former occasion shown a similar disregard of signals at the Harrow station. The porter, John May, states, that when the train passed the Harrow station last evening it was running at the rate of at least 20 miles an hour, and when it is considered that this was upon a descending plane of 1 in 330, and that the gross load of the waggons and the goods they contained could not have been much less than 110 tons, it will be obvious that the momentum of such a train could not be easily arrested. **The end waggon was provided with a break, but it is doubtful whether it was used or not on this important occasion**. If, however it had been used, it is a great question with me whether it would have prevented this accident; as the break attached to the luggage waggons are by no means powerful, and a single break can merely be considered as a feeble auxiliary to the engines in retarding the progress of such a train as that of yesterday evening. I considered it my duty to inquire into the ordinary extent of the luggage trains on this line, and I found that they varied considerably; but that it was not unusual to see them amount to 50 waggons, and that on one occasion & luggage train had consisted of upwards of 80 waggons.



Part of a London & Birmingham wagon frame from approx. 1840. With the outside break with which Sir Smith was not at all happy with its effectiveness. Note the loop-handle by which the breaksman would operate the break by pushing down on it. Very likely it could also be pinned down. From the information here it is clear that 'luggage' or 'goods' trains might have only had one such breaked wagon on the end of the train and not even always a breaksman.



A London & Birmingham 'ballast wagon'. Note the simple lever break (this had a loop on the end of the lever as above) Whishaw (1842)

Now the evil of allowing luggage trains to exceed the gross weight of 80 tons, is that in order to make up for the loss of speed in the ascending planes they are obliged to travel at such a velocity on the descending planes as to acquire a momentum beyond the prompt control of the engine and break.

As a general principle, I would state that no train, whether containing passengers or goods, should consist of so many carriages as to require to be drawn by more than one engine, because when two or more are employed it is impossible to regulate them, so that they shall employ equal power, and be equally safe for the passengers. But I am aware that such traffic as that on the London and Birmingham Railway it would be difficult not impossible to dispense on all occasions with assistant engines. Nevertheless, it should be considered as the general rule not to extend the trains beyond the power of a single engine.

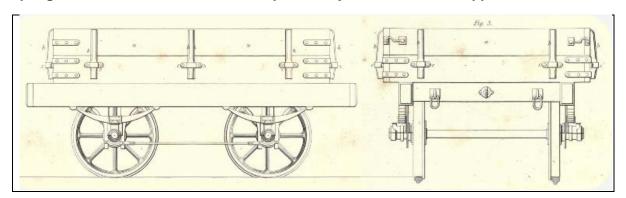
I would suggest that at those seasons of the year or periods when the luggage traffic is considerable the number of trains should be increased. At present, the first luggage train leaves Birmingham at 6 o'clock a.m., and arrives at Wolverton at 1/2 past 9; it waits there till 1/2 past 11 o'clock to allow two passenger trains to pass it; it then proceeds on to Tring, where it remains on a siding; to allow another passenger train to pass; and, finally it arrives at Camden Town at 4 o'clock.

The next luggage train leaves Birmingham at  $\frac{1}{2}$  past 10, and proceeds in a similar manner, stopping at Wolverton and Tring to allow passenger trains to pass.

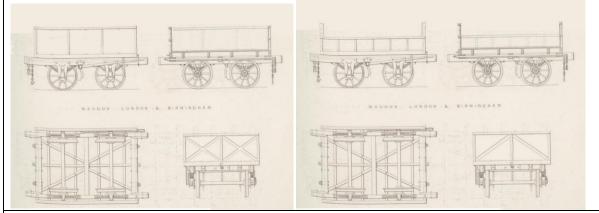
A third luggage train from Rugby brings luggage from the Midland Counties) and goes into sidings at Wolverton and Tring, like the preceding trains.

It does not appear that any accident has yet happened from this system, but I cannot help regarding it as one not quite free from danger, as I think that in order to avoid all risk from collisions. the course of the various trains should be continuous and uninterrupted, like the revolutions of an endless chain. I would therefore submit the expediency of the heavy goods trains being worked at night, after the departure from the termini of the latest passenger trains, and that the only luggage trains that should travel in the day time should be such as might be so limited as to keep their time between the passenger trains.

In my report on the Hull and Selby accidents, I suggested "that buffer springs should be adopted for every carriage, waggon, truck or horse-box used on railways." **Had the tenders and waggons** of the luggage train in which the loss of life occurred yesterday been provided with buffersprings this lamentable accident, in all probability, would not have happened.



An early primitive 'dumb' buffered wagon. So called as the extensions of the frames provide the point of contact with the next vehicle but had no springing or means of absorbing the impact. This is from Dempsey (1847), who sourced his drawings from Derby makes this design likely to be an early 'midland' wagon design, but disregarding axlebox and wheel specifics is most likely matches a generic design of the railways at the time of the Harrow accident.



How wagons might also have looked on the London & Birmingham in 1840. Two speculative forms deriving the upper bodies from examples found in Pickford's warehouse of a similar date sat on the body of the ballast wagon from Whishaw.

In the same report I suggested the expediency of engine-drivers being licensed. I beg to repeat that suggestion) and to add that if it should be adopted, railway companies should be invited to report for your Lordships' information, all important instances of neglect in these servants in order that, when it may appear proper, they may be deprived entirely, or for a limited period, of their licenses, which tend materially to check misconduct.

If Simpson, the unfortunate sufferer by the accident of yesterday, had been suspended for his former misconduct, it would in all likelihood have acted as a salutary warning to himself and to others.

I am of opinion that an engine should under no circumstances be left on a line of railway by its driver and that a general order should be issued to that effect by the managers of all railways. In the event of such a regulation being now in existence in the London and Birmingham Railway, which from the great foresight and attention which prevails in that company, is extremely probable, it would be proper that the driver, Bradburne, should be discharged.

I would recommend that the maximum speed of the luggage trains should be fixed, and on no account departed from. This is perhaps the more important, as it is well known that in almost all railway companies the most inexperienced drivers are those attached to the luggage trains; and it is to be borne in mind that 'this is the third accident which has happened in the space of three weeks to "goods trains;" viz. on the Whitstable line, the Great Western; and, lastly the accident of yesterday.

I have to add, that I conceive it would be a proper check on the drivers of the luggage trains, if the station clerks were to keep the same record of the time at which these trains pass their respective stations as they do in regard to the passenger trains, so that the superintendents of the several lines might have a knowledge of any irregularity at intermediate stations, and take proper steps to prevent their recurrence.

In the event of the adoption of the suggestion I have offered as to running the luggage trains at night, I would recommend as a necessary check on the sobriety of the engine-drivers, fireman and guards, that at certain fixed stations the clerk should hold such communication with them as to enable him to feel satisfied that they are in the state to pursue their journey.

I found the fractured axle trees of the luggage-waggon so covered with mud when I inspected them at Harrow, and the weather was so unfavourable for the purpose that I was unable to examine the quality of the iron but I shall avail myself of an early opportunity of narrowly inspecting it. However, this accident adds strength to the recommendation which I had the honour to make to your Lordships, in my Report of the 16th ultimo, on the North Midland Railway, that the form and dimensions of axletrees should be the subject of scientific investigation.

When the inquest takes place, it is possible that additional information as to the causes of this accident may be obtained, but I teel no hesitation in pronouncing that it is mainly attributable to the following causes:

1st.-T he overloading of the Burton waggon, and consequent fracture of its axletrees.

2nd.- Either to the bad quality inferior workmanship or want of substance of the iron of which its axletrees were made or to their being of a defective form,

3rd.- To this waggon having only four wheels.

4th.- To the over-extent [too many wagons] of the second luggage train, and the consequent necessity of employing two engines.

5th.- To the excessive [speed of] driving.

6th.- To the neglect of the driver, Simpson [failing to see or heed signals]

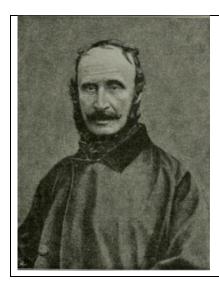
7th.- To the absence of the driver, Bradburne, from his engine; and

8th.- To the want of buffer-springs.

I have, &c.

Frederic Smith,

Lt-Col. Royal Engineers.



Major-General Sir John Mark Frederick Smith KH FRS (11 January 1790 – 20 November 1874) was a British general and colonel-commandant of the Royal Engineers. Although he didn't testify he did attend the inquest and reported on a number of significant railway accidents in the early 1840s. Just a month after this accident, on the 2nd December 1840 he was also appointed inspectorgeneral of railways. In 1841 Smith, in conjunction with Professor Peter Barlow, made a report to the treasury respecting railway communication between London, Edinburgh, and Glasgow. Smith resigned the appointment of inspector-general of railways at the end of 1841, and became director of the Royal Engineer establishment at Chatham on 1 January 1842.

<sup>&</sup>lt;sup>1</sup> RAILWAY ACCIDENTS. LATE DREADFUL COLLISION AND LOSS OF LIFE ON THE LONDON AND BIRMINGHAM RAILWAY,. INQUEST ON' THE BODIES OF THE TWO MEN KILLED

<sup>&</sup>quot;West Kent Guardian - Saturday 21 November 1840 p2