

## FRIGHTFUL RAILWAY COLLISION NEAR DUDLEY.

TWELVE LIVES LOST.

(The following appeared in a second edition yesterday.)

The most serious catastrophe that has ever occurred on a railway in the Midland district took place last night (Monday) on the Oxford, Worcester, and Wolverhampton line, between Round Oak and Brettel Lane Stations, a few miles beyond Dudley. By it eleven persons were instantaneously killed, another died a few hours afterwards, several more were so severely injured that their recovery is despaired of, others are maimed for life, and a great number were more or less injured. The accident took place under the following circumstances: Yesterday there was "a very cheap Sunday school excursion to Worcester." A special was announced to leave Wolverhampton for Worcester at 9.15, "calling at all stations for the express purpose of conveying the teachers and children of the various schools to Worcester and back." The fare from Wolverhampton and Stourbridge and all intermediate stations to Worcester and back was one shilling for adults and sixpence for children; from Hagley, Churchill, Kidderminster, and Worcester it was 8*d.* for adults, and 4*d.* for children; and from Droitwich and Fernall Heath 6*d.* for adults, and 3*d.* for children. This extraordinary low rate of charges naturally attracted a large number of passengers, and by the time the train arrived at its destination it had been augmented to forty-five carriages, computed to contain nearly 2,000 passengers. The return train was announced to leave Worcester at 6.15 p.m. Those having charge of the arrangements determined to divide the train, and instead of having one monster train propelled by two engines, to have two trains each drawn by one engine. Accordingly, about twenty-five minutes after six o'clock, the first train left Worcester station. It consisted of twenty-nine carriages, closely packed with passengers; and was followed in a quarter of an hour by the second train consisting of 16 carriages. Each train called at all stations, and all went well with the first until its arrival at Round Oak, which took place about 8.5. There, either just before the train arrived at the station, which is situated on a steep incline, or when it was put in motion to leave the station, twelve or thirteen of the last carriages became detached from the former part of the train by the breaking of the couplings of two of the carriages, and rolled back down the incline towards Brettel Lane with ever increasing velocity. The guard who occupied the van at the extremity of the train applied his break with all the force of which it was capable, but its power was insufficient to check the retrograde motion of the carriages, which soon attained a very high rate of speed. On arriving at the Bug Hole, a little more than half way to Brettel Lane, they dashed into the second excursion train, which as before stated, was despatched from Worcester only fifteen minutes after the first, and being a lighter train, naturally gained upon it during the journey. The driver of the second train, perceived the carriages running back upon him down the incline, and had nearly succeeded in bringing his train to a stand at the time of the collision, thus considerably mitigated the severity of the crash. But as it was the consequences were

fearful. The guard's van and the carriage next to it were split into matchwood, and the second carriage escaped little better. The guard jumped out before the collision occurred, and escaped without injury; but the effect upon the passengers crowded in the two shattered carriages was dreadful. The scene that ensued it is impossible to describe. Fragments of the crushed and broken carriages, mutilated human forms, some still in death, some writhing in their last agonies, others seriously but not fatally hurt, shrieking with pain and terror, were commingled in a generally melee, hardly distinguishable amid the darkness and the dust occasioned by the collision. The terrified passengers who escaped without serious injury, ran hither and thither in bewilderment, and for a time none knew what to do. A few of the more self-possessed, however speedily bestirred themselves to render all possible assistance to the unfortunate sufferers, and remove them from the wreck that bestrewed the line, and messengers were despatched for medical and other aid. It was soon apparent that the loss of life was lamentably great. Eleven lifeless forms were discovered amongst the rubbish, in addition to many frightfully mangled and disfigured. As speedily as possible the latter were conveyed on stretchers, furnished by the shivered coaches, to the various hotels in the neighbourhood; and the next duty attended to was the removal of the dead in like manner. Many of those only slightly injured proceeded onwards by the train, and it is probable that a complete list of the casualties resulting from this sad affair will never be obtained. The removal of the wounded was effected under the superintendence of Mr. Wall, assistant to Mr. Norris, the company's surgeon at Brierley Hill, who was first upon the ground; but other medical men soon arrived, and took charge of cases at the inns, to which the sufferers were conveyed. Amongst these were Dr. Walker, Brierley Hill and his assistant; Mr. W. E. Johnson, surgeon, of Dudley, and Mr. Horton, assistant; Mr. Osborne and Mr. Harding, of Stourbridge; Mr. Tomlinson, from Mr. Freer's; Mr. Evans, from Mr. Giles's, of Stourbridge; &c. Information of the occurrence was instantly telegraphed to Worcester, and about half-past nine o'clock Mr. Sherriff, the general manager, with Mr. Adcock and Mr. W. Carden, and Mr. Everett, surgeons to the company, arrived by special train from Worcester. The two former gentlemen immediately directed their attention to the clearing of the line and preparing it for the resumption of traffic, and the two latter visited the wounded located in the neighbourhood. There is a feature in this case which is not presented by railway accidents generally. The train to which the accident happened being a special one from a particular district, all the persons injured and it is feared all those killed also, but up to two o'clock this morning none of them had been identified, resided within a limited area, within which all the distressing consequences of the calamity are concentrated, instead of being distributed over the whole country as in the case of an ordinary train conveying passengers to and from various parts. The bodies of some of the dead are fearfully mangled, and their identification, except by the dress, will in some cases be difficult. The features of one poor woman, whose body lies with four others at the Swan Inn, Moor Lane, are wholly undistinguishable, her head being crushed into a shapeless mass. The legs of a man lying at the same place are fearfully crushed, and his head and face shockingly contused. The gentleman had been expensively dressed, and even in death had the air of a person who has been

accustomed to move in superior society. Most of the other appear to have belonged to the working classes. We append a list of such of the casualties as we were enabled to obtain particulars of, and have no doubt but in the course of to-day it will be known who were the unfortunate individuals who were killed. We may mention that the particular spot at which the collision occurred is a short distance beyond the junction of the Kingswinford branch railway, in course of formation, with the main line, and that the line was cleared for traffic by twelve o'clock, but little damage being done to the permanent way. From the list appended it will be perceived that all the serious casualties were sustained by persons resident at Princes's End, Coseley, Tipton, Dudley, and the immediate vicinity of those place; and with one exception all are adult persons.

Elizabeth Hyde, a girl ten or twelve years of age, slightly injured; Charles Turner, of Bloomfield, Tipton, suffering from injury to the chest, a large scalp wound, and many cuts about the head, fractured ribs on the left side, and perforation and protrusion of the left lung, recovery doubtful; Thomas Brett, of Daisy Bank, fractured shoulder, and injuries to he head and thigh, a serious but not fatal case; and Edward Jones, of Dudley Port, slight injury to the leg, are all accommodated at the Crown Inn.

Sarah Fisher, of Coseley, slight injury to the chest, is staying at the Royal Exchange.

Luke Stokes, slight injury to leg; William Skelding, Princes End, injury to tongue and nose; Eliza Lones, Princes End, a girl, suffering from general concussion, a slight scalp wound, and general contusion of knee; Thomas Lones, father of the last-named, slightly injured; and Mary Lones, mother of Eliza, and wife of Thomas Lones, sustained a fracture to the collar bone, and injuries of a very serious nature to the chest and abdomen. All these are accommodated at the Whimsey, Brettel Lane, where three dead lie.

Lydia Cox, Bloomfield, very extensive scalp wound; Samuel Clark, concussion of the brain, and extensive injury to the knee joint, very serious case; and Henry James, Coseley, slight injury in the back.; these lie at the Cock Inn, Moor Lane, where are also three dead, two men and a woman.

Joseph Webb, compound fracture of the left leg and the right toe, very serious case, but expected to recover; William Kendrick, Prince's End, fracture of right thigh and left leg, and injuries to the head, dangerous case, but hope of recovery; William Harley, tailor, Dudley, general concussion, not dangerous; and Richard Welsh, scalp wound and internal injuries of a very serious character, no hope of recovery, lying at the Swan Inn, where there are five dead - three men and two women.

Sarah Ann Whitehouse, of Prince's End, injury to he arm and leg, not of a very serious character, accommodated at a house next door to the Swan.

Haden Smith, Coseley, comminated fracture of the arm, and injury to the back; Sarah Bevan, Coseley Street, Bilston, toe cut off and otherwise injured; Mrs. Wycherley, sister of Miss Bevan, injury to left leg; and Benjamin Sheldon, injury to the ancles, necessitating amputation of both legs, dangerous case; these lie at Moor Lane House, kept by Mr. James Naden.

In addition to the above there were a great number of persons injured who were conveyed t a distance by their fiends. Others proceeded to Dudley by rail, and were forwarded to their homes thence.

Mr. Johnson, of Coseley who arrived at Dudley Station, appeared so much injured that his recovery was considered doubtful.

Mr. Mooney put on special trains for the accommodation

of persons residing on the lines of the South Staffordshire and Stour Valley Railways, who were detained by the accident until too late for ordinary trains.

#### LATEST PARTICULARS.

Particular and minute enquiries yesterday tended to confirm the general accuracy of the foregoing statement. In a few minor details it is, of course, incomplete; but in all material particulars it is substantially correct. The number of killed is correctly stated, and the description given of the injuries sustained by those most seriously injured is generally accurate. As we ventured to anticipate, the bodies of all the deceased have been identified. They are a young man named Francis Mills, a furnaceman at the Bloomfield Iron Works; Joseph Baker, Prince's End, Ironworker, thirty five years of age, single; Edward Matthews, Coseley, puddler; Benjamin Skeldon, of Prince's End, baker and provision dealer; Harriet, his wife, and John, his son, a young man of seventeen; Mrs. Hildrick, wife of Mr. Hildrick, sawyer, of Park Lane, Tipton; Mrs. Harley, wife of Mr. Harley, tailor, Dudley; Henry Weston, labourer, Prince's End, aged thirty-three, single; Richard Moore, aged thirty, Prince's End; Henry Marshall, aged thirty-six, boatman, Worcester; and Benjamin Pitt, hay and straw dealer. Perhaps the case of the Skeldons is the most melancholy of the foregoing list of casualties. A sad gap has been made in that family, the husband, and wife, and eldest son, alike falling victims to the catastrophe: an unborn baby also perished with the mother. Mrs. Hartley has left a young family of children motherless, her husband being amongst the wounded. Amongst the seriously wounded are Joseph Webb, Prince's End, puddler, leg broken and toe amputated, thirty years of age, married; William Kendrick, Prince's End, leg and thigh fractured; Richard Wassell, Prince's End, serious internal injuries and injury to the head, slight hope of recovery; William Harley, Stafford Street, Dudley, tailor, severely contused; Haden Smith, residing near Christ Church, Coseley, arm broken; Miss Bevan, Coseley Street, Bilston, toe cut off and otherwise injured; Mrs. Wycherley, sister of Miss Bevan, leg broken; Samuel Clark, external injury to the knee-joint, supposed spinal injury, and paralysis; Lydia Corser, of Burton-on-Trent, serious scalp wound; Henry Augustus James, son of the postmaster of Coseley, injury to back; Sarah Fisher, of Prince's End, slight injury to chest, progressing favourably; Mrs. Mary Lanes, crushed internally, collar-bone broken, and otherwise seriously injured, progressing satisfactorily; Elizabeth Hyde, aged fourteen, Vicarage Prospect, Dudley, slightly injured; Edward Jones, of Dudley Port, hair-dresser, generally contused; Charles Turner, aged twenty-seven, Prince's End, hurt seriously in the head and side; Thomas Brett, Daisy Bank, blacksmith, ribs and collar-bone broken, very dangerously hurt, &c., &c. It is of course impossible to present anything like a perfect list of the wounded, most of those who were able to bear removing having been taken to their own homes. We are informed that the surgeons of the Company have visited upward of seventy cases of alleged injury by the accident, and report that more than sixty persons have sustained damage by the collision. It is hoped that no further sacrifices of life may result, although the injuries of some of those who are wounded are so severe as almost to preclude the hope of recovery. The wounded are receiving every possible attention from the officers of the Company. and neither expense nor trouble is spared in endeavouring to lighten their suffering.

An inquest on the bodies of the deceased will be opened to-day.

We shall give a full report of the proceedings in our impression of to-morrow.

## THE RAILWAY CATASTROPHE NEAR DUDLEY

This lamentable occurrence is still the absorbing topic of interest throughout the district. Up to the late hour last night no further death had taken place, although it was currently rumoured on Tuesday evening that three more of the persons injured were dead, thus increasing the number of fatal casualties to fifteen. The rumour obtained currency in the columns of a contemporary yesterday, but we are extremely happy to say it was without foundation. All the injured persons were alive last night; most of them were progressing favourably, and fatal consequences are not now apprehended in more than two additional cases. It is now clearly established that the train had not arrived at Round Oak Station on its return from Worcester when it separated; and that the coaches which divided were properly attached with shackle and side chains. There is therefore no blame attributable to any of the subordinate officials of the company; but important questions will no doubt arise as to the sufficiency of those fastenings; and the strain to which they ought to be submitted on such an incline as that from Brettel Lane to Round Oak, and the amount of break power requisite for the safe working of a line of railway where the gradient is 1 in 75. It will be seen from the subjoined report of the proceedings at the inquest yesterday, that the enquiry has been adjourned for a week, during which time the fullest investigation into these and all other questions pertinent to the matter will no doubt take place.

### THE INQUEST

An enquiry touching the cause of the death of the twelve persons killed was commenced yesterday, before T. M. Phillips, Esq., Coroner. The inquest was opened at the Whimsey Inn, where a jury composed of the following gentlemen was empanelled: The Rev. J. Bailey, Baptist minister, foreman; Mr. James Wheeler, spirit merchant; Mr. John Stewart, chemist and druggist; Mr. George Ford, newspaper proprietor; Mr. Edward Elcock, baker; Mr. Thomas Fletcher Rooker, chemist; Mr. Edward Samuel Haines, clerk; Mr. Joseph Jackson, shoemaker; Mr. Benjamin Hammersley, pawnbroker; Mr. George Wassell, wine merchant; Mr. James Salmon, tailor; Mr. Joseph Done, publican; Mr. George Chephain, chemist; Mr. James Williams, shoemaker; Mr. William Holcroft, coalmaster; and Mr. William Major Dunn, schoolmaster.

As soon as the jury were sworn they proceeded to view the bodies, the Coroner adjourning the enquiry to the Bell Hotel, Brierley Hill, where, in course of an hour, it was resumed in a more spacious and convenient room than could be obtained at the Whimsey. The names of the deceased on whom the inquest was held are Francis Mills, a furnaceman at the Bloomfield Iron Works; Joseph Baker, of Prince's End, Ironworker, thirty-five years of age, single; Edward Matthews, Coseley, puddler; Benjamin Skeldon, of Prince's End, baker and provision dealer; Harriet, his wife, and John, his son, a young man of seventeen; Mrs. Hildrick, wife of Mr. Hildrick, sawyer, of Park Lane, Tipton; Mrs. Harley, wife of Mr. Harley, tailor, Dudley; Henry Weston, labourer, Prince's End, aged thirty-three, single; Richard Moore, aged thirty, Prince's End; Henry Marshall, aged thirty-six, boatman, Worcester; and Benjamin Pitt, hay and

straw dealer. Mr. King, of the firm of Collis, Bernard, and King, of Stourbridge, attended to watch the proceedings on behalf of the Company, Mr. Adcock, the secretary, Mr. Sherriff, the general manager, and Mr. Wilson, the engineer, were also present. Mr. Burbury, of Brierley Hill, attended on behalf of the friends of two of the deceased, Henry Marshall and Francis Mills; and Mr. Round, solicitor, of Tipton, for the friends of the Skeldons family, and the family of the late Mr. Edward Matthews.

Formal evidence of the identity of the bodies having been given, Isaac Baldwin, a waggoner, living at Prince's End, was sworn and deposed: On Monday I went with the excursion train from Dudley to Worcester. In going, the deceased Joseph Pitt, was in the same carriage as me. We left at half-past nine. The deceased, Richard Moore, was also in the same carriage with me and Pitt; and were in company at Worcester, and had our dinners together. I do not know who was the guard of the train; nor should I know him if I were to see him again. There were two engines to the train, but I do not know how many carriages. The engines were both in front of the train. There were second and third-class carriages, but I do not know whether there were any first. I think they were principally third-class carriages; all were covered. The guard was in the break-van behind the train. I cannot say whether there were two engineers, but I saw two engines at Dudley. We got into Worcester at half-past twelve o'clock. As we were going, the coupling chains broke either three or four times - I do not know which for certain; but three times we were thrown all one on top of the another in the carriage by the violence of the shocks. They were bad shocks; one of them made one young woman's nose bleed. She was in the same carriage with me. I did not get out to see what caused the shocks. I asked them to let me out, but they would not. I never got out till we got to Droitwich. The first shock occurred before we got to Dudley Station. The train did not stop then: It stopped at Dudley. A man named Walker put his head out of the carriage, and asked what was the matter, but did not receive any answer. I think the first shock was near Brettel Lane. I heard that the cause of it was the break being down when the train started. The third shock took place beyond Stourbridge. I believe it was near Church Hill Station. I do not know whether there was any other shock between Church Hill and Worcester, but we were shaken three times altogether. I did not make any enquiries of the guard as to the cause of the shocks. I cannot tell exactly what time it was when we left Worcester to come home again, but as near as I can tell, it was half-past six. My two friends Pitt and Moore, did not get into the same carriage as I did to return. They went into the first train, and I got in the first carriage of the second train. The carriage in which they went was crowded. I should think one train started ten minutes before the other. I did not hear any complaints made then with reference to the shocks we had received in going; I believe Mr. Skeldon complained, but I did not hear him. When the accident happened I got out of the carriage and went up to the engine and asked what was the matter. They told me to get into the train again; that there was nothing the matter, and nobody was seemingly hurt. We came back very much better, than we went, until we got between Brettel Lane and Round Oak stations, when the train suddenly stopped. I tumbled out of the carriage, together with young William Skeldon, and asked the driver what was the matter. He told me there was nothing the matter, and that I must go back and take my seat; that there

was nobody seriously hurt, and that they would drive on again directly. The carriage in which I was riding was reared up on end, and I was thrown off my seat. There was a very sudden and violent shock. There was no light in the carriage in which I was riding. The first thing I saw, on getting out of the carriage, was the coaches smashed all to pieces; but I did not take much notice, I was so badly frightened. The first person I saw was Mr. Hildrick, who had just got up. The break-van and one or two carriage were, I believe, smashed all to pieces; but I could see very little about it in the dark. The carriages had run into our engine, I believe. I do not know where the guard was; I never saw him. I believe the first train ran back into us, and I consider that was the cause of the smash. I saw some people lying about injured. I rendered assistance to Mr. Hildrick and young William Skeldon; but I did not know that it was him then, though I helped to carry him away. Mrs. Hildrick was lying on the ground, outside the carriages, and her husband asked me to lift her up. I lifted her up and got her over the fence, and laid her on the grass. Her husband was badly hurt, and he leaned on my shoulder. She was quite dead. She was very much hurt about the head. Her face was but little injured, but she had received a blow on the ear from what I could see, and she was bleeding from the nose and mouth. I did not assist to take her anywhere; I went to a public-house - the Cock - to get some convenience to fetch her away, but I could not get any, and when I came back somebody had removed her. I saw many other persons lying about injured, and two or three more who were dead. All the rest were strangers to me. I helped to carry one man to the Cock. I tied my handkerchief round his head, and stayed with him as long as I could.

The Coroner: What do you believe was the cause of this collision?

Witness: I think it was neglect. I think the guards did not do their duty. I think if the guard had exerted himself properly and used his break when the coupling chain broke, he might have stopped the train. I do not know that any coupling chain broke except from what I have heard. Mr Hildrick, who asked me to get out his wife, is very ill now.

In reply to Mr. Burbury, the witness said he believed the breaks were down when he felt the shock at Brettel Lane, William Skeldon having told him so. William Skeldon rode to Worcester in the guard's van, with the guard. He (witness) was himself much hurt on the knee and the head. He remained after the collision took place until the last train left for Prince's End. He got home at a quarter past twelve o'clock.

In reply to the Foreman of the Jury, the witness said the doors of the carriages on the sides next to the platforms were locked, and though he requested to be allowed to get out at several of the stations, he was not permitted. The door on the opposite side was not locked, and at Droitwich, when the train stopped to collect tickets, he got out onto the line.

William Skeldon, who was next called, deposed: I live at Coseley, and am a boiler maker. I went by the excursion train from Prince's End to Worcester, on Monday. We left Prince's End about thirty five minutes past nine, a few minutes after the specified time of starting. There was a guard in the break-van, but I do not know his name. There was only one engine to the train then, but another was put to afterwards. I do not know at which station. I rode in the van all the way to Worcester. Several other passengers were in the van. About half an hour after we had started, the guard asked if any of us had got any matches, or tobacco. I had both, and the guard lighted a pipe and began to smoke. As soon as he began to smoke he directed my brother, John Skeldon, that is dead, to work the break for him. We had

nothing to drink. My brother John was 17. The guard told him to work the break, directing him to apply it when we got near a station. He told him he ought to do something for his bread if he got his cheese for nothing. The guard appeared quite sober. I cannot exactly tell where this conversation took place, but I believe it was between Dudley and Stourbridge. My brother worked the break all the way to Worcester; other persons sometimes assisting him.

The Coroner: What was the guard doing?

Witness: Oh, he was smoking his pipe, Sir, most of the time. In continuation witness said: Between Prince's End and Worcester we broke one or two coupling chains. I believe the first broke soon after we left Dudley, and somewhere near Brettel Lane. Just before we got to the station I felt a shock; and when the train stopped the guard got out, but directly afterwards came back and took a chain out of the van. It was a very large one. The shock threw me forward against the front of the van. The guard said when he came that there was a coupling chain broken, and he wanted another. There was another coupling chain broken before we got to Droitwich, and we received a shock, but it was not so bad as the first. When the train stopped the guard got out and he fetched another coupling chain out of the van, saying there was another broken, but he afterwards brought it back again, and said it was not wanted. Nothing further occurred before we got to Worcester. There were about forty five carriages attached to the chain, I believe. I do not know how many passengers there were, but is said there were more than 2,000. They were packed so thickly some of them had to stand. There were a great number of children. I did not hear any complaints made about the shocks we had received. I did not return in the van at night. The guard wanted me and my brother to come with him, but we refused. The first train left Worcester about twenty minutes past six, and the second about a quarter of an hour afterwards. I returned in the second train. When the guard asked me to get into the van he said, if I did not return in it I should have to pay a guinea, but I said but I did not mind if I had; that I had stood up all the way coming and would have a comfortable seat back again. The guard was then sober for anything I can tell. The guard with whom I rode in the morning returned in the van attached to the first train, and I came back in the first carriage of the second train. Nothing occurred as we were coming back until we got between Brettel Lane and Round Oak, when I felt a very severe shock. I should think that was about ten minutes past eight o'clock. I was thrown against the side of the carriage. It quite took all my senses away for a long time. My tongue was very much cut, and my nose crushed, and I received two very black eyes. I have had a bad pain in my head ever since. As soon as the carriage stopped, and I could recover my senses, I went to see what was the matter. The first thing I saw, on getting out of the train, were the funnel and buffers of the engine lying on the rails. They were knocked completely off. I saw the engine driver walking round the engine, and I asked him what was the matter. He said "What the devil do you want here, out of your carriage? go and get in again; there's nothing serious the matter, and we shall go on again in a few minutes. There were many out of the carriages besides me. I did not get into the carriage again. I and Benjamin Law went to see what we had run into. The first person I saw was the guard I rode with in coming, and then I knew we must have run into the first train. Two or three carriages were smashed all to pieces. Our engine had run over them, and just as I got (on?) of the carriage, they called out to us to keep clear of the train, and drew the engine back off the broken carriage. The guard was not hurt at all. I did not speak to him then.

Coroner:- Did you not ask him how it had occurred?

Witness: No; as soon as I saw him I knew it was the train my father and mother and brother were in, and I knew they were in the last carriage, next to the guard's van; and I knew enough without asking him. They were in the last compartment, next to the van.

Coroner: Then I suppose you went and looked for them?

Witness: Yes.

Coroner: Did you find them?

Witness: No, sir, I looked for two or three hours before I found my father, and then I found him at Mr. Noden's. My mother and brother I have not seen at all. He was not dead then. He died the next morning after his legs were amputated. He was quite sensible when I saw him. His feet were cut off by the train, and he was badly bruised about the head and face.

Coroner: Was he aware of his position; did he express any belief that he should not live?

Witness: He enquired about my mother, and said he should never see her again; that she was crushed under the carriage. I was not with him when he died. I do not know the name of the surgeon who amputated his legs; they were taken off just below the knees. He only lived twenty minutes after the operation, I believe.

Coroner: After seeing your father did you go back and look for your mother and brother?

Witness: Yew, I hunted about for two or three hours, but could see nothing of them, and then I went home to ascertain if they had gone on. They were not at home, and I immediately sent my uncle to look for them. That morning I heard that they were both dead.

Coroner: Then I suppose you went to see them?

Witness: No, Sir; I have not seen them at all.

In reply to Mr. Burbury, the witness said that although the guard directed his brother to work the break, his brother had never been a railway servant, nor was he at all acquainted with such matters, never having travelled so far on a railway in his life before. There were several other passengers besides his brother and himself in the van when the train arrived at Worcester, and they might have been seen by any of the officials of the Company who were in the station. The van was standing opposite the platform when the guard requested him to ride back in the van. He asked him openly, and the question might have been heard by any of the officials about. The guard threw open the folding door of the van and asked him and Law to get in, but Law said he would do no such thing. He saw ten or twelve persons get into the van of the first train before it started. Not more than ten minutes elapsed after the departure of the first train before the second started. It was sent off as soon as the passengers could be got in, and many of them remarked that they should soon catch the first train, that one being so much lighter. There were seven or eight stations between Worcester and Brettel Lane, and the train stopped at three or four of them, including Stourbridge and Brettel Lane. The train did not remain at Brettel Lane many minutes.

In reply to Mr. King, the witness said the train was advertised to take Sunday school children and teachers only. He was not a Sunday school teacher, nor in any way connected with any schools, but his brother was a scholar in one of Messrs. Bagnall's schools.

In answer to the Coroner, the witness said the sale of tickets was not confined to persons connected with Sunday schools; they were not denied to anyone applying for them.

Francis H. Etheridge, collier, was next examined. He deposed that he was walking from his work at Wordsley, to his home in Moor Lane, about twenty minutes past eight o'clock on Monday evening, when passing over the railway bridge in the lane he saw a number of railway carriages coming down the line in the direction from Round Oak.

There was no engine attached to them, and they were travelling at a great speed. There were twelve or thirteen carriages, and he could hear the voices of people inside them. He watched the carriages go under the bridge and down the line, and almost immediately heard the "slam". He immediately ran to see what was the matter. The crash took place 400 or 500 yard beyond Moor Lane Bridge. He did not hear any whistle, but only the crash. When he got to the place he found that the carriages had run into a train coming from Stourbridge. The crash was so loud it nearly took his hearing away. When he got to the place where the accident happened, he saw a man with a lamp, and there was an awful screaming. He saw seven or eight dead bodies lying under the first two or three carriages that had come down the line. The first two were splintered all to atoms. He did not observe whether the engine of the Stourbridge train was thrown off the rails, but immediately began to help get the bodies out, and to carry away the person who were alive. After having carried away the wounded, they removed the dead. He did not see any railway guard there, nor did he know the man who had the lamp. There were several dead bodies besides those he first saw. He believed he assisted in getting out every one of them. There were a great many wounded, and with broken legs and arms. He did not attempt to ascertain the cause of the accident.

Adonizebet Gordon, a watchman employed at a colliery near Moor Lane, said he was in a field near the railway on Monday night, and shortly before eight o'clock he saw a passenger train go up towards Round Oak. Shortly afterwards he saw several carriages coming down again. The train appeared to be travelling about the usual rate in going up to Round Oak, and he did not observe that the carriages travelled much faster in coming down again. When the coaches had passed Moor Lane Bridge, he heard a whistle in the opposite direction, and saw a train coming from towards Stourbridge, and a collision occurred immediately. He ran to the place, and found several of the carriages broken to pieces. There were a number of people lying under the wheels of the carriages, and he assisted to get them out. He helped to get out one man with his feet cut off, who was alive. A great crowd of people came directly. He never what was the cause of the accident, for what with the cries and one thing or another, it put him about so that he had no heart to ask questions of anybody.

In reply to Mr. King, the witness said he did not see the train coming from Stourbridge until after he heard the whistle, and he did not know there was curve on the line that would prevent the driver of that train from seeing the carriages coming in the opposite direction until he was almost close to them. He did not observe that sparks were flying from the wheels of the van as the carriages were coming round the curve.

The Rev. Edward Cresswell Perry, who had entered the room during the examination of Gordon, in reply to a question to the Coroner, said that he was a passenger by the excursion train on the day in question, and could give some evidence on the subject of the accident. He was then sworn and deposed: I am a clergyman. I live at Caponfield, in the parish of Sedgley. We left Bilston station about half past nine o'clock in the morning. I believe I rode in a second-class carriage, but I do not remember particularly, I had a party of nearly 200, about 109 of whom were school children under my care. I cannot tell exactly how many carriages there were, but I think there were about fifty; I made a rough estimate of them. They were principally second and third class. I saw one or two guards with the train. I did not hear any complaints before leaving Bilston, as to there being too many persons allowed to go by the train, or of any want of engine power. It was scarcely to be expected that I should,

seeing that the train had only come from Wolverhampton, and was then comparatively empty.

Coroner: Do you remember anything occurring before you got to Worcester?

Witness: The very first circumstance I happened to observe of an alarming nature was that of the train separating, near Brettel Lane Station. As it was starting from the station one-third of it, I should think, broke away from the first portion. I did not perceive any shock whatever before coming to Brettel Lane. As soon as the train separated we stopped. I could not understand the extra shock I felt. It was not a severe shock, but just enough to excite a little surprise. I was in the first part of the train. I looked out of the window, and perceived that the train had separated, and I perceived a number of men with pieces of wood, which, I suppose, are used for stopping trains on an incline. The former part of the train was pushed back to that which was left behind, and the carriages that had broken loose were reattached. It occurred to me at the time, though I may not be justified in stating it, that the carriages may not have been properly fastened together, but I did not get out to ascertain whether it was so.

Coroner: Did you perceive any other shocks?

Witness: After that time I perceive several extraordinary movements of the carriage, which I thought were produced by an extraordinary quantity of steam being put on the engine in order to get the train along.

The next particular shock was one that caused myself and my wife considerable alarm. The train again separated, and unfortunately for us, we happened to be in the portion that was detached. We were in the first carriage of the last part. I cannot say exactly where that was, being unacquainted with the spot, but I think we were going round a curve this side of Kidderminster. I immediately left the carriage, and ran for at least fifty yards by the side of it, when the speed gradually slackened. The first part of the train was brought to a stand, and the line being inclined in the direction in which we were going, the latter part came up to it again, and the guard reattached the two portions. I observed that one of the chains was broken, but the only operation necessary to attach our carriages to the first part was to bang on the middle chain. I observed that the centre chain—a very strong one—was not broken.

Coroner: Then how do you make out that the carriages were separated?

Witness: I think that one or both, of the side chains must have been fastened, and the centre one left unfastened; therefore the middle chain was not broken, and it was that which the guard hooked on. He did not bring a fresh chain. I had a conversation with the guard after I got into the carriage. I said "I do not know whether these engines are playing tricks with us, or whether they are drunk; I hope not the latter at this early hour of the morning, but the extraordinary jerks we have experienced lead me to suppose such is the case," but he assured me that one of the drivers was a teetotaller. We went on to Worcester after the second separation. We left Worcester in the evening after half past six o'clock. I travelled in the first part of the train. I have not been told why the train was divided there, but I suppose after the experience of the morning it was deemed impracticable to work the whole of it together. There were twenty-nine carriages in the first train. There was only one engine when the train started from Worcester, but another was attached subsequently. On an average there would be from 50 to 60 persons in each carriage, and there would be something like 1,540 people in the train. The train went very steadily until it got to Round Oak. Just before arriving there the latter part of the train again detached itself from the former, and ran down the incline towards Stourbridge. I

was in the former part. In about ten minutes the first part of the train was pushed back at a slow rate, for about half a mile, when it was again stopped, and after the lapse of a few minutes it was pushed on to the scene of the accident. It was rumoured that an accident had occurred, and that some were killed and some wounded. After describing the scene of the accident the reverend gentleman stated that after the lapse of sometime the train was taken to Dudley. He accompanied it there and then returned.

Mr. John Phillips, station-master at Round Oak, was next examined. He said he rode on the engine of the train as it was going to Worcester in the morning, from Netherton to Round Oak Station, and he did not perceive any unusual motion. In pursuance of his duty he examined the train, and all the carriages were properly fastened together. He first heard of the accident about nine o'clock in the evening. He was then at the Dudley Station, where he remained for some time assisting the wounded who were brought there. He afterwards went to the scene of the accident and examined the carriages, both that night and the following morning. The couplings were broken; the centre one, commonly called a "shackle," was snapped short off in the middle; the hook of one of the side chains was broken, and the staple to which the other was attached was wrenched out of the carriage. He observed that the nut with which it had been secured was missing, and on the railway about 60 yards on the Brettel Lane side of the Round Oak Station. The witness was examined at considerable length both by the Coroner and Mr. Burbury as to the means of communicating between Brettel Lane and Round Oak in the event of the line becoming blocked up and other matters. He said that there being telegraphic communication between the two stations, the signals used in some other places were not necessary. The coupling chains and shackle which broke were produced, but the person who had taken them from the carriage was not in attendance.

Shortly after six o'clock the enquiry was adjourned until one o'clock on Wednesday next.

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**THE  
RAILWAY CATASTROPHE  
NEAR DUDLEY.**

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It affords us much satisfaction to be able to state that up to yesterday evening no further death had occurred in consequence of this sad casualty, but some of the sufferers are not yet out of danger. Charles Turner and Clark, respecting whom the most serious apprehensions were entertained, are progressing more favourably than was anticipated.

All the sufferers located in the vicinity of the accident continue to receive every possible attention from the medical men employed by the Company, and it is hoped that the whole may recover. Immediately after the adjournment of the inquest on Wednesday, the friends of the deceased took possession of the bodies, under the authority of the Coroner, who issued warrants for the interment of the dead, and in the course of the evening all were removed to the late homes. Immediately on occurrence of the accident, Mr. Hart, of Brettel Lane Station, who stated that twelve minutes elapsed between the departure of the first and second trains from that station, caused information to be communicated to Mr. Mills, the Superintendent of police at Brierley Hill, who instantly hastened to the spot, accompanied by Mr. Wall, assistant to Mr. Norris, surgeon to the police force, and rendered great service in superintending the removal of the dead and wounded, in which important duty he was ably assisted by Sergeant Gasson. We regret to add that the service of the police were also required in another capacity. A number of harpies speedily congregated, and instead of affording assistance to the wounded, attempted to make profit by plundering those who were insensible. The exertions of the police in repressing these attempts were most praiseworthy; and much property that would otherwise have been lost was preserved by their means. A valuable watch found on the line is still in the possession of the police unclaimed.

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## THE RAILWAY CATASTROPHE NEAR DUDLEY, CONDITION OF THE WOUNDED.

It affords us much satisfaction to be able to state that no further death as yet resulted from this sad casualty, although the condition of a least two of the wounded is such as to preclude all hope of their recovery. These are Richard Wassell, of Prince's End, who received serious internal injuries and severe wounds in the head; and Samuel Clark, of Bilston, who sustained injury to the spine. It is not expected that either can survive many days. The former is lying at the Swan, and the latter at the Cock, Moor Lane. Charles Turner, of Prince's End, who sustained much severe injury to the side and head that his recovery was at first looked upon as hopeless, is going on more favourably than expected and serious consequences are no longer apprehended in his case. He accommodated at the Crown Inn, Brettel Lane. Joseph Webb, of Prince's End, whose leg was fractured and his foot so seriously injured that amputation of one toe was necessary is still very ill, but progressing as favourably as could be expected, considering the serious nature of the injuries he sustained. William Kendrick, who had his thigh broken in two places, is also going on as well as can be expected. Miss Corser, Burton-on-Trent, who received a very serious scalp wound is recovering rapidly. This young lady is engaged to be married to Charles Turner, who is injured above and being on a visit with his friends accompanied them to Worcester on a pleasure excursion. Miss Bevan, and Mrs. Wycherley, who are staying at Mr. Naden's, the former of whom lost a toe, and the latter had a leg broken, are progressing as well as can be expected. So also is Thomas Brett, of Daisy Bank, who had his ribs and collar-bone broken, and sustained other severe injuries, although he cannot yet be considered out of danger. William Harley, Dudley, tailor, whose wife was killed, is so far recovered that it is expected he will be able to remove to his home in a few days. Henry Augustus James, son of the postmaster of Coseley, has already been removed, as have one or two others whose injuries were not very severe. Mrs. Lones, whose collar bone was broken, and who was otherwise injured, is also going on well. Edward Jones, of Dudley Port, hairdresser, who has been accommodated at the Crown, will be so far recovered as to be able to proceed home in a few days.

Brett, it appears, rode in the van with the guard from Worcester, and he stated that after leaving Brettel Lane there were only two besides himself and the guard in the van. The guard was George White, who has been in the employ of the company as a luggage guard for five years past, and bears the character of a steady attentive man. The other persons in the van in addition to the guard were Henry Marshall, boatman of Worcester, who was killed, and another man from Worcester, named Williams, who did not sustain serious injury. Brett also states, that as soon as the carriages broke away from the first part of the train at Round Oak, the guard immediately applied his break, at the same time waving his lamp to the driver of the other train which he knew to be advancing on the same line. Directly after passing Moor Lane Bridge, the second train appeared in sight, and the guard redoubled his exertions at the break. Finding his efforts unavailing, and that a collision was inevitable, he advised the other persons in the van to jump

out, himself setting the example. Brett, however, was the only one who followed it; and he, poor fellow, sustained grave injuries. Marshall was killed; but Williams happily escaped.

There is no doubt that the consequences of the collision would have been much more serious if there had been a rather longer interval between the two trains – if the carriages which became detached had passed Brettel Lane station before the second train arrived there. As it was, the latter train had not attained its full speed at the time the driver perceived the carriages which had been detached from the first train returning: whereas if they had met the second train before it stopped at Brettel Lane, and while it was travelling at a rapid speed, the force of the collision would have been much greater.

The occurrence continues to excite much interest in the neighbourhood, and large numbers of persons daily visit the spot at which it took place. The effects of the accident are severely felt in the neighbourhood of Prince's End, Coseley and Tipton. There all the dead, with the exception of Marshall and poor Mrs. Harper, resided, and most of the wounded came from the locality. No less than seven of the unfortunate people killed, were buried at Coseley Church, on Friday; one was interred there on the previous day, and one on Saturday.

On Friday, Captain Tyler the Government Inspector of Railways, visited the scene of the accident, and spent the whole of that and the following day inspecting the line and collecting information as to the mode in which it is worked. He was accompanied by Mr. Adcock, the secretary, Mr. Wilson, the engineer, and Mr. Sherriff, the general manager of the line. On Saturday, a series of experiments were made with a view to ascertaining the speed at which carriages would descend the incline on which the accident happened, and the amount of break power necessary to ensure perfect control over trains on that portion of the line. With the results of these experiments we are, of course, unacquainted, but the fullest information on the subject will no doubt be communicated by Captain Tyler at the inquest, to be resumed on Wednesday. We are informed that Captain Tyler will again visit the scene of the accident again to-day.

We are sorry to learn that the number of the wounded appears to have been understated rather than the reverse. It is said that in the neighbourhood of Bilston, Coseley, Tipton and Prince's End alone, there are upward of 100 persons who have sustained more or less injury by the accident.

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THE  
**RAILWAY CATASTROPHE**  
 NEAR DUDLEY

ANOTHER DEATH

We regret to have to add to the list of deaths resulting from this sad casualty, the name of Samuel Clark, who expired about eight o'clock yesterday morning, after enduring great suffering. The poor fellow had his back broken, and no hope of his recovery was entertained from the first. Information of his death having been communicated to the Coroner (T. M. Phillips, Esq.), who had appointed the adjourned inquest, in reference to the Brockmoor murder, for yesterday, he directed the immediate summoning of the same jury as were empanelled in the enquiry into the other twelve cases opened last week, and at two o'clock the inquest was opened at the Cock Inn, Moor Lane, where he had been accommodated since the accident, and where the body lay. Formal evidence of the identity of the body having been given, the Coroner adjourned the enquiry until to-day, at the Bell Hotel, where it will be renewed in conjunction with the enquiry into the other twelve cases.

We are happy to learn that Richard Wassell, whose case was looked on as only second only to that of Clark in point of gravity, is much better and hopes are entertained that he may ultimately recover. John Webb, suffering from compound fractures of one leg, and who has had one toe amputated, is doing well, as is Mr. Kendrick, who sustained a fracture of the leg and thigh. These three are accommodated at the Swan Inn, and are attended by Dr. Walker, of Brierley Hill, and the Company's surgeons. Mr. Harley, tailor, Dudley, who unhappily lost his wife by the collision, was so far recovered as to be able to be removed to his home yesterday morning. He was also accommodated at the Swan. Now Clark is dead, the only sufferer remaining at the Cock is Miss Corser, of Burton-on-Trent, who received a severe scalp wound and other injuries. She is progressing favourably. Mrs. Wycherley, and her sister, Miss Bevan, both of whom were staying at Mr. Noden's, Moor Lane House, are doing well. Mrs. Wycherley, who is in an advanced state of pregnancy, sustained fracture of the leg and other injuries, and her sister injuries to one foot, necessitating amputation of a toe, and injury in the back. They, as well as Miss Corser and the patients at the Swan, are under the care of Dr. Walker. Charles Turner, injured in the side (lung protruding), and Thomas Beck, hurt in the shoulder and elsewhere, lying at the Crown Inn, Brettel Lane, are both doing well. Edward Jones, who was staying at the same place, went home yesterday, convalescent. All those who were accommodated at the Whimsey have been removed to their homes and are doing well. Mrs. Fisher, at the Royal Exchange, will also, it is hoped, be able to be taken home in a day or two. Turner is under the care of Mr. Norris, of Brierley Hill, and Mr. Harding, Stourbridge. Brett is attended by Mr. Osbourne, of Stourbridge, and the Company's surgeons.

Yesterday, a further series of experiments to test the working of the line were made. Mr. Adcock, the secretary, Mr. Sherriff, the general manager, and Mr. Wilson, the engineer of the Company were present, as were also Mr. Craig, the engineer of the Manchester, Sheffield and Lincolnshire, and the traffic manager of the Great Western of Ireland Railway. The results of the experiments showed that one break is sufficient to hold a train of the same

weight as the first excursion train from Worcester to which the accident happened, and to stop a train of the same weight as the portion that broke away within 200 yards, after it had attained a speed of six miles; but a second break had to be applied in order to stop the train when it had been allowed to attain a speed of ten miles an hour. Experiments were also made to test the strength of the couplings in ordinary use, and the result showed that a shackle of half the strength of those commonly employed is sufficient to have borne the entire weight of the excursion train. It is inferred from these experiments that the shackle which broke must have been previously damaged and that the guard (Cook) could not have applied his break to stop the carriages which broke away, until they had attained considerable velocity.

In addition to the valuable watch that the police are in possession of, one Robert Drake has an unclaimed watch in his keeping. Of property of less value found on the line after the accident, the police have in store. Private parties possessing unclaimed property should hand it to the police authorities.

The Rev. E. C. Perry, the clergyman who was in the train at the time of the accident, with 200 in his charge, in the special sermon which he preached on Sunday evening last, and which drew a congregation for which sufficient accommodation could not be afforded in the sacred edifice, said – "Whether I shall ever travel by another excursion train I know not. It is certain that as I am in my senses I shall not do so under similar circumstances, still less is it likely that for the sake of a few pence I would ever again incur the risk of having children under my special supervision, unconsciously removed by death from this world to another, without a moments notice; or mutilated or crushed so dreadfully as preclude the possibility of their ever following their earthly employment/ With regard to the management of the train by the Company's servants; it cannot be doubted that there was a great lack of precaution and want of foresight, which were absolutely necessary to run such a monster train with safety to the lives of passengers."

The matter continues to excite much interest, and the adjourned inquest to-day anxiously anticipated.

## THE RAILWAY CATASTROPHE NEAR BRIERLEY HILL

### DEATH OF ANOTHER OF THE INJURED.

It is with sincere regret that we add another to the list of thirteen persons who had previously died in consequence of injuries received in this lamentable collision. The last addition to the melancholy catalogue is Mrs. Sarah Rogers, a widow, seventy years of age, who resided with some relative at Prince's End, Tipton. It appears that one or more of her ribs was broken, and her chest seriously injured by the collision; she was, however, able to be removed to her own home the same night. Her system was not sufficiently vigorous to sustain the shock she underwent, and she gradually sank, and died at nine o'clock on Tuesday night.

It affords us satisfaction to add that all the wounded still remaining in the neighbourhood of the accident are going on favourably, Richard Wassell, whose recovery was at first deemed impossible, is going on most satisfactorily.

### THE INQUEST YESTERDAY

The inquisition before T. M. Phillips, Esq., Coroner, touching the cause of the death of the thirteen persons who lost their lives in consequence of the melancholy accident on the Oxford, Worcester and Wolverhampton Railway, on the night of the 23rd. ult., was resumed at one o'clock yesterday, at the Bell Hotel, Brierley Hill. The names of the deceased are Francis Mill, Henry Marshall, Richard Moore, Benjamin Skelding, Harriet Skelding, John Skelding, Mary Hildrick, Joseph Pitt, Joseph Baker, Edward Matthews, Henry Weston, Ann Harley and Samuel Clark; the latter of whom died at the Cock Inn, Moor Lane, on Tuesday morning last, as stated in our yesterday's impression.

W. Fenton, Esq., the Chairman of the Company, was present, as were Edward Watkin, Esq., and W. Lawts, Esq., Directors; A. C. Sherriff, Esq., General Manager, Edward Wilson, Esq., Engineer, W. T. Adcock, Esq., Secretary, James Burchell, Esq., the London Solicitor of the Company, and Mr. Wood, from the General Manager's Office. Mr. King, of the firm of Collis, Bernard and King, of Stourbridge, again appeared as the legal advisor of the company; Mr. Burbury, solicitor, of Brierley Hill, was again present on behalf of the friends of Marshall and Mills, two of the deceased, and Mr. Round and Mr. Caddick, for the Skeldings family, Mr. Ebsworth, of the firm of Duggin and Ebsworth, of Walsall, appeared for Mr. Hildrick, the Husband of Mrs. Hildrick, one of the deceased, and Mr. Sanders, of the firm of Bolton and Sanders, of Dudley, for the friends of Joseph Baker. Mr. Warmington, of Dudley, attended on behalf of Mr. Johnson, of Coseley, and five others who are injured. Mr. Dudley Parsons, Manager of the Stour Valley Railway, Mr. George Bentley, solicitor, of Worcester, and Mr. Hemmatt, of Birmingham, were also present.

At the commencement of the proceedings Mr. King rose, and said he was instructed by the Directors of the Company to express their deep sympathy with the sufferers by this unfortunate accident.

The Coroner interposed, and stated that he was perfectly satisfied the Company were anxious to give every

information in their power. The fact of something like twenty-four or twenty-five of their servants being in attendance for the purpose of giving evidence was sufficient proof of that. But, in addressing any observations to the Jury now, Mr. King might make some impression which had better not be made until the enquiry had terminated. He believed that the Jury perfectly understood that the Company were most desirous of affording all the information in their power.

Mr. King, stated that the Chairman of the Company would have been on the spot much earlier, but was away in the Highlands when the accident happened. As soon as information of the occurrence reached him, he immediately set out, and had travelled as fast as possible, in order to get here at the earliest practicable moment.

The examination of the witnesses then resumed.

Noden was first examined. He said: I am a roller, and live near Brierley Hill. On Monday, 23rd August, at about a quarter past eight at night, I was on Moor Lane Bridge. I heard an "explosion" near to the bottle-house of Mr. Westhead's, down the line. I went to the spot. I found Francis Mills by the side of the rails. He was not quite dead. He was close against the rails, on the road. He was sensible, but in a dying state. He had a severe cut across the forehead. I carried him away from the rail, and he asked me for a draught of water. I told him I could not get any. He died in my presence in ten minutes or a quarter of an hour afterwards. I had not known him previously. There were broken carriages near to where he was lying.

Mr. William John Humphries, station-master at the Low Level Station, at Wolverhampton was next called. He deposed: I am in the employ of the Oxford, Worcester and Wolverhampton Railway Company, and have charge of the station generally. It is not my duty to inspect the carriages passing through the station. That is the duty of a person named Drinkwater. My duties are station-master, superintendent of part of the Oxford line, and have the general management of the station, and those employed there. I superintended the starting of the excursion train on the 23rd of August. I gave instructions for it to consist of twenty-four carriages and two guards' break vans. It left the station at eighteen minutes past nine. It was advertised for the accommodation of Sunday School teachers and children. There was one engine to the train. I do not know the power. It is the duty of the locomotive superintendent, Mr. Wilson. I have not the control of that department. The train was managed by an engine-driver and fireman. Only ninety-nine persons, mainly children, left Wolverhampton. The engine was in front of the train, and was in perfect working order. I examined the train throughout myself, and everything seemed right. No complaints were made to me by the guard or any other person as to any defect in the chains. When a train leaves my station it ceases to be under my control.

By the Rev. J. Bailey, foreman of the Jury: I have printed rules defining my duty. Strictly speaking, it is not my own duty to see to all the trains. (The rules were then produced)

By the Jury: In the absence of the locomotive superintendent, the engine-driver became responsible for the engine being competent to draw the train attached to it. No man is appointed an engine-driver without his being thoroughly competent to undertake the management of an engine, and also having a complete knowledge of its part.

By the Coroner: I walked down the off-side of the train, and saw that all the couplers were on. I am very particular in that respect. I cannot swear that Mr. Drinkwater was at

the station on the 23rd August. He is inspector for the Oxford, Worcester and Wolverhampton Line only. I am joint servant of that Company and the Great Western.

By Mr. King: I have seen an excursion train on the Great Western Line of fifty carriages. I cannot say with what number of break vans. The couplers used on the two lines are of comparatively the same strength. The Great Western is a broad-gauge, and the Oxford, Worcester and Wolverhampton a narrow gauge line.

By Mr. Emsworth: There were two break vans to the excursion train, but I do not know the name of the guards.

By Mr. Burbury: All guards and other officials of the line are supplied with a printed copy of the rules.

By the Coroner: I cannot consider that an excursion train is a special train. It is an ordinary train, because due notice of its departure is given. A special train is one which follows another without previous notice. The rules of the Company apply to an excursion train as to an ordinary train.

By the Coroner (referring to the 10th rule): I cannot say that station-masters generally can leave their station without sanction of the superintendent. I am a joint servant, and under joint rules of the Great Western, and Oxford, Worcester and Wolverhampton Railway. The general rules of the latter company do not apply to me. Guards are not allowed to take any one in their vans.

By a juror: Mr. Wilson, the engineer, was not present on the morning of the 23rd August at Wolverhampton.

By the Coroner: No complaints were telegraphed to me after the train had started of sufficiency of steam power. If there had not been sufficient steam power, or had the engine been defective, the engine-driver would have acted to the best of his judgment - he would have probably have complained to a station-master. If such a complaint were to be made to me, I should either order the train to be divided or an additional engine put on.

Mr. Phillips, station-master at Round Oak: I have known a chain break before on a train coming up the incline at Round Oak. It was an excursion train, on the day of Wolverhampton races. It was the centre chain or "shackle" which broke. I should have mentioned that it broke on the train departing from the station, and not on approaching it. no accident happened. We replaced the "shackle" with another from the guard's van. The side chains, on that occasion, were sufficiently strong to prevent the carriages running back. I did not examine any of the chains during the confusion on the night of the 23rd August.

By the Foreman: I do not know whether I possessed a copy of the rules on the morning of the 23rd. August. I know most of them by heart. I did not instruct Mr. Boden, my assistant, to take my place when I went away. It is an understanding thing between us for him to do so. I did so at night. I am station-master at Primrose Hill as well as Round Oak. They are a mile and three-quarters apart. I have also charge of the goods department at Round Oak. My salary is £90. per year, with payment for a horse, and with the understanding that if I can manage the work I am to have an increase.

By Mr. Burbury: I did not make a report on the day of Wolverhampton races of the circumstances of the shackle breaking. I did not think it necessary, because I could replace it, and the guard knew of it.

By Mr. King: There is a competent person in my absence, both at Round Oak and Primrose Hill Stations.

Mr. Ebsworth: I do not know who had charge of the second part of the train on the return journey from Worcester. I was not at Round Oak Station when the trains passed by.

Mr. King here stated that the names of the guards in charge of the two divisions of the train were Cook and

Cording in the first division and Prickett and Prestige in the second.

Examination resumed: I heard of the catastrophe and its cause before I got to the scene. I hastened to the spot as soon as I possibly could from Dudley. I did not examine any of the carriages, they were much broken. The porters told me about the broken chain. Mr. Hart, station-master at Brettel Lane, also told me about it. I went to the spot again the following morning, and did not then examine the carriages. I merely took a casual view of them. Deakin, a porter, told me on the night of the accident that he had a chain in his possession, and the following morning I asked him to produce it.

By Mr. King: When I arrived at the scene of the accident, on the night of its occurrence, I found Mr. A. C. Sherriff, the general manager, and Mr. T. Adcock, the secretary and superintendent, both there. In the presence of superior officers it was not my duty to enquire into the cause of the accident. Their presence removed my authority.

By Mr. Ebsworth: I have been two years on the line, and knew Cook well. He is a properly constituted guard, and one of the best on the line. I do not know Cording - he is a stranger to me.

The Rev. E. C. Perry having expressed a wish as to give evidence as to the strength of the coupling chains, the Chairman proposed to examine him next.

Mr. King enquired whether Mr. Perry had received the education of a mechanical engineer. In order to qualify him to give an opinion on such a subject?

Mr. Perry replied, that up to twenty-two years of age he was engaged as a practical mechanic and considered himself competent to give an opinion.

Mr. King said he should call several eminent practical engineers on behalf of the Company.

The Jury, however, expressed a wish that Mr. Perry should be examined.

The gentleman then read a statement to the following effect: Forty-five carriages, the number in the train going to Worcester, weighing 5 tons each (making that weight of ..... as an .....) and two engines of thirty tons each (the ..... stated by Mr. Sherriff), would require a force of 10lbs. per ton upon the whole weight to drive them along a level straight road at the rate of twenty miles an hour. An additional force of 2lbs. per ton would be required to drive a train of equal weight round a curve that was not inclined. Therefore the force required to drive the train in the most favourable circumstances, in the direction of Worcester, would be equal to 2,850lbs. The chains connecting the carriages together would, therefore, at the starting of the train, would have a strain upon them of not less than 2,850lbs., or 1 ton, 5 cwt., 3 qrs., 22lbs., which is only about 1-12th the tension of good iron, one inch square. Good rod iron, an inch square, will bear a pressure of thirty tons, but it is not considered safe to use it higher than fifteen tons, which would be about twelve times the pressure that would be upon the couplings in going to Worcester, in the morning. If, therefore, the iron of which the couplings were made had been of good quality, it would have borne twelve times the strain upon it. It is, however, quite possible to bring to bear upon the connecting chains ten times the amount of tension by putting on excess of steam. It therefore follows, all things being favourable to the train, that the iron was bad, or that excess of steam was applied. Coming to the train from Worcester, It consisted of twenty-nine carriages, weighing 5 tons each, and two engines of thirty tons each. Ascending an incline whose gradient was one in seventy-five a force of 40lbs per ton on the whole train would be required to maintain a speed of twenty miles per hour, overcoming, of course, the usual resistances, and the weight of each

carriage and its passengers instead of five tons, the thirteen which became detached would weigh sixty-five tons. This weight having to descend an incline of about 1,520 yards in length, and with a gradient of 1 in 75, the distance due to gravity, or through which it fell, would be 61 feet, and by the time it came into collision with the other train it would strike with a force equal to 3,965 tons, supposing the break was not applied, and assuming that its effect on the train was nullified this force by one half, it would then strike with a force of not less than 1,982.2 tons, and the velocity acquired at this point would be sixty feet per second. The force of 40lbs. per ton being required to take a train of 205 tons up an incline of 1 in 75 would be equal to 8,200lbs., or about 3 tons 16 cwt., which would be the strain on the connecting chains. This of course will be lowest pressure, and if the iron is of good quality is capable of sustaining with perfect safety four times the amount of pressure, showing that if everything had been favourable the chains were equal to bring up a train four times the weight. Therefore the chain that broke in ascending the incline must either have been of bad quality, or, as was my opinion the case in going to Worcester, too great a pressure was brought to bear upon them by putting on an excess of steam, which produces what is technically known as a "back-lash."

In reply to a question from Mr. King, Mr. Perry stated that the thickness of the shackle was, to the best of his knowledge, one inch and a quarter before the thread was put on it, and one-inch and one-eighth at the bottom of the worm. There was no question as to the shackles being sufficient to bear the strain if all had gone on favourably.

Mr. Perry supplemented his evidence by a statement to the effect that having some knowledge of mechanics and the inclined plane, he had deemed it his duty to make these calculations.

Mr. W. T. Adcock, secretary and superintendent to the Oxford, Worcester and Wolverhampton line, was then called to state the reason why the train had been divided at Worcester. He deposed: I am resident at Worcester, and was at the station on the 23rd of August, when the excursion train arrived from Wolverhampton. It was about half-past twelve in the day. The train consisted of about forty carriages, with two engines, and there were from 1,700 to 1,800 passengers. Frederick Cook was the chief guard, and John Cording acted as the second guard. When the train came into the station my assistant, Mr. Charles Harris, whom I had sent to Wolverhampton to supervise it, told me that there had been something the matter with the chains. Mr. Harris had the care of the train, and the guard would act under his orders. His statement was that the coupling had broken on the way to Worcester. I then directed that on its return the train should be divided; and that only one engine should be sent with each train. In accordance with those instructions the train was divided. The chain which had broken was submitted to Mr. R. Cransmore, inspector of carriages at Worcester. I cannot say whether the same chain was put on again after being mended. I heard no complaint from anyone but Mr. Harris. Neither of the guards said anything to me. It is the duty of Cransmore to examine each train on its arrival at Worcester, and again before its departure. Witnesses will be called who will depose to the fact of what chain was afterwards used.

By the Jury: Harris complained that the chain had broken twice. The stations up the line were not appraised of the division of the train at Worcester. The only intimation they would receive would be by a board attached to the first division. I was never more astonished when I found that, instead of school children and their teachers only, the train on its arrival at Worcester also contained a great number of adults. I consider that each station-master selling tickets to

adults had acted indiscreetly. Mr. Harris had no control over that.

By Mr. King: The carriages used on the Oxford, Worcester and Wolverhampton Railway are built by one of the best makers in London, Mr. Charles Kay Williams, and a high price was paid for them. Those used in the excursion train were built by him.

By the Jury: The reason why the train was divided so unequally (nineteen carriages and twenty-six) was that one of the engines was a six-wheel couple engine, and was capable of taking more than the other, which was an ordinary passenger engine.

By the Coroner: The Oxford, Worcester and Wolverhampton first-class carriages cost £365 each; second-class, £245; third-class, £205; composites, £320; and break vans £200 each.

By Mr. King: The carriages used on the Great Northern are some of the best in England, and those employed by the Oxford, Worcester and Wolverhampton Company, are built in the same manner, and are therefore equal to them.

By Mr. Ebsworth: Mr. Williams is a carriage builder, and supplies us at the prices named. We use all our carriages indiscriminately. The carriages used in an excursion train are quite as good as those used in an ordinary train, and would be used in ordinary trains. The majority of the carriages used in the excursion train were built by Mr. Williams in 1853 and 1854, and the minority in 1852. The coupling and side chains are charged with the carriages. There is no separate charge made for them. Every carriage and chain, before it is used on the line, is examined. Mr. Gooch was formerly examiner. He has now retired. The carriages used in the excursion train were examined and passed by him. I do not know that any test was applied. When Mr. Harris complained to me, I do not know that Cransmore applied any test. I was not present.

By Mr. Burbury: The first train in returning was under the care of Cook, the guard. Cook was not then under notice to leave.

By Mr. Wheeler, one of the Jury: The second guard on the train would be a porter considered deserving of promotion, and occasionally employed as an assistant guard. None of the station-masters have at present been rebuked for selling tickets to other than Sunday scholars or teachers.

By Mr. Burbury: It was Cook's duty on the return journey to have in his van fog signals and additional couplings, and also see that his break was in proper order, and report it to the Inspector before leaving Worcester.

Mr. E. W. Hart, station-master at Brettel Lane, next deposed: I was on duty when the excursion train from Wolverhampton to Worcester stopped at Brettel Lane. It was about eleven o'clock. There was about forty carriages, with two engines; and I believe there were two guards. I spoke to Frederick Cook the principal guard of the train. No complaints were made to me of anything having broken in the train between Wolverhampton and Brierley Hill. On its leaving the latter station the couplings between two of the carriages broke. I saw the train divide. The shackle was broken, and also one of the side chains. The other side-chain was drawn out of the buffer plank. Directly I saw that the train had parted, I held up my hand to the engine-driver, and he immediately stopped that portion of the train in front. The two parts were then run together. I told the guard to get another chain out of his own van. It was a very stout cable-chain and was sufficient to hold all the carriages. It was fastened on as the shackle-chain. The side-chains were not fastened. I do not know what became of the other chain. Only a link of the shackle-chain was broken. I have heard since that there was another breakage between Brierley Hill and Worcester. About five or six minutes to eight at night I

was at my station, and heard the signal-man at the crossing give the whistle announcing that the train was in sight. It came up in about two or three minutes. I did not count the carriages, but I should say there were twenty-eight or thirty. There were two guards and two engines. Frederick Cook, the guard, was in the last van. No complaints were made to me about any breakage. The train had the usual red lamps, two side lamps, and a tail lamp. Several persons got out then. My night-watchman, Thomas Watton, who had been to Worcester, came by the train, and told me that another train was going to leave Worcester shortly after they left. The first train left my station about four minutes to eight, and the second train came up about three minutes past eight, and stayed five minutes. It left about seven or eight minutes past eight. The guard of the second train was a man called Prickett. The engine was in first. About two or three minutes after the train left I heard an engine whistle once or twice very sharp, and immediately after heard a loud report. I cannot describe it. I ran down the step and asked the signal-man "What was that?" He said he thought it must be the engine "skidding," (i.e., the wheels not biting the rails). I said it was no "skidding," it was a smash. I then told the signal-man to put the signals, and block both lines. He did so. I took a lamp, called to some men to go with me, and ran down the line. I saw a red light coming towards me; it was about 300 yards off, and was carried by Prickett, the guard. He said, "It's been a smash." I continued running and came up with the trains. They were about 500 yards distant. The engine-driver and stoker of the second train were clearing their engine. The chimney was knocked off, and part of the wood-work. I said to the engine-driver, "Where is the train you have run into?" He replied, "In front." It was dark. I passed to the front, and met the guard, Frederick Cook, coming along with a lighted red lamp. He said something about their having been a dreadful collision. I sent him to Round Oak Station to stop anything that might be coming on the up-line. The first things I saw and heard were the wreck of the carriages, and the cries of the injured persons. I sent two men I had with me in different directions for doctors, and went myself to my station and telegraphed to Mr. Sherriff, at Worcester. I was powerless to do any good on the spot, as I had no staff of men with me. I immediately returned to the scene of the collision, and saw Mr. Chillingworth, a civil engineer from near Birmingham, who said if I would place my authority in his hands he would do all he could to assist. I immediately did so, and having two bottles of brandy put into my hands, I did all I could to succour the wounded. I made no enquiry into the cause of the accident, because I knew full well that the first train had broke loose and had come back. The buffers of the engine of the second train were broken off, and the last van and two of the carriages of the first train were smashed to atoms. None of the carriages in the second train were injured, and as I passed by the passengers put their heads out at the windows, and enquired what was the matter. They did not seem to be alarmed. Every exertion was made to succour the wounded. The broken carriages, &c., were removed on Tuesday, under the direction of Mr. Heppinstall and Mr. Gill, of Dudley. I never remember any coupling chains breaking before, between Round Oak and Brettel Lane, nor any train coming back again.

By a Juror (Mr. Williams): As a general it is not allowed for a guard to take persons in his van; but with the case of a special train, sooner than let passengers be left behind, he had no doubt a guard would allow them to ride in his van. He observed some persons in the guard's van in going to Worcester. I was distinctly understood that the excursion was for school children, teachers and their friends.

By the Foreman: I cannot say there were any lights in

the carriages in returning. My reason for detaining the second train at Brettel Lane longer than the first was that I thought it well to allow a larger interval between the two trains than the rules specify. I cannot identify the carriage of which the coupling broke at my station in going to Worcester.

By Mr. Ebsworth: There is no particular person at Brettel Lane to examine the trains, and see that all the carriages are right before a train leaves the station. I am not aware that it is my duty; the station-master is not expected to be there always. I do not consider it my duty to examine all the couplings, nor is there any person appointed to do so. It is the duty of the signal-man to enter the times of departure of all trains from the station. The signal-man acts under my direction; but it is not my duty see that he does make the entries. I did not on the return journey ascertain whether the breakage which took place at Brettel Lane in the morning had been repaired.

By Mr. Sanders: I saw the guard Cook at Brettel Lane on the return journey, and I believe he was perfectly sober.

By Mr. Burbury: I would have been his duty to report to me if anything had happened to the train since leaving the last station. When I got to the scene of the accident I did not examine the van to ascertain whether the break had been applied. I do not know whether such an examination was made by any person; but I am of opinion that any person acquainted with breaks could tell by examining the wheels whether the breaks had been applied.

By Mr. King: On arriving at the scene of the accident, I immediately followed the dictates of humanity by attending to the sufferings of those injured, instead of wasting time by asking questions as to how the accident had occurred. It would detain a train too long for a station-master to examine every coupling, and it would be almost impossible to do so, especially at night. The shackle-chain put on at Brettel Lane, in place of that which broke, was of extra strength; it was the thickest chain I ever saw, and was a goods coupling, equal in strength to a shackle and side chains.

At the close of Mr. Hart's evidence, the Coroner, at the request of the Jury, adjourned the enquiry until one o'clock on Tuesday next.

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THE  
**RAILWAY CATASTROPHE**  
 NEAR DUDLEY

THE ADJOURNED INQUEST.  
 EVIDENCE OF THE GUARDS.

Yesterday the inquisition before T. M. Phillips, Esq., touching the deaths of thirteen of the persons killed by this unfortunate collision, was resumed at the Bell Hotel, Brierley Hill.

Mr. King was again in attendance as the legal adviser of the Company. J. S. Pakington, Esq., director; A. C. Sherriff, Esq., general manager; Edward Wilson, engineer; W. T. Adcock, Esq., secretary; and James Burchell, Esq., the London Solicitor of the Company; were likewise present; as were also J. E. M'Connell, Esq., Locomotive Engineer of the London and North-Western Railway; and W. G. Graig, Esq., Locomotive Engineer of the Manchester, Sheffield and Lincolnshire Railway. Mr. Ebsworth was also in attendance on behalf of Mr. Hildrick, whose wife was killed; Mr. Nelson, of the firm of Southall and Nelson, of Birmingham, for Mr. Noakes, who was injured; Mr. Burbury, on behalf of the representatives of Marshall and Mills, who were killed; and Mr. Homer, of Brierley Hill, for Mr. Harley, of Dudley, whose wife was killed, and who sustained considerable personal injury.

The first witness examined was John Cording, who deposed:— George Cording; I am under guard of the Oxford, Worcester and Wolverhampton Railway, and live at Worcester. I accompanied an excursion train from Wolverhampton to Worcester on the 23rd. of last month. Frederick Cook was the head guard. I did not hear any complaint as to any defect in the engines or machinery before leaving Wolverhampton. I cannot say how many carriages or passengers there were. Additional carriages were attached at Dudley, but I do not know how many. One engine only left Wolverhampton, but an additional one was attached at Dudley. I went to the front van, next to the engine. Three or four persons rode in the van with me from Tipton to Dudley. There was not room in the train at Tipton. Nothing particular occurred between Wolverhampton and Dudley. The first breakage occurred at Brettell Lane, just as we were leaving the station. I should think seven or eight carriages were attached at Dudley, but I do not know how many. As we were leaving Brettell Lane the shackle attaching two of the carriages broke. Jonas Lockwood was the driver of the engine. Cook gave me the signal, and I communicated it to the driver. The driver of the second engine was Thomas Benson. The chain broke as we were in the act of starting from the station. The breakage occurred to the fourteenth or fifteenth carriage from the engine, I should say, but I cannot speak particularly. I do not know the cause of the chain breaking. We had not got many yards from the station when the breakage took place. The bow of the shackle was pulled off the nut. A large goods chain, out of Cook's van, was used to replace the broken shackle. There was another breakage at Hagley. It was not the same chain that broke at Brettell Lane. The breakage occurred after passing the station. The shackle that broke there was replaced by another that was hanging on the next carriage. No other breakage took place between and Worcester. It is the head guards place to make a report of anything that occurs. Mr. Charles Harris, assistant superintendent, had

charge of the train from Dudley to Worcester. I do not know whether the head guard or Mr. Harris made any report respecting the breakages. I returned with the train in the evening. The chains that broke in the morning were repaired. I looked over the train before it started. The chains were repaired by a blacksmith. I cannot say whether the same chains were used in returning, or whether they were replaced by others. I consider it my duty to see that all the couplings are right before starting. The train was divided on returning. We left Worcester about 6.30. There were 29 or 30 carriages in the first train. I went with the first portion. There was only one engine at starting. Cook was head guard of that train. The engine-driver was John Bust. Another engine was attached at Stourbridge, on account of the incline. It was put in front of the train. The incline extends from Stourbridge to near Dudley. Robert M'Gee was the driver of the engine attached at Stourbridge. Nothing occurred between Stourbridge and Round Oak Stations. Just before we arrived at Round Oak Station I noticed that the lights of the last portion of the train were all right. The first intimation I received of anything having broken was from Bust the engine-driver. I put on my break at the station. The breakage did not occur until after we had stopped. I did not hear the breakage myself. Bust told me the train had broken, and part had run back. I immediately turned to look, and found the lights on the latter portion of the train had disappeared. I went and examined the shackle that had broken. It was attached to No.114, through Bristol and Liverpool carriage. This shackle was attached to the carriage. The side chains of that carriage were not broken, but the chains on the next carriage were broken; the hook of one was broken, and the other was pulled out of the buffer beam. I removed the shackle that broke from carriage No.114 at Wolverhampton on the following morning. I went back after the portion of the train that had broke away, and near the place at which the collision took place I met a man, who informed me what had occurred. Twelve carriages and a van remained attached to the engine. Eighteen ran back. I do not know how many were broken. I got as many persons into the first part of the train as I could, and went to Dudley by direction of Mr. Ivetts. Many injured persons went in the train. My break was in good order, and I believe the other was in good order also. I used it in going to Worcester in the morning. I applied my break at all the stations between Worcester and Round Oak in returning. I saw Cook at the place where the accident occurred. He was quite sober, and did not make any complaint of any defect in the machinery. I did not make any enquiry as to how the accident occurred. I have been engaged on the line some time. I cannot say whether the break was applied to the van that ran back. I have been employed as assistant guard twelve months, and have perhaps made two or three journeys per week during that time. I do not think it would be possible for the guard to have stopped the carriages that ran back, because the night was foggy and his break would not bite. If it had been a dry night perhaps he might have stopped them. I cannot say in what distance one break would stop eighteen carriages filled with people on such an incline. Carriages laden with a dead weight would be easier stopped than if laden with people. I do not think it would be possible to stop eighteen carriages filled with living people on such an incline with one break. That is my opinion, having been employed as assistant guard on the line for twelve months, and having been in the habit of travelling over it three or four time a week. I knew the second train

was to follow us from Worcester, but did not know at what interval. The head guard might know. It is usual to allow five or six minutes to elapse after the departure of one train before the despatch of another.

By the Foreman: I did not perceive any unusual jerking of the train in going to Worcester.

By Mr. Ford: I did not see Cook at Round Oak.

By Mr. Wheeler: I have been asked questions respecting the accident by Mr. King on two occasions, but by no other person connected with the Company.

By the Foreman: I am not aware that any telegraph message was sent from Round Oak to Brettell Lane within a few minutes after the breakage. We have passenger carriages with breaks attached. It is a rule that all such carriages shall be locked but rather than passengers behind, the guard would probably allow them to enter a carriage with a break attached. The break is in a separate compartment, into which the passengers are not allowed to enter.

By Mr. Haynes: I cannot tell the name of the blacksmith who mended the chains broken in going to Worcester.

By Mr. Bushbury: I have been employed on the Great Western Railway, but I have not been employed on any narrow-gauge except the Oxford, Worcester, and Wolverhampton. I cannot speak to the number of break vans used to any given number of carriages on any other line of railway. It was a third-class carriage of which the shackle broke. It is customary to use through carriages for ordinary purpose when required.

By Mr. Ebsworth: At the time I was acting as assistant guard I ranked as a porter, and was receiving 18s. a week. The wages of a porter are 16s. a week. I was raised 2s. when I became assistant guard. I had never acted as assistant guard for any company besides the Oxford, Worcester, and Wolverhampton. When additional carriages were put on at Dudley, I directed the persons in my van to go into the carriages, and they did so. Other persons got into my van at Brettell Lane. It is a rule that guards shall not permit persons to ride in their vans, but at Brettell Lane the station-master, or one of the porters, said some boys must go in the van, and they did so to Stourbridge, where other carriages were attached. I dress as a porter, and I cannot account for Phillips, the station-master at Round Oak, not knowing me. I know him. I had two persons in the van in returning. I do not know whether Cook had any one in his van.

By Mr. King: I saw the carriage No. 114 and another carriage coupled together at the scene of the accident. Prickett coupled them. I proceeded to Wolverhampton with those carriages and other, and pointed them out to Drinkwater, the inspector. I took No. 114 to Worcester next day. I there pointed it out to Gransmore, the inspector of carriages, and also to Brown, the platform inspector.

Joseph Williams: I am a boatman, and live in King Street, Worcester. I rode in the van with the guard from Worcester, having gone there from Dudley by the excursion train in the morning. We left Dudley at about ten o'clock in the morning. I did not perceive any shock between there and Worcester. I did not know that any chains broke. We left Worcester in the evening, but I cannot say at what time; I did not take any notice. I rode with Cook, the guard, and Marshall, who was killed. I do not know Cook's Christian name: Marshall's was Henry. I got into the van because the carriages were full. Cook did not ask me to get in. There were several other persons in the van besides Cook, Marshall, and myself; but none that I knew. I did not perceive any shock in coming from Worcester until the accident occurred. When we ran back from Brettell Lane, Cook tried to stop the train with his break, and when he found he could not stop it he began to whistle. When he saw

the other train he told us to jump out of the van, saying there would be an accident. I did not jump out, nor can I say whether Cook did or not. I did not see either Cook or any other person use the break in returning from Worcester until just before the accident. He did not use it long before the accident. I did not perceive any diminution in the speed of the carriage when he used the break. I was quite sober. I was injured by the collision. I was thrown out of the van and rendered insensible. I was not able to render any assistance to the wounded. I did not see any wounded at all.

By the Foreman: I had not been drinking on that day.

By Mr. Wheeler: I am not a Sunday School teacher.

By Mr. Williams: I cannot say whether Cook had been absent from and got into the van just before applying his break

By the Coroner: Cook was sober.

By Mr. Wheeler: I have received £5 from the Company, as compensation for the injuries I received. I cannot tell whether there was any light in the van.

By the Foreman: I did not see the Round Oak Station at all.

By Mr. Ebsworth: I did not know the train was running back until Cook told us. Two or three minutes elapsed between telling us and the collision, Cook did not ask for any one to assist him in working the break. He was turning the break when he told us. He had not been smoking or drinking in the van.

By Mr. Nelson: We stopped at all stations in returning. I cannot say whether many passengers had got out at the stations.

By Mr. Homer: I cannot tell who asked me to come. I have not had any promise of payment.

Mr. King protested against such questions being asked. The Company had endeavoured to bring every person who knew anything about the matter; and having heard that Williams rode in the van, had brought him with the other witnesses. Such questions were most unprofessional.

By Mr. Homer: I received £5 as compensation, before I was asked to give evidence.

Frederick Cook was next examined. He said, I am a guard in the service of the Oxford, Worcester and Wolverhampton Railway Company. I was head guard of the excursion train to Worcester, on the 23rd ult. I live in Mark Street, Worcester.

The Coroner here cautioned the witness not to say anything that might criminate himself.

Cook said he would answer any questions that might be put to him, and deposed as follows: John Cording was under-guard. James Lockwood was the engine-driver. There were one engine at starting from Wolverhampton, twenty-four carriages, and two vans. I did not hear any complaints made of any deficiency in the engine or carriages until there was a breakage at Brettell Lane. Eight additional carriages and another engine were attached at Dudley. At Brettell Lane a shackle broke and two side-chains broke. It was on starting the train from the station that the breakage occurred. I should say it was about fourteen carriages from the van I was in. I was out of the van at the time. I fetched four big links from the last van. I put a spragg in the wheel and coupled them tight. I cannot say whether the station-master was aware of the breakage. The train proceeded onward, and at Stourbridge five more coaches were attached. At Hagley another shackle and two side-chains broke. The train was just starting from the station at the time. I went and examined the shackle, and saw a porter put on another. I proceeded with the train to Worcester, and at Droitwich I found there was another shackle gone. I cannot say how it had broken. I could not find the shackle; it was lost, and the carriages were attached by the side-chains only. There was

no other breakage between Droitwich and Worcester. I did not take any persons in my van from Wolverhampton, but at Prince's End I allowed several persons to get in, because there was no room in the coaches. I am aware that this is contrary to the Company's rules to allow persons to ride in the van. I told our man to take the break off at Netherton and Round Oak, but I cannot say who he was. There was smoking going on in the van. The same person did not use my break all the way to Worcester; no one used it but myself. I did not make any complaints at any of the stations about the chains having broken. We arrived at Worcester at 12.32. I did not make any complaint, because Mr. Harris, a superior officer, was with me. He accompanied the train from Dudley, and rode in the van with me part of the way. In returning, I took the first train, and rode in the last van. The train consisted of twenty-seven coaches, two break vans, and one engine from Worcester. A second engine was put on at Stourbridge, to assist us up the bank. All went on well until we got to Round Oak. Six or seven people rode in the van from Worcester. All the coaches were full. We left Brettell Lane at 8.3, and arrived at Round Oak about 8.10. I put my break on, just before coming to Round Oak Station, to stop the train. When the train came to a stand, I took off my break and immediately perceived the carriages coming back upon me. I then put on my break again, but could not stop the coaches. Eighteen carriages ran back. The break appeared to draw up the coaches a little at first, but they got ahead of me again after, and gradually increased their speed until they obtained a rate of about 10 miles an hour. I should say my break acted very well, and a very good break it was; but the weight was too much for it to hold. I knew the other train was coming after. About ten minutes are generally allowed to intervene between two trains. When I saw the other train coming I called to the passengers in the van to jump out, but I do not think any of them did. I also held out my red light and whistled. I jumped out ten yards from the place where the collision occurred. I left the break on when I jumped. When the collision took place I ran back towards Round Oak to stop the line, and met the fireman, who told me the line was blocked. I then went towards Brettell Lane, and met Prickett, who told me all was right there, and I then went and assisted to get out the wounded. Since the accident I have made experiments as to the power of a break on the incline. I have been on the line eight years. When we go down the bank we always apply the break. I never found any difficulty in stopping a train down the bank except when the rails are wet. They were wet on that night in consequence of a fog that was breaking. I have taken thirty-five carriages down the bank with two breaks. There were two guards and an extra extra breaks man for Dudley in going. There was a break attached to one of the eighteen carriages that broke away, but there was no one to work it. Mr. Harris superintended the train at starting. I did not ask to have any man placed in charge of the break attached to the carriage.

By the Foreman: There were two break-vans in addition to the break attached to the carriage. There were persons in the carriage to which the break was attached.

By the Coroner: I did not know that a chain broke when an excursion train was going to Wolverhampton races.

By a Juror: Any person in the compartment in which the break was placed might have used it.

By Mr. Ford: I discovered the backwards movement of the carriages almost immediately. At first I fancied they were being pushed back by the engine.

By the Foreman: If the break was left on at the standing of a train, the couplings would be likely to snap. When I found the carriages going back down the line I screwed the break on as tight as possible.

By Mr. Holcroft: I was thrown down when I jumped out.

By Mr. Ebsworth: Any of the passengers in the carriage to which the break was attached might have played tricks with it. It was not protected in any way. My salary as a guard is 24s. per week. I cannot say whether that is the usual remuneration of guards on other lines.

By Mr. Wheeler: I had not got out of my van at Round Oak, when I found the carriage was going down the bank again.

By Mr. Burbury: I am a regular goods guard, but have been employed running excursion trains all the summer. I did not tell any person the day after the accident that my break was out of order. There is not any one at Brettell Lane to inspect the break vans before they go up the incline. If I had known of the severance at the moment it took place, and applied the break instantly, I do not think I could have prevented the train from running back.

By Mr. King: I was present when the experiments were made as to the power of breaks on the incline by the Government Inspector and the Company's servants, but I was not present when the experiments were made by Mr. Craig.

By the Coroner: I do not know the power of the break I used on the night of the accident. The experiments were made by the Government Inspector on the Saturday after the accident. John Prickett used the break on that occasion. I think the train to which the accident happened was much heavier than that with which the experiment were made. There were the same number of carriages in each; and the coaches with the experiment were made were loaded with iron.

By Mr. Ford: I am still in the employ of the Company; I have not been discharged.

Mr. Sherriff here remarked that the Company never discharged a man while an enquiry like the present was pending.

Cook's evidence was then continued: He was questioned by the Coroner as to the nature of the experiments made under the direction of the Government Inspector, but did not give a very intelligible account of them.

Mr. King stated that evidence would be given of the result of those experiments.

By Mr. Burbury: The rails were perfectly dry at the time the experiments were made.

The Coroner here remarked that he thought it highly desirable that the Jury should have the benefit of the Government Inspector's opinion.

Mr. King stated that he had no doubt the Government Inspector would attend if the Coroner or jury intimated a desire that he should do so.

A conversation then took place as to the additional evidence to be offered. Mr. King, on behalf of the Company, stated that they had felt it their duty to cause all their servants who knew anything about the matter to be in attendance, and many of them had not been examined.

The Coroner said he thought the witness who had been examined had communicated all the facts it was essential for the jury to have before them, and all that remained to be done in his opinion, was, to give of the scientific evidence of which Mr. King had spoken. It then being near six o'clock it was arranged that the enquiry should be further adjourned until Tuesday next at 11 o'clock, when it is understood that Mr. Craig, Mr. M'Connell, and the Government Inspector, if he should be in attendance, will be examined.

Mr. Burbury then enquired whether the legal gentlemen who attended on behalf of the representatives of deceased persons, and those who had sustained injury by the collision, would be allowed to make any observations upon the case. He understood from the Coroner the last time they met that

Mr. King would be permitted to make any observations on behalf of the Company, and in that case he thought it would be only fair that those who attended on behalf of injured persons should also be heard.

The Coroner said he had been misunderstood. He never intended to convey an idea that Mr. King would address the Jury, neither did he intend that any other gentleman should do so.

The enquiry was then adjourned.

THE RAILWAY CATASTROPHE  
NEAR DUDLEY.

THE ADJOURNED INQUEST YESTERDAY.  
CONCLUSION OF THE EVIDENCE

The enquiry before T. M. Phillips, Esq., touching the deaths of thirteen of the unfortunate persons who lost their lives in consequence of this melancholy catastrophe, was resumed at the Bell Hotel, Brierley Hill, yesterday morning, at eleven o'clock.

William Fenton, Esq., Chairman of the Oxford, Worcester, and Wolverhampton Railway Company, and J. S. Pakington, and W. Lewis, Esqs., directors of the Company were present. Captain Tyler, Government Inspector of Railways, was in attendance for the purpose of giving evidence as to the results of the experiments made by him on the railway near the scene of the accident. Mr. McConnell, Locomotive Engineer of the London and North-Western Railway, and Mr. Craig, Locomotive engineer of the Manchester, Sheffield, and Lincolnshire line; Mr. Markham, Locomotive Engineer of the Midland Railway, and Mr. Cawkwell, the Locomotive Engineer of the Lancashire and Yorkshire Railway, were also in attendance for the purpose of giving evidence. Mr. Sherriff, the General Manager of the Oxford, Worcester, and Wolverhampton line; Mr. Adcock, Secretary, and Mr. Wilson, engineer, were likewise present. Mr. King, of the firm Collis, Bernard, and King, appeared as the legal advisor of the Company. Mr. Rupert Kettle, of the Oxford circuit, instructed by Mr. Homer, of Brierley Hill, was present on behalf of Mr. Harley, of Dudley; Mr. Burbury, for the friends of Marshall; and Mr. Nelson, of the firm of Southall and Nelson, of Birmingham, for Noakes.

On the suggestion of Mr. King, Mr. George Lindsley, Locomotive Foreman at Worcester, was first examined in order to prove the weight of the train with which the Government Inspector made his experiments. He deposed: I am stationed at Worcester. I can speak to the weight of the train with which Captain Tyler tried his experiments. I weighed it on the 28th of August, by direction of Mr. Wilson, the Company's engineer. It consisted of seventeen carriages and a van. The carriages were loaded with iron. The gross weight of the train was 116 tons 9 cwt. That weight did not include the engine. The carriages were weighed at Worcester, on the machine generally used for weighing coal and goods. The witness then detailed the numbers and weights of the several carriages, and went on to state that he put 22 cwt. weight of iron in each of the seventeen carriages. The van was not loaded, and there were two empty carriages also.

By the Coroner: They were carriages belonging to the Company, used for ordinary purposes.

By Mr. King: The carriages I weighed were used in the experiments made by her Majesty's Inspector.

By the Coroner: They were used before I weighed them.

Mr. Sherriff remarked that as soon as the train returned to Worcester it was drawn over the machine.

By Mr. Ford: I weighed the carriages used yesterday, and have no doubt some of them were the same as those used by the Government Inspector.

By the Coroner: I did not see the experiments made yesterday; but I weighed the carriages on their return to Worcester. There were 17 carriages and one van, which weighed 110 tons 22 cwt.

By Mr. Williams: The reason of the train used yesterday being lighter than that used by the Government Inspector was, that in the latter train there were two empty carriages in addition to the seventeen loaded ones. The weight of those two carriages was 9 tons 7 cwt. In each carriage used yesterday 5 cwt. more iron was placed than in those used by the Government Inspector.

By Mr. Kettle: I superintended the making up of the train with which the experiments were made. I cannot tell the exact length of it; I did not measure it, nor can I say whether it was measured by any one. I did not make up the train to which the accident happened. I do not know of my own knowledge how many of the seventeen carriages that broke away on the night of the accident were fit to use on the day on which the experiments were made. The experiments were made on the 28th of August. I do not know anything that would have prevented us from using the carriages that broke away, except those that were damaged. I can not tell how many of them were damaged.

By the Coroner: I have no doubt some of the carriages that were in the experiment train were in the accident. We took them indiscriminately out of the siding.

Captain Tyler explained that the train with which his experiments were made was weighed with several people in the van, and when the other experimental train was weighed there was no persons in the van. That would in some degree would account for his train being heavier than the other.

Robert Gransmore, Inspector of Rolling Stock for the Oxford, Worcester, and Wolverhampton Railway Company, was next examined. He deposed: I live at Worcester, and was present when the train to which the accident happened left Worcester. It was my duty to examine it. I was also present when the excursion train arrived at Worcester in the morning. No complaint was made to me of any breakage having taken place. The train arrived about 12.25 p.m., a few minutes before an ordinary train. I examined the train on its arrival. I cannot say how many carriages there were, nor can I speak positively whether there were two engines or only one. There were two ordinary luggage break-vans, and two second-class breaks. One of the break-vans was a goods break, the other a passenger one. The breaks were in good condition. I found three broken screw-couplings and four side chains. I cannot say whether the engines were in good order; it is not my duty to inspect locomotives. I cannot say whether any of the chains produced are those which I found broken. I think one hook only was broken; the others were broken in the links. The broken chains were replaced by others before the train returned in the evening. The broken chains were not used again. I was on the platform when the train started on the evening. It was near half-past six. The train was divided into two portions, but I cannot tell the number of carriages in either portion. There was one engine in of each train. The first train had two breaks – one a goods break, the other a passenger break. I cannot tell what time elapsed between the starting of the two trains.

By Mr. Stewart: It is not a common occurrence for so many shackles to be broken on one train.

By Mr. Salmon: The broken shackle were replaced by others, but he side chains that were damaged were not replaced. I noticed on the arrival of the train at Worcester that one goods shackle was used to unite two of the carriages. That was used on the return journey. The broken shackle was attached to the carriage when it left Worcester.

By the Foreman: I consider the couplings used in the return train were of sufficient strength. The ordinary side

chains were used in addition to the goods coupling, which took the place of the broken shackle.

By Mr. Holcroft: It is not the duty of the guards to report breakages to me, nor do I know to whom they should be reported.

Mr. Williams remarked that this circumstance appeared very extraordinary to him.

By the Coroner: There was in the first return train a second-class break-van. In addition to the two break-vans, but I do not know whether any one was placed in it to work it.

By Mr. Wheeler; I have been examined by the Government Inspector and Mr. King before coming here – once by each gentleman. When I was examined by the Government Inspector Mr. Sherriff was present. My duty is to examine all trains as they arrive at Worcester, and stop anything unfit for use. None of the carriages in the train to Worcester, on the morning of the 23rd, were detained as unfit for use.

Mr. Williams: I should very much like to know with whom the responsibility rests. He does not know whether the guard ought to report to any one or not.

The Coroner: It being his duty to examine all carriages, he is responsible if he sends out any unfit for use, whether any report is made or not.

Witness in reply to Mr. Williams: I did not examine the excursion train more particularly than others. I was surprised when I heard of the accident. I know for a fact that heavier trains than the one to which the accident happened have passed over the line safely.

By the Foreman: The last break in the first train was in the good working order when it left Worcester. Cook was the guard who worked it, and he appeared sober for anything I could see.

By Mr. Kettle: I is not my duty to ascertain the cause as well as the fact of a breakage in all cases. If a carriage should come in much injured I should enquire the reason, but not when a coupling chain merely is broken. I do not know whose duty it is to find out the cause of breakages. It would be my duty to examine a shackle, and endeavour why it had broken. If I could not ascertain the cause of the breakage by observing the broken shackle, I should enquire from the guard. I discovered seven breakages on the arrival of the train at Worcester – four side chains and three shackles. It was a very unusual circumstance. It never before happened in my experience to have so many broken in the course of one journey. I cannot name any other instance of more than one breaking in course of a journey. Upon examining the chains that were broken I did not form any definite opinion myself as to the cause of the breakages, as I had heard the cause; but I thought there must have been a snap, from the guard not having had his break off in starting from the stations. I was informed that the chains had broken in starting from the stations. I cannot say who told me. I did not particularly examine the broken chains to ascertain the quality of the material, having heard they were broken in starting from stations. I walked along the train as it was put in the siding on its arrival. I did not take each broken link in my hand and look at it. I understood the breakages had taken place in starting from stations in consequence of overhearing conversation amongst the Company's servants. In examining a train I walk along each side and examine the wheels and the couplings. I pause between each carriage and look at the fastenings. It was not the duty of any other person to examine that particular train before it left Worcester. When I have formed an opinion as to the cause of a breakage, I report it to the foreman of the works, Mr. George Jones. I did not report to him my opinion as to the cause of the

breakages on that day, but I reported the fact to him. I was his duty to send some one to replace the broken chains, and fresh ones were supplied under his superintendence. There was plenty of time for him to have examined the chains personally before the train returned. The shackles and chains in the return trains were of the ordinary size – the same size as those that broke in the morning. I did not tell any person in charge of the return trains my opinion of the cause of the breakages in going to Worcester. I did not form any opinion as to the cause of the breakages. I thought but little about it; they sometime break at starting and sometimes on the journey. It is my duty to ascertain the cause. I do not know why the couplings broken in the morning are not produced. I know one has been repaired. I do not know how many of the seventeen carriages which broke away are unfit for use. I have nothing to do with repairs. I am not the general superintendent of the rolling stock of the Company; but merely Inspector of the rolling stock. I cannot tell whether there is any person here who can tell where the seventeen carriages which broke away are now.

Mr. Sherriff remarked that probably some of them were in London and some of them in Liverpool at the present time.

By the Foreman: I do not think it would injure the iron of a coupling to put on a break suddenly when the train is in motion, unless the coupling actually broke. I know couplings have broken under such circumstances.

By Mr. King: It is my duty to examine the fastening of every train which comes into or leaves Worcester Station. I is also my duty to report the circumstance of every breakage to Mr. Jones, the foreman of the works. I do not consider myself competent to give an opinion as to cause of every breakage. I do not know what strain iron will bear. It is the duty of the engineer to decide the strength and proportions of the materials used in the fastenings. I thoroughly examined every coupling before the train left Worcester. It is not the duty of Mr. Jones to examine carriages.

Mr. Haines: Are you competent to know what Mr. Jones's duties are?

Witness: Yes.

By Mr. King: All the side chains and couplings were perfect when the train left Worcester. The train was in proper travelling condition.

Mr. Wheeler: Have any of the questions now put to you been put to you before by Mr. King or the Government Inspector?

Witness: Yes; some of them.

By Mr. Wheeler: I do not consider it necessary to report to Mr. Jones the breakage of all coupling chains, but Mr. Jones must replace the chains.

The Coroner: Then how is Mr. Jones to know when a fresh chain is required?

Witness: He would know from the person who did the work. When I speak of a report, I mean a report in writing, not a mere verbal report.

Mr. Kettle here asked for the report of the seven breakages the occurred to the train in going to Worcester.

The witness explained that he made a verbal report personally to Mr. Jones, but did not make a written report.

Mr. Kettle asked what was the substance of the statement he made to Mr. Jones.

The witness said he told Mr. Jones that three coupling and four side chains had broken: but they could not be repaired, as the coaches were crowded together in the siding, and he considered them perfectly safe to go back again as they were.

Shortly before two o'clock the Coroner adjourned the enquiry for an hour, at the request of the Jury.

During the interval a very neat and well-executed model

if two of the Company's carriages were placed upon the table, for the purpose of elucidating the scientific evidence about to be adduced.

On resuming, the first witness examined was Captain Henry Whatley Tyler, one of her Majesty's Inspectors of Railways, who deposed as follows: I live at Norfolk Crescent, London. I was ordered to report on the accident to the Board of Trade, and came and tried certain experiments for my own information. I made the experiments on the 28th of August. The experiments were made on the line between Round Oak and Brettell Lane. I desired to obtain seventeen carriages and a van, as nearly as possible similar to those to which the accident occurred on the 23rd of August, and they were furnished by the Company. They were such carriages as are in ordinary use on the railway. There were two break-vans – one behind, the other about the centre. The one about the centre was a break-carriage – one in which passengers ride, which has a break attached to it – and the other was a regular break-van. – Mr. Sherriff, Mr. Adcock, Mr. Wilson, and other officers of the Company were present, with Prickett and Cook, guards, and other persons. The carriages were loaded with iron, by my direction. I first ascertained the number of passengers likely to have been in the carriage at the time of the collision, and then directed the carriages to be loaded with 22 cwt. each, which would be as nearly as I could compute the weight of the passengers in them at the time of the collision. I think we had only one engine. We took the carriages from Worcester to Round Oak, and on arriving there seventeen carriages and two breaks and a van were detached from the engine, and allowed to run back down the line by the force of gravity. They ran down at various speeds by their own weight. The result was that the one break-van in the rear had perfect control over the whole of the carriages. I will give you the figures of one of the experiments which I marked more particularly than the others. I measured the distances in that case. The speed at which the various experiments were made varied from two or three to ten or fifteen miles an hour. We acquired a speed of ten miles an hour in 440 yards. The hind break was then applied, the train stopped in 833 yards after the application of the break, 111 yards short of the point of collision. The state of the rails was favourable on that day, the weather being dry. If the rails had not been dry, the train would not have been stopped in so short a distance. I afterwards tried at a speed of fifteen miles an hour, but that I do not think worth recording. I merely wanted to get up a speed that would go past the point of collision. The break used was an ordinary one. If the rails were slippery a train would go very much further, but I cannot say how much further unless you could define the exact degree of slipperiness. At any speed under ten miles an hour I think the break ought decidedly to have stopped that train in the state in which the rails are likely to have been on the night of the collision. If the break had been applied as soon as the train began to go backwards, there is no doubt in the world that the train ought to have been stopped in a short distance – that is, supposing the break to have been in good order. Supposing the break to have been applied when the train was going at four miles an hour, the train ought to have been stopped before the point of collision if the rails were slippery; but it could not have been stopped before arriving at the point of collision in a slippery state of the rails if it had been allowed to attain a speed of ten miles an hour; still the collision would not have been so violent as it appears to have been. These experiments have led me to the conclusion that the guard did not apply the break at all on that night when the carriages ran down the incline, or that it was applied only a short distance from the point of collision. I think it would be

right to produce before you a part of the break apparatus which tends to confirm that opinion.

The screw of the break was here produced, and the Government Inspector pointed out certain indications which, in his opinion, tended to confirm the judgment at which he had arrived, that the break was not fully on at the time of the collision. He then said: I found it much bent, and that the nut was in the lower part of the greasy portion of the break screw, and that it was in the position which indicated that the break had not been turned on.

The portions of the broken coupling were then produced at the request of Captain Tyler, who said the quality of the iron was good, and that it was of sufficient strength to bear any strain to which it would be applied in ordinary use. He then proceeded: The strap of the shackler seems to have given way first, and to have been the primary cause of the accident. That strap gave way in consequence of the weld by which the eye of the strap is attached being defective. It was only holding by about one-third of its thickness. The iron is not of the best quality; but the cause of its giving way was the defective weld. Only a third of the section of the eye was holding in consequence of the bad weld.

The Coroner here suggested that Captain Tyler should produce a copy of his report to the Board of Trade.

Captain Tyler, however, said that he had proposed to do that before a Coroner at Chilham, a few days ago, who refused to receive it, on the grounds that it was not evidence, and he was not provided with a copy of his report in this case.

In reply to Mr. Wheeler, Captain Tyler said it was usual for breaks to be attached to second-class carriages, but they ought to be protected from interference by the passengers. His duty, when he was sent down here by the Board of Trade, was to report to them; and he made such experiments as he thought proper. He requested the engineer of the company to provide carriages loaded with the weight arrived at by a joint calculation, but did not instruct anyone to superintend the loading of the carriages. He had no power to direct the Company to do anything. He could merely prefer requests, and everything for which he asked was willingly furnished. He even requested that a certain amount of weight should be taken out of the carriages after they were loaded, in order to make a fair experiment. It was not wetness but greasiness which made rails slippery. Some companies watered them to wash off the grease. I only know from what I hear that the rails were slightly greasy on the night of the collision. I examined the railway servants on the subject, and was led to believe from what I heard that the rails were slightly greasy. Having no power to command the Company to anything, they were pleased to grant me an interview with their servants, for the purpose of obtaining information.

Mr. Wheeler further asked whether a train would be as easily stopped if the rails were immersed in water as if they were quite dry, but the gallant Captain laughingly said he had never tried the experiment, and did not choose to give an opinion on such an absurd question.

In reply to Mr. Ford, Captain Tyler said fog made rails greasy, but water washed the grease off.

In reply to Mr. Kettle he said: My opinion is that the defect in the coupling iron and the non-application of the break had conducted to this accident. I asked to see as many of the broken chains that broke in going down as could be found, but have seen only one half link. Looking at this broken side chain and examining the crystals where it is broken, I think it would be better if a superior quality of iron were used.

Mr. Kettle asked if it was proper iron of which to make coupling chains for passenger carriages.

Captain Tyler replied that it was no doubt best to use material of such quality, but taking into account the weight of metal in the broken link submitted to him, he thought it would do with fair usage. Sudden jerks might be called unfair usage. ...ft..... the Captain continued more important that the shackles should be of good quality than the side chains, which are adopted as an additional precaution, and it is a question whether they ought to be used at all. The shackle which broke is not of the very best quality of iron. I heard the evidence of Gransmore this morning as to the examination of the train, and am of opinion that he did all that was his duty to do. Assuming that he is the only person who has the examination of such matters on behalf of the Company. I do not see what else he could have done without taking off the shackles and testing them by weight or hydraulic pressure. You can only test them by view when on the carriages. You cannot test them usefully by sound. The strap of the shackle which broke is not of the best quality of iron. It appears to be of the same quality as the iron of the shackle itself. Each strap would have to bear half the strain on the shackle, and at the same angle.

In reply to further questions, Captain Tyler said: It is impossible to give anything more than an approximate opinion as to the distance the train would have gone on the night of the accident before it attained a speed of four miles an hour, unless the exact state of the rails could be ascertained. I should think it would probably go from 100 to 200 yards. I should think that on the night of the collision the guard might be applying his break have stopped the train short of the spot at which it occurred, if he had allowed the train to attain a speed of seven miles an hour before using his break.

By the Foreman: I think that if the break had been applied within 160 yards of the station on the night of the accident the guard might have stopped the train short of the point of the collision.

By Mr. Kettle: I should think the train would attain the speed of seven miles an hour in 300 or 400 yards if the break were not applied. In my opinion the guard must have applied his break within the distance of the station, in order to have stopped his train short of the point of collision.

By Mr. Fenton, Chairman of the Company: The flaw in the shackle strap could not have been seen by the officers of the Company before the fracture occurred; but it might have been detected by actual strain. I believe these shackles are supplied by the carriage builders, but I am not aware whether it is usual for the companies to test them. I have no reasonable doubt that the carriages of the experimental train were loaded with iron according to my directions; it is stated on the oath of Mr. Gransmore.

Mr. James E. McConnell, engineer of the London and North-Western Railway, was then examined. He said I live in Wolverhampton. I have been asked to examine the break apparatus. I am not in any way connected with the Oxford, Worcester, and Wolverhampton line. I was also asked to examine the couplings and side chains now produced. Taking the screw coupling, or shackle, I consider there can be no doubt that the failure has been owing to the imperfect welding of the strap. I find there has been a flaw in the link of the strap where it fits onto the stud of the nut. That flaw is about one-third of the entire area of the link or eye of the strap; the sound part being a film round the outside, of about one-eighth of an inch in width. The inner portion, which is not exposed to view, is black, as though it had never been welded. That of course reduces the strength of the strap to one third. The effect of the strap breaking, in my opinion, has led to the breakage of the screw coupling, by the nut becoming angled across by a sudden jerk. That led to the breakage of one of the side chains and the stripping of the

nut of the other and consequent separation of the carriages and the accident that ensued. The iron of which the hook of the side chain is made is not the best, but it is of fair quality. It is not a fibrous tough iron. The iron of which the screw coupling is made is, I consider, very good iron. I cannot tell without testing it by fire or tension. I cannot pronounce whether it is the best, but it is of good quality. A tough iron is best for such a purpose, but I cannot say whether this is tough without testing it. It is fine-grained iron. The quality of the link is inferior, and I am inclined to think it has been over-heated in welding. There is some good iron in the hook, and some a little middling. I heard the evidence of the last witness, but have not tried any experiments myself. I also heard the evidence of the guard, an upon the evidence of Cook I am of opinion that the last break had not been applied when the train was approaching Round Oak Station on the night of the collision. The consequence would be the breaks of the engine tender and front van being applied, the momentum of the latter part of the train would force the buffer springs forward, bringing the carriages closer together, and the subsequent rebound would test the weakest coupling. The jerk broke the eye of the strap, and then what I have described before led to the separation of the carriages. If the guard in the last van had applied his break as soon as the carriages stopped, there would have been no accident. If the carriages had parted, they would have been stopped within a very short distance.

By Mr. Wheeler: the London and North Western Company make their own carriages at Saltley and Crewe. In purchased carriages the shackles and side chains were attached complete when bought. It is customary in our works to test some of the shackles—not all. We sometimes purchase shackles. They are bought by tender; but I do not know the price at which the last were bought. A certain percentage of the purchased shackles are tested in an hydraulic press. An ordinary third-class carriage holds about thirty two or forty persons. A second-class will hold twenty-five to thirty, and a first eighteen. We generally reckon fifteen passengers per ton.

By Mr. Kettle: The eye of the strap is the worst of the three pieces of iron; it is inferior iron, but I have seen much worse. There is a flaw in the welding. I think the hook is not so good as the screw-coupling; it is not so equal. I think it is likely the crystalline appearance of the strap may have been produced by the mode of breakage, which would be by a snap. Constant jarring will disintegrate the fibres, and when a breakage takes place the appearance will be crystalline. When that disintegration of fibre has taken place, the iron will break more easily. We do not from time to time test our couplings to see whether that disintegration is occurring. If in one of our trains it were reported that seven couplings had broken in one journey, I should first enquire under what circumstances the breakage had occurred—whether there had been any unusual jarring, and I should then direct the carriage inspector to examine the couplings, and remove any that might appear defective. I have known three or four carriages separate, which might cause six or seven breakages altogether in a very heavy train. When I test a coupling I always break it, and I do not think it is safe to do otherwise. The test may damage the coupling without actually breaking it, to an extent that would render it unsafe to use it afterwards.

By Mr. Nelson: Knowing seven breakages had occurred in going to Worcester, I would have allowed twenty-seven carriages to return in one train.

By Mr. Burbury: I think it probable I might have attached the second engine necessary to draw the heavy train up the incline behind the train instead of in front. Putting tow engines in front has tendency to bring greater strain upon the

couplings. I should have put a second engine behind the train, and have sent the whole of the train up at once; but there are objections to that course, and there is a recommendation of the Board of Trade against it being adopted. Still we have sometimes to make a choice of evils.

By Mr. Wheeler: It is entirely a question of speed and gradients how many breaks are necessary to a given number of carriages. Fast trains require more breaks than slow ones. On the London and North-Western Railway perhaps two breaks to twenty carriages is about the ordinary average. We should not despatch a train of fifteen carriages without two breaks.

By Mr. Fenton: I think the price given ought to have commanded the best quality in workmanship and material. I valued the rolling stock after it had been in use two years by the contractor.

Mr. William Grindley Craig, locomotive engineer, and carriage and waggon superintendent of the Manchester, Sheffield, and Lincolnshire Railway, was the next witness. He said: I received a telegram from Mr. Sherriff, on the 30th of August requesting me to come and make a series of experiments. I came on the following morning, and made experiments for the purposes of testing the breaking power of the break-vans of the Oxford, Worcester, and Wolverhampton Railway Company, between Round Oak and Brettell Lane stations. The experiment train consisted of two engines, a goods break-van, two break-vans, five empty passenger carriages, and twenty-three loaded with iron (23 cwt. each), and a passenger break-van, with four passengers in it. The gross weight of the van was 5 tons, 6 cwt., and 2 qrs. The total weight of the train, exclusive of engines, was 185 tons. The breaksman was one of the passengers in the van. I got into the passenger break-van, in the rear of the train, at Brettell Lane, and on approaching Round Oak Station, at a speed of about five miles per hour, No. 131 third-class carriage, which was the eighteenth vehicle from the rear of the train, was uncoupled and allowed to recede down the incline towards Brettell Lane, at a speed of about four miles an hour. The break of the van was applied, and the detached carriages were brought to a stand in ten yards. The gross weight of the eighteen carriages was 101 tons 3 cwt. The second experiment: we coupled the carriages again, and went towards Round Oak at a speed of about four miles an hour. We uncoupled No. 133 carriage, which was twenty carriages from the rear of the train, the gross weight of which was 112 tons 15 cwt. These detached carriages were allowed to recede at a speed of three miles per hour. The break was then applied, and the detached carriages were brought to a stand in 88 feet from where the break was put on. The third experiment: We connected the train, and again detached the same carriages. We allowed them to attain a speed of 42 miles an hour when the break was applied, and they were brought to a stand in eighty-eight yards from the point where the break was applied. I then had the break taken off, and allowed the twenty carriages to recede at a speed of fully five miles an hour. The break was then applied, and the train was brought to a stand in seventy yards. I then connected the twenty carriages with the front portion of the train, and approached Round Oak Station at a speed of eight miles an hour. On nearing the station the speed was reduced to six mile and carriage No. 56, the 28th from the rear of the train, was detached. These twenty-eight carriages weighted 154 tons 16 cwt., and they were allowed to recede down the incline at a speed of three miles an hour. The break was then applied, and the twenty-eight carriages were brought to a stand in 218 yards. I again connected the whole train, and returned to Round Oak Station at eight miles an hour. I then uncoupled the whole train from the engines, making thirty-

one vehicles, weighing 179 tons 13 cwt. 2 qrs. They were allowed to recede at a speed of six miles an hour, when the break was applied, but could not pull up the train without the assistance of the second break. I then allowed the same train to recede at a speed of three miles an hour, when the break was applied, and the speed did not increase more than one mile per hour in 700 yards. After that the speed increased to six miles an hour. The second-class break was then applied, and the train was brought to a stand. The eight experiment: We travelled with the whole train towards Round Oak, where I uncoupled all the passenger carriages (twenty-eight), weighing 160 tons 2 cwt. 2 qrs. On finding that the train was receding, I had the block applied, and it was brought to a stand in ten yards. That experiment was repeated, and we brought it up in nine yards. It was again repeated, and we brought up in seven yards. Again, and brought up in 32; and again repeated, and brought up in fifteen yards. After having finished the testing of the breaks, I had the coupling of one of the carriages reduced in size, in order to see whether, when it was reduced in size, it would bear the strain of an engine starting the whole train. I reduced it from 18 inch in diameter to w inch. The train was then started up the incline with the reduced chain attached to the twenty-eighth carriage from the rear of the train. The coupling did not break. I have also measured the strength of one of the couplings, and I find the weakest part of it was equal to a strain of 13 tons, which the last experiment proves.

Mr. Kettle did not cross-examine Mr. Craig, and after a conversation between Mr. King, who stated that the Company had several other witnesses in attendance, the Coroner and the jury, who expressed an opinion that they had heard sufficient to enable them to arrive at a satisfactory conclusion as to the cause of the accident, it was decided that no further evidence should be given.

It being nearly seven o'clock, the enquiry was adjourned until Thursday (to-morrow) morning at ten o'clock, when the depositions will be completed, the Coroner will sum up, and the verdict be returned.

THE LATE  
RAILWAY CATASTROPHE  
NEAR DUDLEY

EXTRAORDINARY SCENE AT THE INQUEST  
YESTERDAY.

SECESSION OF THE FOREMAN OF THE JURY

The enquiry before T. M. Phillips, Esq. Coroner, touching the deaths of thirteen of the persons who lost their lives in consequence of the late collision on the Oxford, Worcester, and Wolverhampton Railway, was resumed yesterday morning at the Bell Hotel, Brierley Hill. Mr. Sherriff, the general manager of the line, Mr. Adcock, secretary, Mr. Wilson, the engineer, and Mr. Wood, from the office of the general manager, were present, as was also Mr. Dudley Parsons, the manager of the Stour Valley Railway; Mr. King of the firm of Collis, Bernard, and King, attended as the legal adviser of the Company. Mr. Burbury was present on behalf of the friends of Marshall and Mills; Mr. Nelson, for Mr. Noakes; and Mr. Homer, for Mr. Harley, of Dudley.

Before resuming the enquiry, the Coroner remarked that he had received a letter from a person who tendered a statement on the subject of the enquiry.

Mr. Wheeler: He spoke to me this morning, and said he could make an important statement in reference to the conduct of the guard.

The Coroner: I cannot hear statements; everything that is said here in reference to this enquiry must be upon oath. Does he mean that he can give important evidence?

Mr. Wheeler: Yes; I understand him to say he could give important evidence.

Mr. Bird of Birmingham, the inventor of an apparatus for communicating between the guards and drivers of railway trains, then came forward, and said the nature of the statement he wished to tender to the jury was that the accident having arisen in consequence of the severance of the train, the Company might have had an instrument, with which they were well acquainted, which would have communicated to the guard notice of the severance the moment it took place, and so have left him entirely without excuse for not applying his break.

The Coroner: I suppose you mean to say that if the instrument of which you are the inventor had been applied to the train, the occurrence would not have taken place?

Mr. Bird: I also wish to say that the Company have tried it, and know that it answers the purpose intended.

Mr. Sherriff remarked that the statement on the part of Mr. Bird was not altogether *ex parte*, but entirely wrong.

Mr. Wilson wished to correct the statement of Mr. Bird in reference to the alleged trial and approval of his machine, but the Coroner declined to hear it, as he could not take it as evidence.

Mr. Bird then stated that his brother was in the train at the time of the accident, and he felt it to be his duty, as the inventor of a scientific instrument which would have prevented the loss of life that had taken place, to show it to the Court.

The Coroner: You have shown it in the room below, upon several occasions, I believe.

Mr. Bird: I have Sir: but I wish to make a statement. Am I refused to be examined?

The Coroner: Anything you say must be on oath.

Mr. Bird: Then I tender myself for examination.

Mr. King here remarked the Mr. Bird was but the propounder of a speculative theory. There were all sort of inventions of a similar character, and the Company had received hundreds of letters from different inventors, all of whom might as well be examined as Mr. Bird.

The Coroner: But when a man comes and tells me his brother was killed, and tenders evidence, I must hear him.

Mr. King: Not killed Sir; in the train, but not injured.

The Coroner: Well, when a person tenders evidence, I am bound to receive it.

Mr. Nelson: I think, as I attend here on behalf of one of the persons injured—

The Coroner: Are you on the jury, Sir?

Mr. Nelson: No.

The Coroner: Then I have nothing to do with you.

Mr. Bird came forward to be sworn, upon which Mr. King said that if his evidence were taken, he should claim to be allowed to give evidence of the inutility of his machine.

The Coroner: This gentleman has been here every day of the enquiry, and he certainly ought to have tendered his evidence before.

Mr. King: If he had done so we could have completely answered him. Now unfortunately, all our scientific witnesses have gone away. Mr. M'Connell is thoroughly acquainted with the machine, and if he were here would satisfy you that it is practically useless. But Mr. Wilson has examined the invention, and I shall tender his evidence in answer to Mr. Bird.

Mr. Bird was then sworn, but the enquiry was not yet to progress. A still more unusual scene had to be enacted before the enquiry was resumed.

Mr. Wheeler rose and said that Mr. Haines had publicly made a statement that impeached the character of the jury.

Mr. Haines was sorry that such was the case, but the statement referred merely to the foreman.

The Coroner said it was open for the jury to take any course they chose. If they thought Mr. Haines had acted with indiscretion, or that Mr. Bailey had committed any impropriety, either of those gentlemen might retire, as there were fourteen or fifteen on the jury.

The Foreman said he should not feel justified in retiring, unless he had an opportunity of vindicating his character. If the jury wished to go into the case he had no objection to give them the most ample information; but retire under the stigma that seemed now to hang over him, he could not, nor he would not.

Mr. King said he was quite satisfied that in what the foreman had done he had acted most impartially.

Mr. Homer then rose and said: Mr. King is not in possession of all the facts. If the finding of this does not attach blame to this Company, I shall under the advice of Mr. Kettle, who appeared her the other day, institute an enquiry—

The Coroner: What do you mean, Sir? Mr. Kettle: What has he to do with my inquest, or you either? If the jury should not find a verdict of negligence, you will institute an enquiry! It is most absurd. (Cries of "Shame, shame!" from some of the jury.)

The Foreman again rose and commenced speaking.

The Coroner: Let one speak besides yourself, will you? You have heard the accusation against you. Are you prepared to say you have not, directly or indirectly, interfered in any way in this matter contrary to your duty as a member of this jury?

The Foreman: I will go into the circumstances and vindicate my character if necessary. I have not acted in any way disgracefully, either as a juror, a Christian minister, or an Englishman.

The Coroner: The simple question is, have you interfered in any way, directly or indirectly, with any person in reference to this enquiry?

Mr. Homer: Have you not seen my client, Mr. Harley, and settled the case for £100.?

The Foreman: I have not settled the case, nor had anything to do with it.

Mr. Homer: Did you not count the money, and pay it over to him?

The Coroner: It is not your province to examine the foreman.

Dr. Walker, one of the medical agents of the Company, here came forward, and wished to make a statement, but was cut short by the Coroner, who said that if the jury could not come to an arrangement he should adjourn the enquiry for a month, and lay the whole case before the proper authorities. He would not be detained longer by any squabble among them.

Mr. Holcroft thought the statement of the Foreman was quite satisfactory, and if it went forth to the public he had no doubt it would set at rest the many groundless rumours afloat.

Mr. Ford: Talk about rumours! Look at the ignoramuses who have published statements in the public prints, rashly rushing in where higher intelligences might hesitate, making all sorts of accusations against the jury! Now there is something fastened upon our foreman. I think it is a more impudent proceeding. It is trying to bias the jury. Let us settle it now.

The Coroner: The foreman denies *in toto* the accusation against him. The Rev. C. Perry: He is a minister of the gospel, and I think his word ought to be taken.

Dr. Walker: The accusation in reference to the case of Harley, of Dudley, is unfounded.

The Foreman: If you will allow me to make a statement of the circumstances, I will detail them as truly and as correctly as I possibly can. If you will hear me but patiently you will be able to form an honest opinion. Shall I speak. ("Yes, yes," from several of the Jury.) Very well; I am prepared to do my duty. On a certain day, soon after the collision, I was requested by a friend to go and see a person, who is a member of the Baptist denomination, of which I am a minister, who had been injured in the collision, and who resides at Prince's End. I understand the man had expressed a wish to see me, and obtain my opinion as to the amount of compensation he ought to get. I determined to go, and on my way, somewhere between Brierley Hill and Dudley, Dr. Walker picked me up in his gig. I do not know—positively and conscientiously I declare it—when I got into that gig, that Dr. Walker was going to Harley's, at Dudley. But there he pulled up. He said, he was going in; the he should not be long, and asked me to go in with him, saying he would get a man to hold the horse. I walked after him, and stood at the door. The doctor commenced examining his patient, and then spoke to him about compensation. The moment he began to talk about compensation Mr. Harley asked him to walk up the stairs, and invited me to follow him. The kitchen was full of relatives and friends, and he appeared to wish that they should not hear what was said. I left the door open, but he requested me to return and shut it. A conversation then ensued between Dr. Walker and Mr. Harley. I heard the doctor offer him £100, as compensation. Having previous knowledge that Harley had committed his case to his brother-in-law, Mr. Armstrong, of Birmingham, I thought it

possible some persons might infer that undue advantage had been taken, and I asked him if he would not like to see Mr. Armstrong before settling; but he replied, No; he was quite competent to settle his own business. That was the only thing I said in the matter. Dr. Walker then drew out a roll of bills, and counted out what came to £100., and laid them on the table. Harley asked me if I would go down stairs and get a pen and ink, being unable to walk very well himself, in consequence of his injuries, and I did so. He then signed the receipt. Now comes the point at which Mr. Homer seems to stick. Dr. Walker, in his hurry and confusion, after the receipt was signed, said he had some £10. notes amongst the £5. notes he had in his hand; and asked me to see if there were any amongst those he had laid on the table for Harley. I took up the notes, looked at the numbers in the corners, and said they were all fives. I cannot say whether there were twenty of them, for I did not count them. I gave the notes to Dr. Walker, who handed them to Harley; and I shall never as long as I live, forget the zest with which he thrust them into his pocket. I advised him to take care of the money, and not let anybody or everybody get it off him. That was all I did; and I solemnly declare this is the truth, the whole truth, and nothing but the truth, so far as Harley's case is concerned. Having disposed of that case I proceed on my journey to Prince's End.

The Coroner: This all took place since you have been foreman of the Jury?

The Foreman: Yes. On arriving at Prince's End I called upon Rev. R. Nightingale, who is the pastor of Bailey, feeling desirous that if I were to see Bailey, Mr. Nightingale should accompany me. I found that Mr. Nightingale could not then accompany me, and rather than see Bailey without him, I fixed to go again on the following day, being anxious that there should not be the slightest shade of suspicion connected with any of my movements. Accordingly, on the following day I walked over again, and Mr. Nightingale accompanied me to Bailey's home. We sat and conversed with him on temporal and spiritual things for some time. Bailey said he had been offered £50. as compensation for the injuries he had received; and that from what had had been told by his friends he thought he ought to have £100., and that five lawyers had been with him wanting to get the case into their hands. He said some friends of his had had a distant relative killed on the South Staffordshire Line, and they consequently wished him to press hard upon the Company, and get as much as he possibly could. I said to him, "If the Company will give you what will satisfy you, without going to law—don't you think it would be wise to take it? Is there any use in going to law if you can have what you want without it?" He said, "Well, If they will give me £100. I should be satisfied."

The Coroner: I should think the jury are perfectly satisfied.

The Foreman: I asked to be allowed to speak without interruption. We talked the matter over as regarded his injuries, and as regarded the compensation, and I expressed my opinion to him frankly and fully, and so did Mr. Nightingale. Our opinion was, that if he were to get £75. it would be ample compensation for him; and I told him that I thought the Company would pay that, and as one of their agents was in the neighbourhood, he might have his compensation at once. He said he wanted to see me, because he thought I knew all the circumstances of the case, and being a minister of his own denomination should be able to tell him what he ought to get. I told him that I had no interest in the Company, that I had not received a penny for my expenses in coming there, and neither did I expect anything; but was acting from disinterested motives. Mr. Bailey then went on to say the man at length agreed to

accept £80.; that on returning to Mr. Nightingale's home he found Dr. Walker driving by; that he informed the doctor of the result of his interview with Bailey; that the doctor asked him and Mr. Nightingale to return to Bailey's, promising to meet him there, which he did; and that the money was then paid, and a receipt taken, the man telling Dr. Walker that he would not have settled the case, except for the advice of his pastor, Mr. Nightingale, and his friend, the foreman. Now said the foreman in conclusion: I have had nothing more to do with the case; I have no connection with the Company or their officers, nor had I any understanding with them. I have not received one halfpenny from them towards my expenses; or from Bailey. All I have done with the purest motives, and a sincere desire to do good to my friend in his affliction. If I am unfit to sit upon any jury after that statement of the circumstances, I will retire.

Mr. Homer said he thought it unnecessary to say anything; Mr. Bailey had said quite enough to implicate himself.

The Coroner: His conduct has been tantamount to acting as the agent of the Company.

Mr. Holcroft was quite satisfied Mr. Bailey had acted from the best motives.

The Coroner: Yes; but he had no business to interfere.

Mr. Sherriff said he had not exchanged half a dozen words with Mr. Bailey, and was certain he was not acting as the agent of the Company.

The Coroner: He seems to have been acting in concert with Dr. Walker in settling claims, and therefore cannot come here with an unbiased mind.

Mr. Haines: Certainly not.

The Coroner: I think, under the circumstances I shall adjourn the enquiry for a month, if the Jury are not satisfied with what they have heard. I have heard quite sufficient, and do not want to hear another syllable. It was a most indelicate thing to interfere at all, being sworn as foreman of the Jury.

The Foreman: I will retire.

Mr. Wheeler and others expressed themselves perfectly satisfied that Mr. Bailey had acted from the best motives, however indiscreetly.

The Foreman said that having had an opportunity of stating the case as it really stood, he should now retire. He did not wish to be upon the Jury unless he could do some public service.

Mr. Holcroft said he was quite sure the jury regretted his retirement. He had been the means of eliciting much valuable information in the course of the enquiry, and hoped that jury, after having heard his statement, would request him to remain.

The Coroner thought it unnecessary to occupy further time about the matter. It was quite clear Mr. Bailey had been negotiating with people who were wounded, with an agent of the company; and after that he did not think he should retract his offer to retire.

Mr. Bailey then withdrew from the Jurors' table, and shortly afterwards left the room.

Mr. Bird's evidence was then taken. He said he was an experimental chemist, living in Birmingham. In the autumn of 1856, in consequence of a request from Mr. Johnson, one of the directors of the Oxford, Worcester, and Wolverhampton Company, he took over to Worcester and instrument which he had constructed, which would indicate to the guard and driver of a train when any severance took place. Mr. Sherriff saw the apparatus, and suggested that it should be tried, requesting Mr. Wilson, the engineer, to make an experiment with it. Under the direction of the latter gentleman, it was affixed to a train from Worcester to Kidderminster. Mr. Wilson expressed his entire approbation

of the action of the apparatus, and suggested certain alterations, which were afterward made. Permission was subsequently given him to work the apparatus on a train of the Company between Evesham and Birmingham for a month, to see how it operated in practice; but as no promise of business, in case the trial was successful, accompanied the offer, he did not accept it, and the trial never came off. He had received similar permission from the London and North-Western Company.

Mr. Bird's "statement" was somewhat protracted, and Mr. Haines, one of the jury, occasioned considerable merriment by remarking while it was being made, that the jury had better give him an order and let him go.

Mr. Wilson, the Company's engineer, was then sworn. As to Mr. Bird's invention, he spoke unfavourably. The tube employed is made of gutta-percha, and in working along the carriages is chafed and cut. Mr. Bird could not satisfy him either how the water in the meter could be prevented from freezing. He (witness) did not see how it could be kept perfect, but offered to put it on a train for a month, so that it might be properly tested between Evesham and Bromsgrove. A rope would answer quite as well as Mr. Bird's apparatus. There are 2,000 or 3,000 such inventions, and this was the least promising of any of them. It was neither useful nor ornament. I was a series of water-pipes, pumps, and "rattle-traps." It was applicable as long as it could be kept perfect; but it could not.

In answer to questioning from the Coroner, Mr. Wilson then said his duties were to keep the permanent way and rolling stock in perfect order. In the 27th he accompanied the Government Inspector to the scene of the accident. On arriving there they examined the different points of the line between Brettle Lane and Round Oak. The engine-drivers and guards who accompanied the excursion trains from Worcester on the night of the accident were in attendance by his desire, and he examined them. He also examined the station masters, porters, and platelayer (Heeley), and others. On the following morning I loaded seventeen carriages with 22 cwt. of iron in each carriage, and can confirm his statements in every particular. I may say in addition that the guard (Cook) was requested to apply the break on arriving at the same speed as he did on the night of the accident; and the train stopped in a very short distance. I also witnessed Mr. Gray's experiments, and can confirm his statements. I made experiments last Monday with 5 cwt. additional in each vehicle, and arrived at similar results. I had seventeen vehicles, containing 27 cwt. each.

By Mr. Wheeler: The responsibility for all rolling stock of the Company being in perfect order devolves upon one of my assistants. I do not test all the chains; those which I test I break; I think testing chains or any other things intended to carry weight is courting accident. Most of our side chains we make ourselves; the shackles we purchased. The storekeeper sends the orders, but submits the materials he receives to me for my approval. It is a distinct understanding that all shackles ordered shall be of the best material made in the country; of course we do not specify that they shall be of Swedish iron, though that is undoubtedly the best. I believe the price paid for the last that were purchased was 7d. per lb., including the cast-balls. It is specified that they shall be of a certain strength, and we examine them when they come in. They are submitted to a series of examinations before being used. All that appear faulty are sent back; and it is in our interest to examine them carefully. There is no specified limit to the number of carriages to be attached to one engine; it depends entirely on where they are to proceed, and we exercise a discretion over the matter. We work our goods engines from 100 to 120 horse power, and our passenger engines from 90 to 100; but I

cannot speak exactly without making a calculation. We have no fixed rule as to the number of breaks to be used with a given number of carriages. We should not send fifteen carriages without two breaks. I believe the guard might have stopped the train considerably short of the point of collision, if he had applied his break, after running 300 or 400 yards. We applied the break after running 500 yards, and stopped 111 yards short of the place where the collision occurred. I am of the opinion that the nut on the screw of the break-van alluded to in the evidence of Captain Tyler, could not have been moved after the accident. I cannot tell whether the break was on at the time of the collision. I have not minutely examined the position of the screw on the nut. If, before jumping out of the van, the guard did not put the strap on the break, it would slack back a little. I cannot say whether the break would lock the wheels with the nut in the position in which it is now on the screw. When I came here I gave instructions for the best men to be engaged as engine drivers, and for them to be paid the best wages.

By Mr. Holcroft: The screw of the break would require to travel a great distance if the blocks were old than if new. I cannot tell whether the break of Cook's van had new or old blocks. All the broken material that was portable was carried away. Everything was stolen except the wheels of the carriages, and I expect those would have gone if they had not been too heavy. I consider the break of the excursion train more powerful than the one with which the experiments were made, it having recently had new tyres upon the wheels. I believe the break was on when the collision took place. I think he put it on when he saw the second train coming. Captain Tyler was strongly of opinion that the break had not been applied; but I think, taking Cook's own statement, and that of a man who said he saw the sparks flying from the wheels, that he must have put it on. We consider Cook one of our best guards, and I have no doubt he was perfectly sober.

Mr. Burbury: Are you, as engineer of the Company, prepared to contradict the evidence of Captain Tyler, as to the non-application of the breaks?

Mr. Wilson: I am of opinion the break was on, but that Cook did not put it on until he saw the second train coming, and then only very slightly.

Mr. Alexander Sherriff, the general manager of the Company was next examined. After giving details of what he saw when he arrived at the scene of the accident, he proceeded to say:- Having heard nearly the whole of the evidence given, I am pretty much of the opinion of Mr. McConnell, as to the breakage of the couplings and the non-application of the break in sufficient time, but I am not a scientific man, and can only give the same opinion as an ordinary person. I am clearly of opinion that the guard did not apply his break in time; but he may not be culpable on that account. He appears to have lost his presences of mind; and we are all liable to mistakes. If he had applied his break in time, I think the collision would not have taken place. I have never had a case of the kind reported to me of chains having broken before.

Mr. Wheeler: Is there any one responsible for this accident, Mr. Sherriff?

Mr. Sherriff: That the jury will have to say, I manage the line under the direction of the directors. It is part of my duty to promote additional traffic if I can. All the bills of excursion trains that have been published with my name attached this year have been issued with my sanction. Those trains have been worked in addition to the ordinary traffic. We have not increased our ordinary traffic; it is quite sufficient for such exigencies. We do not keep a supplementary staff of officers during the periods of the year when excursion trains are run; we keep a staff of officers

amply sufficient for the necessities of the season. I cannot say we have the same number of servants in the winter as in the summer, because the traffic diminishes. The receipts fall off from £5,000 a week to £3,600, probably. I requested the Superintendent to give the Sunday school scholars along the line a treat to Worcester, at half the usual rate charged for excursion trains. I left details for him to settle. Mr. Adcock engages and discharges servants. He reports to me, and I confirm. I cannot state the number of passengers by the train who were not Sunday school scholars or teachers. I think the station masters who sold tickets to others than Sunday school children or teachers have been guilty of dereliction of duty. It might have been better if the tickets had been sent to the superintendents of the schools, but it did not strike him to do so, and therefore the station masters may perhaps have been placed in some difficulty. A train of precisely similar character came from Oxford the previous week, and none but the class of persons intended availed themselves of it. I assumed that there was honesty enough in any district of parties not to take advantage of a train not intended for the class to which they belonged; but it seems that I took too favourable a view of human nature. A station master is not expected to be at the station when every train arrived. We have not separate station masters for passengers and goods, nor has any Company, except in large stations; and it is essential for the public safety that a station master should have the entire control of his station. In an ordinary case, where a train was too long for a platform at a station, the guard would have his van with the break on, and walk up to the station; but in the case of an excursion train, I fancy the passengers got out as they get oooo pretty much as they please. They are too strong for the guard, unfortunately. I have a fixed salary, and in addition a percentage from the increased net receipts of the line; and therefore this most unlucky accident will take a couple of hundred pounds out of my pocket.

By the Coroner: I have never had any complaints from the directors as to the staff being insufficient. I will back the staff of the line, both for efficiency and being well paid, against the staff of any line in the kingdom. I think the true economy is to get the best servants and pay them well.

By Mr. Burbury: The salaries paid since I came have been much greater than they were before.

By Mr. Ford: I cannot tell what time the broken carriages were removed next morning. On my return home on the night of the accident, I was taken exceedingly ill, and was not able to leave my home for two days.

Mr. Charles Harris: I am assistant to the superintendent at Worcester station. My duties are to instruct the guards what trains they are to work daily, and I pay the guards. I also act generally under the direction of Mr. Adcock. I accompanied the excursion train from Dudley to Worcester, by Mr. Adcock's instructions. There was a coupling broken at Brettell Lane, and another at Hagley. The breakage at Brettell Lane occurred as we were leaving the station, and also at Hagley. There was no other breakage on the way that I am aware of. At Brettell Lane four links of the cable chain were put on in place of the coupling that broke. I do not know what was substituted at Hagley. I did not see any person in Cording's van. In Cook's van I believe there were three or four persons. I think they rode with him all the way from Dudley to Worcester. Cook was sober. I reported the breakage of the coupling to Mr. Adcock immediately upon the arrival of the train. I did not see the chains removed, but I know that when the train returned at night the couplings were all right. I went through the trains to see that they were all properly fastened. The first train left at 6.30, and the second at 6.47. Mr. Adcock instructed me to have the train divided. There were twenty-eight carriages and two breaks

in the first train, and one engine. Cook and Cording were the guards. Cording was in the first van, and Cook in the second. The second train consisted of fifteen carriages, a break van, and an engine. I did not telegraph to any of the stations after the first train left Worcester. I saw Cook before he left Worcester. He was quite sober. There was a second-class break in the train, but no guard in it. I cannot say whether there was any other person. I did not see any one in the guard's van.

By Mr. Wheeler: I rode in Cook's van from Stourbridge to Hagley in going to Worcester. I did not see any of the persons in the van smoking, nor did I observe any one use Cook's break. If I had done so I should have reprimanded Cook for allowing it. I am not aware of any breakage occurring between Kidderminster and Worcester.

By Mr. Holcroft: I am quite sure no person touched Cook's break between Stourbridge and Hagley, or between Droitwich and Worcester.

By Mr. Haines: At Round Oak some Sunday school scholars, and, I presume their teachers, got into the second-class break van. If they had been mischievously inclined they might have applied the break between Brettell Lane and Stourbridge, or between Kidderminster and Worcester. I rode in that break from Dudley to Stourbridge, and from Hagley to Kidderminster, and should not have permitted any interference with the break while I was present.

Robert Deakin, porter and signal-man, was the next witness. He deposed: I was at the station on the morning of the 23rd of August, when the excursion train passed, and when it returned at night I was off duty. When I went off duty I left the booking-clerk at my post. I had gone to a public house to fetch some beer for my supper. I returned through the station-yard while the train was there. The train arrived about ten minutes past eight. It should have arrived at five minutes before eight. The booking-clerk was at my post when I left. When I arrived on the platform the guard told me part of the train had broken loose. I had finished duty that night at 7.50. William Mills, the booking-clerk; was the duty person at the station when the train arrived. In five or six minutes afterwards I went down the line to the scene of the accident; and then returned and signalled the first part of the train to return. I uncoupled the portion of the carriages that ran back that were not broken from those which were broken, and the guard attached them to the first portion of the train which returned to Round Oak. Prickett the guard, gave me the broken shackle and side-chains which he took off the carriages. I cannot swear to the shackle, but I can to the side chain.

James Healey was then sworn. He said: I am foreman platelayer on the portion of the road where the collision took place. When the excursion train arrived at Round Oak, on the night of the 23rd of August, I was standing on the up platform at the station. I saw the train come from towards Brettell Lane, and stop at the platform. The next thing I observed after the train came to a proper stand opposite the platform was the carriages rebounding from the engine. I then heard a "snap," as if something had broken. After hearing the snap I saw the carriages drawing back the later part from the former part.

The Coroner: How many?

Witness: I cannot tell.

The Coroner: Several?

Witness: Ah! there would be more than "several." I should think there were fourteen or fifteen. [Laughter] I then went and told John Burt, one of the engine drivers, that the train had broken loose. After that I went up to the station, and got a light from the booking clerk, Mills. I then followed the latter part of the train down the line, towards where the collision took place. On arriving there I assisted

in removing the wounded.

By Mr. Hammersley: There was no servant of the Company on the platform when the train came in.

A conversation here took place as to whether further witnesses should be examined. The jury expressed a wish to hear the evidence of Mills, the booking clerk, Lockwood and Burt, engine drivers, Brett, who rode in the van from Worcester, and other persons. These parties were not in attendance, it having been understood on Tuesday, that no further evidence would be taken. It was therefore arranged that as it was now near six o'clock, the enquiry should be further adjourned for a fortnight, such a remote period as Thursday week, the 30th instant, being fixed upon, in order to suit the convenience of the jury.

## THE RAILWAY CATASTROPHE NEAR DUDLEY

The enquiry, before T. M. Phillips, Esq., coroner, into the circumstances attendant upon the late unfortunate accident on the Oxford, Worcester, and Wolverhampton Railway resumed yesterday, at the Bell Hotel, Brierley Hill. William Fenton, Esq. chairman of the Company, and J. S. Pakington, Esq., on of the directors, were present. Mr. W. G. Craig, locomotive engineer of the Manchester, Sheffield, and Lincolnshire Railway; Mr. Markham, locomotive engineer of the Midland Railway; Mr. Blackmore, superintendent of the Lancashire and Yorkshire Railway; Mr. Sherriff, the general manager, Mr. Adcock, the secretary, and Mr. Wilson, the engineer of the Oxford, Worcester, and Wolverhampton Railway, were also in attendance. James Burchell, Esq., solicitor, London, and Charles Pidcock, Esq., solicitor, Worcester, were likewise present. Mr. King, of the firm of Collis, Bernard, and King, of Stourbridge, attended as the legal adviser of the Company; Mr. J. E. Underhill, Wolverhampton, for Cook; Mr. Nelson, of the firm of Southall and Nelson, Birmingham, on behalf of the Skeldings family; Mr. Burbury, for the friends of Marshall and Mills; and Mr. Homer, on behalf of Mr. Harley, of Dudley. The Rev. E. C. Perry, of Copperfield, and Mr. Chellingworth, civil engineer, of West Bromwich, were also present.

Thomas Brett was the first witness examined. He said: I am a blacksmith, and live near Daisy Bank Station. I went by the excursion train from Daisy Bank to Worcester on the 23rd of August last. I rode in one of the carriages, not in the van. As we were going two stoppages occurred in consequence of chains breaking. One was at Brettell Lane, but I do not know where the second was. I do not know who were the guards of the train. We arrived at Worcester at a little after twelve, and we left in the evening about six o'clock. I returned in the first train, and rode in the van with Cook, the guard. I tried to get into several of the carriages, but they were full, and Cook told me I had better get into the van. There were two boatmen in the van besides myself and Cook; one named Marshall, and the other Williams. A little boy and a porter also rode in the van part of the way. Cook had the care of the break. I had some rum and water—a quartern of rum, and some water in a pint bottle. Cook had some of it. There was no light in the van between Worcester and Brettell Lane. It was sufficiently light to see what was going on. There was a light between Brettell Lane and Round Oak. I did not perceive any shock before the accident happened. I have not been tampered with by anyone, nor have I been asked any questions at all by any person in reference to this occurrence before coming here to-day. I believe the train stopped at Round Oak station. I was then in the van, and Cook was there also. He did not get out of the van when the train stopped at Round Oak. Williams and Marshall were also in the van. Cook looked out several times between Brettell Lane and Round Oak. I believe he stood on the step of the van when the train stopped at Round Oak, but did not get off. He came into the van immediately. I did not perceive that we were going back for some time. I fancied something was wrong, because Cook kept looking out. I cannot say positively whether he had the break on at Round Oak or not. He did not say anything until a very short time before the accident happened. He then said, "My good fellows, you are in

danger; you had better jump." I got up from my seat, when I heard the break begin to "screech." That was just before Cook spoke. When Cook told us to jump, he leaped out of the van and I followed him. The collision took place instantly. I do not think we were three yards from the second train when I jumped out. I was rendered insensible, and did not regain my faculties for a week. No person besides the guard used the break between Worcester and Round Oak. Before the guard told us to jump out he blew his whistle and waved his light. He did not blow his whistle when the train broke loose, nor until just before we jumped out. I believe he was perfectly sober.

By Mr. Wheeler: I do not know whether there was any other light in the van than the lamp which the guard held in his hand. If there had been one I should have seen it. I was sober. I was neither drunk nor in any state approaching drunkenness. Mr. Osborne attended me while I stayed at Brettell Lane, and since I have been at home Dr. Walker has attended me. I have not been settled with exactly. I have received £50. from the Company, and I have been promised £100. more. The promise is not contingent upon the verdict to be given. Mr. Underhill, of Tipton, has not attended me.

By Mr. Holcroft: I should say I had about three pints of ale in Worcester. I had not any spirits before I partook of the rum in the van. I had not seen Cook at all previous to getting into the van. No person at all has spoken to me about the accident—neither clergyman, policeman, nor any one else—nor have I made any statement respecting the occurrence.

By Mr. Haines: Cook put on the break as soon as the carriages began to recede at Round Oak. I have not seen Cook since the accident.

By Mr. Underhill: I heard the noise of the break about half the time that elapsed between my being aware that the train was receding and the period when the collision occurred. He first came to the break as soon as I was aware were going back. I did not hear any noise then, but he came again to it twice, and screwed it on with all his might. I heard the noise the second time he came to it. I do not know whether he had any means of fastening it down. He looked out at the door after putting on the break. It was after screwing it on the third time that he told us to jump out.

By Mr. Holcroft: I believe Marshall and Williams were sober. I did not see them have any drink in the van.

By the Coroner: Cook did not make any complaint about the break; did not say it was defective or would not act.

By Mr. Haines: I do not know why the whole of the £150. to be paid to me by the Company was not paid down at once. I received the £50. previous to leaving Mr. Done's, at Brettell Lane.

By Mr. Sherriff: Dr. Walker and Mr. Everitt have promised me the additional £100.

By Mr. Haines: I gave a receipt for the £50. paid to me, but do not know whether it was in full satisfaction of all demands upon the Company.

By Mr. Wheeler: I recollect putting my mark to a paper while at Mr. Done's. I became insensible after the accident, but discovered I had lost my watch the same night. I should not know the paper to which I put my name if I were to see it again. A policeman came and questioned me about the accident while I was at Mr. Done's.

By Mr. Homer: Five or six persons partook of the rum and water I had in the van.

Mr. Fenton requested that Dr. Walker might be examined

in reference to the negotiations with Brett; but the Coroner said it was irrelevant to the enquiry.

Mr. King then enquired from the witness whether he was settled with before being asked to give evidence. The witness replied that he was.

Mr. Chellingworth, civil engineer, West Bromwich, stated that he could give evidence to the condition of the break immediately after the accident.

Jonas Lockwood was then examined. He said: I am an engine-driver, and drove the engine of the second train from Worcester on the night of the accident. I live at Dudley, and went with the train, on, the morning of the 23rd. from Wolverhampton to Worcester. We left Worcester in the evening at 6.45. The first train had been gone about a quarter of an hour. We arrived at Brettell Lane a minute or two after eight o'clock. We remained at that station four or five minutes. After leaving Brettell Lane about 500 or 600 yards, I saw the tail lights of a train in advance but could not tell whether it was standing, or on which line of rail it was. I, however, supposed it was on the down line. I immediately shut off my steam, whistled for the breaks to be applied, and I reversed my engine. The stoker also applied his break. I did all I possibly could to stop my train, and get it into reverse motion, but the time was not sufficient. I should think that the train which ran back was coming at the rate of ten miles an hour. I should say my train travelled 120 or 140 yards after I saw the lights of the other train. I jumped off just before the collision took place. The carriages attached to my engine were unhooked by the collision, and when I saw them going back I sounded the whistle to the guards, and the breaks brought them up. I have been on the line three years, and travel over it from Wolverhampton to Oxford and back four or five times a week. In descending the hill between Round Oak and Brettell Lane, an ordinary train might be stopped by applying the breaks in 300 or 400 yards, if the rails were dry. If the rails were slippery, I do not think a train could be stopped in less than three or four times the distance. I have had occasion to stop a train on the incline between these stations. We had three breaks, and day was fine, and the rails dry. I should say that on that occasion we pulled up in seven or eight hundred yards. We were going at twenty-five miles an hour when I saw the signal to stop.

By Mr. Holcroft: The train consisted of eight carriages and two break-vans. When I saw the train coming down the bank on the night of the accident, I saw fire flying from the wheels of Cook's van, which showed that the break was on. I saw Cook after the accident, but he did not then say anything about the cause of it.

By Mr. Rooker: I have had some conversation with him since.

By the Coroner: He did not complain that the break was defective. He said he had it on and tried all he could to stop the train.

By Mr. Elcock: When I first saw the lights of the train coming down the bank I should say it was 500 or 600 yards from me.

By Mr. Underhill: I saw sparks flying from the wheels of the van a moment or two after I first saw the red lights. In my opinion those sparks were produced by the wheels grinding upon the rails, and the break must have been on. We could have stopped the train of which I have spoken between Round Oak and Brettell Lane in half the distance if it had been necessary. In order to do that I must have reversed the engine. The breaks not hold so well early in the morning or at night as in the middle of the day, the rails being generally damp.

By Mr. Homer: I heard the guard's whistle before the collision took place. I was going over the level crossing

near Westwood's bottle works, and saw the train coming down the line. I saw the van with the red lights, and the fire from the rails "contracted" my attention. It seemed to me to be enough to set the carriages on fire. It was tremendous when it passed me; and I could see it a quarter of a mile off. I heard the crash and immediately ran to the spot; I was there in less than a moment after. I then came up to Mr. Mills, the Superintendent of Police, and gave him information of the occurrence.

The next witness called by Mr. Underhill was Mary Thompson. She said: I live at Jone's building, Moor Lane, close to the railway. My husband's name is Daniel. He is a labourer. About half-past eight on the evening of the 23rd ult., I was standing on Moor Lane Bridge, and saw the train coming down from Round Oak. It had gone up ten minutes before. It was going at about the rate of an ordinary train. It passed me, and went down the line towards Brettell Lane. In two minutes after it passed me I heard the crash, and immediately went to the spot. At the time the train passed, I heard a man say, "I have done all I can; jump."

Mr. Williams remarked that he did not believe the witness's statement, and considered it altogether unworthy of credit. It was impossible she could hear anything said by the guard while the train was going at ten miles an hour.

In reply to the the Coroner, the witness said she saw sparks flying from the wheels of the van, as the train passed.

Mr. Underhill proposed to call other witnesses to speak to the fact of sparks flying from the wheel of the van, but the Jury intimated that they did not think it necessary.

Mr. T. F. Chellingworth was then examined. He said: I was at Brettell Lane on the evening of the accident and went to the spot to see if I could render any assistance. I enquired of the engineer of the Company was there, and being told that he was not, I tendered my services, which were accepted by Mr. Hart. I then began to superintend the removal of the *debris*. I took particular notice of the break apparatus, so as to discover the cause of the accident. I had it removed to the side of the railway. I assisted to take the break-screw which has been produced here from under the carriages, and I noticed particularly the position of the nut. It was near to the centre. I also noticed the break blocks. They were about six inches thick in the thinnest part. They were in good condition, and had been worn a little. I noticed a mark upon the wheels of the break-van which may have been occasioned by their rubbing against the rails when locked, but the mark was not so great as it would have been had they passed over the rails locked any considerable distance. I should think they had not travelled, locked, more than 100 yards.

By Mr. Wheeler: The blocks had not been fired, and did not present any appearance of having been heated.

By Mr. Wheeler: The rails were in a very fair state. There was a slight fog, but not sufficient to make the rails very greasy.

By Mr. Haines: I think the break-screw must have been bent by the collision, and not in being removed from the wreck.

By Mr. Wheeler: I do not think sparks would be emitted from the wheels of carriages passing round a sharp curve without the break being applied.

By Mr. Underhill: If the rails were made of soft iron, and the wheels of hard iron, the rails would suffer more than the wheels. If the train were travelling very fast when the wheels were locked, the indentation in the wheels would be greater than if travelling slowly.

Mr. King: Thinking information respecting the general management of excursion trains would be useful to the Coroner and Jury, I have the general manager of the Lancashire and Yorkshire, and superintendent of the

Midland Railway here, and I tender their evidence.

Mr. Charles Markham was then examined. He said: I am assistant engineer on the Midland Railway, and have held that appointment between seven and eight years. I have examined the coupling which broke, and was produced here, and consider it of proper proportions, and the iron of fair average quality. I consider the primary cause of the accident was the defective weld in the eye of the coupling. I examined the break-screw and the break-nut, and am of opinion the nut was in the lowest position it could have been when the break was off. I believe the position of the nut has not been altered since the collision; and I agree with Captain Tyler, that the break was never on at all. I believe that the break was never screwed on in the right direction, but the guard, in the excitement of the moment, screwed it off instead of on. I attribute the sparks spoken of by the witnesses to the friction of the flange on the wheel pressing upon the outer rail of the curve. I have heard the evidence about the breaking of the couplings in going to Worcester, and I am of opinion that the Company, in dividing the train in returning, and renewing the couplings, adopted a safe and proper course, and one that would be followed on every railway in the kingdom. I consider carriage inspectors are more competent to form a correct opinion on the soundness of couplings and other portions of a train, which it is their sole duty to inspect, than a superior officer. From custom they become more *au fait* than superior officers. I consider twenty-nine carriages a very moderate excursion train, and have no doubt a much larger number can be worked with great safety. I think thirty-five coaches would be a fair train on the line in question. I know the gradients, and have been upon the line. It is the general practice to put two engines in front of the trains when a second engine is required. I have known the stock of this company ever since the line was opened; and from very general knowledge of it, together with an examination of their working expenses the last half-year, I am of opinion that the stock has improved in condition. Unless the stock is in a high state of efficiency the working expenses are invariably increased. With regard to what Mr. Chellingworth said respecting the mark on the wheels. I may say that in all probability similar marks will be found on every part of the surface of all break wheels in ordinary use; and I do not think it possible to point out with certainty any particular mark as the one occasioned by friction on the night in question, unless the wheel had run for a considerable distance down the incline in a fixed position.

By Mr. Wheeler: It is the duty of the assistant locomotive engineer of the Midland Railway in a great measure to conduct the management of excursion trains, in so far as related to engines and carriages, but not the traffic department. The eye of the shackle which broke is made in the ordinary way. I never saw an eye made in any other way. I do not think that punching a hole in the iron would be so safe as welding at the shoulders.

By Mr. Holcroft: I formed my opinion that the break was not screwed on from the position of the nut. I do not think the force of the collision would change the position of the nut. I believe that if the break had been screwed on the accident would not have happened.

By Mr. Underhill: I have frequently seen sparks emitted from the wheels of trains going over curves.

Mr. Henry Blackmore Superintendent of the Passenger Department of the Lincolnshire and Yorkshire Railway was next examined. He deposed: We have various descriptions of excursion trains on our railway.

By Mr. Wheeler: We have never advertised a train exclusively for Sunday school children. Our custom is to get a guarantee for a certain number of scholars, and then to

issue the number of tickets to the superintendent or person arranging for the train. We never put lights in the carriages of excursion trains at night. We never allow any passenger to ride in the compartment of a second-class carriage in which there is a break.

By Mr. Sherriff: I have frequently seen excursion trains with persons riding in the break-vans, on the tops of carriages, and on the foot-boards and the buffers, and it is impossible to prevent them.

By Mr. Fenton: My rule is to allow two break-vans to thirty carriages, and two guards.

By Mr. Holcroft: The steepest gradient on our line is 1 in 93.

By Mr. Fenton: We have carried upwards of 409,000 excursionists on our line since 22nd of May.

Mr. Wheeler: And have you ever had a fatal accident?

Witness: No.

Dr. Walker made a statement in reference to the evidence of Brett, as to the alleged promise that he should receive £100. in addition to the £50. he had already been paid. The fact was that it was agreed that he should receive £1. a-week while he was unable to work, in addition to the £50.; but on the day on which he left Brettell Lane he said that if the Company would give him £100., he would discharge them from all liability. He (Dr. Walker) promised to name the matter to Mr. Sherriff, and it had remained in abeyance since. It was totally untrue that £100. was promised.

There being no further evidence to be adduced, the Coroner proceeded to read over the depositions of all the witnesses who have been examined in course of the enquiry. This process being very protracted, and there appearing to be no probability of concluding the inquest before a very late hour, shortly after six o'clock the enquiry was again adjourned until Tuesday next, at two o'clock, on which day, it is hoped, a conclusion will be arrived at.

# THE ADVERTISER, AND BRIERLEY-HILL AND STOURBRIDGE GAZETTE.

Saturday October 2nd, 1858

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## Local Intelligence

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### STOURBRIDGE

NEW RAILWAY FACILITIES.—On Monday morning last, Mr. Sherriff, the general manager of the Oxford, Worcester, and Wolverhampton Line, came over from Worcester to see the commencement of a work which has long been talked of, and will now be actively carried on till completed – the laying down of rails between the bottom of High-street and the Amblecote cutting. This will be a great accommodation and saving to Messrs. Keep and Watkins, and John Bradley and Co., through whose extensive iron works this line will run, and indeed the general public; for a luggage station will be erected, affording easier access than the now distant one. The passengers, however will still reap no benefit, and still have to traverse a distant line between the town and the station. At the end of last year there seemed a probability of improvement in this respect, the Company having advertised their intention to apply to Parliament next (the past) session for power to abandon part of the present route, and bring a loop down near to the town, which would have conferred a great boon on all travellers, but told too flattering a tale, and persons have still to walk out mile out of the town to get to the station.

THE LATE RAILWAY ACCIDENT NEAR  
BRETTELL LANE

VERDICT OF MANSLAUGHTER AGAINST COOKE,  
THE GUARD.

Yesterday the adjourned enquiry into the cause of the late railway accident near Brettell Lane, on the Oxford, Worcester, and Wolverhampton line of railway, was held in the Bell Inn, Brierley Hill, before T. M. Phillips, Esq., Coroner, and the jury, previously empannelled. Mr. A. C. Sherriff the general manager, Mr. Adcock, the secretary, and Mr. Wilson, the engineer, of the Oxford, Worcester, and Wolverhampton Railway were present. Mr. King of the firm of Collis, Bernard and King, of Stourbridge, attended as the legal adviser of the Company, and Mr. Nelson, of the firm of Southall and Nelson, of Birmingham, on behalf of the Skelding family. The Rev. E. C. Perry, of Copperfield, was also in the room.

The time appointed for the commencement of the proceedings was two o'clock, but owing to another engagement which the Coroner had in the district, it was half past two before the business opened.

The Coroner called upon Frederick Cooke, the guard, and enquired if he had any statement to make upon his evidence, which had been read over to him. If he had, it was his duty to take anything that he might say down in writing?

The witness, Cooke, replied that he had no observations to make.

The Coroner to Cooke: Is your solicitor here?

Cooke: No, Sir.

The Coroner: Then I understand that you have no statement to make?

Cooke: Yes, sir.

The Coroner then proceeded to sum up, and in so doing remarked that after the very lengthened time that this inquest had occupied, and the very great attention which they had been given to it as jurymen, for the benefit of the public, he should not occupy their time by any observations which might be unnecessary. The Coroner then directed the attention of the jury to the evidence of the various witnesses which had been brought before them, and read over the depositions of the witnesses who had been called before them, describing the excursion, the accident, and the causes which led to it, and the various opinions entertained upon the same. This having been done, the Coroner, commenting upon the evidence, addressed the Jury in the following brief terms: Now, gentlemen, that is all the evidence that has been taken before you at this enquiry. I must beg of you to divest your minds of anything that you may have heard out of this room, and return your verdict only on such evidence as has been taken on oath before me. It varies as regards the quality of the iron, but I think all the witnesses agree that the iron is of fair quality, and that the breaking of the eye of the shackle must have been the cause of the carriages separating at Round Oak Station. Almost all the scientific men agree in thinking that if Cooke had applied his break in a proper manner when the carriages separated at Round Oak Station that he would have stopped the train and prevented the collision, and avoided the deaths of the several persons who are the subject of this enquiry. If you believe that Cooke could have stopped the train in the ordinary performance of his duty on that occasion, and did not do so, Cooke would be guilty of manslaughter. It is for you, gentlemen, to consider what is

your verdict. You have heard the evidence, and if there is any question you want to ask me, I shall be happy to answer you.

A pause then ensued, and

The Coroner followed up the silence by saying to the Jurymen "Perhaps you would like to consider your verdict with a clear room?"

Several of the Jury: We should.

The Coroner and Jury then retired, the time being now four o'clock.

After an absence of two hours and a half, the Jury intimated that they were agreed upon their verdict; and the Coroner took his seat and said: what is your verdict?

The Foreman: We are unanimously of opinion that a verdict of "MANSLAUGHTER" be returned against Frederick Cooke.

The Foreman also remarked: The Jury, in delivering their verdict on this very important enquiry, feel that they are called upon, in performance of their duty to the public, to pronounce their opinion on the general management of the Oxford, Worcester, and Wolverhampton Railway Company, derived from official evidence that has been produced before them in this investigation. We think there is gross insubordinate conduct of their station-masters, and an apparent unconcern of the highest authorities thereto, that sufficient care is not used in selecting materials required, such as chains, shackles, &c., as to the quality of workmanship; that there is irresponsibility of officials in each department of the Company, from the highest to the lowest, and it is the opinion of the Jury that a sufficient number of servants are not employed at various stations to ensure the safety and comfort of the public. The Jury also censure in the strongest terms the practice of allowing the public to ride in a second-class break-carriage, where the break is exposed to the use of passengers, and unprotected by any servant of the Company.

The Coroner: Frederick Cooke. Call him up.

Frederick Cooke, the guard, appeared, and bowed.

The Coroner: Frederick Cooke, the Jury, after carefully considering the evidence in this case, have returned a verdict of Manslaughter against you. Therefore you stand committed.

Cooke bowed his head seriously.

This finished the business before the Jury, and the protracted proceedings of the enquiry were brought to a termination.

In the streets a little excitement prevailed. A number of people lingered about the place for hours before the end of the inquest, evidencing their deep interest in the result.

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## OXFORD, WORCESTER, AND WOLVERHAMPTON RAILWAY.

*Railway Department, Board of Trade,  
Whitehall, Oct. 16, 1858.*

SIR,

IN compliance with the instructions contained in your letter of the 25th ultimo, I have the honour to report, for the information of the Lords of the Committee of Privy Council for Trade, the result of my inquiry into the circumstances which attended the accident that occurred on the 23d August, between the Round Oak and Brettel Lane stations of the Oxford, Worcester, and Wolverhampton Railway.

These two stations are situated, respectively at 2<sup>3</sup>/<sub>4</sub>, and 4 miles to the south of Dudley, and at 25, and 23<sup>3</sup>/<sub>4</sub> miles to the north of Worcester. The line runs between them, for a mile and a quarter, over a series of curves on which the view is much obstructed, and on a gradient of 1 in 75·18 falling towards the south.

On the day in question, an excursion train returning from Worcester to Wolverhampton reached Round Oak at 10 minutes past 8. It was composed of two engines and tenders, 28 carriages, and 2 break-vans, one of these latter having been placed immediately behind the engine, and the other at the rear of the train. Shortly after it arrived at this station, the couplings gave way near the middle of the train, and 17 carriages containing about 450 passengers, with a van behind them, began to run back down the incline towards Brettel Lane.

A second train, also full of excursionists, was following the first one, with an interval of 11 or 12 minutes between them; and the loose carriages ran back upon the second train with great violence. The engine in front of the second train, which lost its funnel and its buffers, was so little injured in other respects as to be able afterwards to proceed on its journey; but the three last vehicles of the first train were broken all to pieces; and the most dreadful consequences resulted to the passengers, 14 of them having lost their lives, fifty others having been more or less severely injured, and upwards of 170 persons, altogether, having applied for compensation, on account of injury to their persons or their clothes. I append a list of the names of those who were killed and of those who were most severely injured.

Such are the bare facts of what may be considered as decidedly the worst railway accident that has ever occurred in this country, and I shall now proceed to state in detail the different circumstances connected with it.

Notices were issued, under date the 12th August, of an excursion train to be run at very low fares on the 23d of that month, from Wolverhampton, and numerous intermediate stations, to Worcester and back. I enclose a copy of one of these notices, by which it will be seen that the train in question was intended for the use of teachers and children of the various schools on the route only, and that no other classes of persons

were to be allowed to avail themselves of it; though I may add that this intention was not carried into effect, and that the following numbers of adults and children respectively, appear, by a return with which I have been furnished by the company, to have been actually booked to travel by it between the several stations enumerated and Worcester:—

	Adults.	Children.
Wolverhampton	35	37
Priestfield	12	—
Bilston	110	110
Daisey Bank	25	95
Princes End	266	60
Tipton	2	15
Dudley	89	79
Netherton	9	7
Round Oak	9	43
Brettel Lane	10	24
Stourbridge	30	6
Kidderminster	144	250
Hartlebury	3	13
	767	739
Adults	767	
Children	739	
Total	1,506	

This train left Wolverhampton at 9·21 in the morning, with 1 engine and tender, 24 carriages, and 2 vans. It travelled in due course as far as Brettel Lane; but as it was starting from that station on its way towards Worcester, with 2 engines and tenders, 32 carriages, and 2 vans, the central couplings and side chains of a carriage, ten or twelve from the last van, gave way. The same thing occurred again, two or three carriages further from the last van, as the train was starting from Hagley with five additional carriages attached to it; and after reaching Droitwich the guard discovered that a third screw coupling had been fractured, at four or five carriages from the hind van, though the side chains had in this last case remained perfect, and had prevented an actual separation from taking place.

These fractures were repaired on the journey, according to the means at the disposal of the guard. At Brettel Lane he connected the draw-bars of the carriages by means of four stout links, such as are used for *goods* couplings; at Hagley he employed a second screw coupling, which he found between the two carriages which had become disconnected; and at Droitwich he re-united the central attachment by means of two links on the one side, and a hook and a link on the other. The train then proceeded to Worcester without further accident, and reached that place at 12·32.

I enclose herewith, a section of the line between

Wolverhampton and Worcester, by which it will be observed that the gradients on the whole fall, considerably from the former to the latter station; that, more particularly, the train was starting down falling gradients of 1 in 660 and 1 in 121 respectively, when the couplings gave way at Brettel Lane and Hagley; and that, with the exception of three short portions of rising gradients, of which 1 in 264 is the steepest, the line falls all the way from Hagley to Droitwich. Considering the nature of these gradients, and having regard to the fact that the fractures of the couplings on the journey towards Worcester all occurred, not in the front of the train where the strain upon the couplings in consequence of any tractive power exerted by the engine would naturally be most severe, but in the last half of the train, it would appear, unless these couplings were in a very defective condition, as if the break of the hind van had been employed in a most injudicious manner.

The broken parts of the couplings that were fractured on the journey towards Worcester were not retained for examination, so that, with the exception of one half link, I have not had an opportunity of seeing them, and I am therefore unable to form an opinion as to their quality; but they appear to have been the ordinary couplings supplied by the carriage builders with the carriages. To judge by those which I have observed upon other carriages of the company, there could be no likelihood of such results, in the ordinary course of events, on falling gradients, although, as I shall presently have occasion to show, there is reason for believing a great number of these couplings to contain certain defects.

A good deal of suspicion, therefore, to say the least of it, must fall upon the hind guard, Frederick Cook, as to the mode in which the break of the last van was employed on the journey towards Worcester; and this suspicion is by no means lessened by the circumstance that he permitted half-a-dozen, passengers to ride with him in his van, and that he employed one of their number, according to his own admission, to take the break off in two cases. There is evidence, also, of his having been smoking and drinking with the passengers in his van, which leads to the belief that his conduct must have been altogether highly irregular.

In descending the incline from Round Oak to Stourbridge, there were four persons acting as breaks-men in different parts of the train; Mr. Harris, an assistant in the office of the secretary and superintendent of the line, who was travelling in charge of the train between Dudley and Worcester; the *bank foreman*, who superintends the working of the bank engines from siding to siding, and who happened to be going to Stourbridge; and the two guards in the front and hind vans; but on the greater portion of the line the train was worked by the two guards, Mr. Harris having ridden in a second-class break carriage between Dudley and Stourbridge and between Hagley and Kidderminster

only, and having performed the rest of his journey, partly on the second engine, partly on the footstep of the last van, and partly, between Droitwich and Worcester, *in* the last van.

Mr. Harris, himself, was only aware of two of the fractures which occurred, and he simply reported to the secretary and superintendent on his arrival at Worcester that there had been a fracture of the couplings; but the inspector of rolling stock who examined the train there, found that there were, as has been already stated, two broken screw couplings and four broken side chains, as well as that a third screw coupling had given way, of which the side chains remained complete. He states that two of the screw couplings gave way in the middle of the "D" link, as it is technically termed, or that link which is passed over the hook of the draw-bar; that in the third, the "D" link had disappeared altogether; and that, as far as he can recollect, the links of all four of the side chains had been broken. He caused all the side chains to be repaired, but he left the central attachments as he found them, both on account of the difficulty of getting at them in the siding and of pulling, out the draw-bars in order to repair the screw couplings which were attached to them, and also because he considered that the goods coupling links which, had been employed were stronger in effect than the screw couplings themselves, and that in the way in which they were fastened the train might travel safely back to Wolverhampton.

The excursionists remained at Worcester between 12:32 and 6:30, and were then sent back in two trains on their return journey, by direction of the secretary and superintendent, in consequence of the heavy gradients which they would have to encounter, which would have been too much for two engines with upwards of 40 vehicles.

The first train, consisting of 28 carriages and vans, proceeded, at 6:30, with 1 engine and tender to Stourbridge, and having been supplied at that place with a second engine and tender, it reached, Round Oak at 8:10. The second train, composed of 14 carriages; and 2 vans, and drawn by 1 engine and tender, reached Brettel Lane at 8:11, and started from thence for Round Oak, at 8:14, 11 minutes, according to the journals of the guards, and 12 minutes, according to the record book at the Brettel Lane station, behind the first train.

The night was rather dark, the smoke was blowing here and there across the line, from the manufactories which are, so numerous in, that part of the country, and the rails were slightly slippery.

After the first train had been brought to a stand at Round Oak, and before any attempt was made to start it again, a foreman platelayer who was standing on the up-platform, heard a "snap." He looked round, and found that a portion of the train was falling back down the incline towards, Brettel Lane. He went to the engines at the head of the train, and informed the drivers of what had occurred, and after getting a light at the station he

followed the loose carriages down the hill, but without being able to overtake them.

The booking clerk at Round Oak observed, as soon as he had collected the tickets (all of which he took from one individual, who had taken tickets for his party), that a part of the train had broken away, and he tried to telegraph to Brettel Lane, Kidderminster, or Stourbridge, to send information of the occurrence; but he was unable to gain attention from the clerks at those stations.

Of the two drivers and two firemen, only one of the latter, the fireman of the second engine, felt anything of the separation that took place in the train. As this man was looking out for the signal to start, he noticed a slight jerk, as if the break at the rear had been eased off, and the carriages had fallen back by their own weight. He experienced this sensation just before the foreman platelayer came to say that the carriages had become detached, and he naturally concluded that the jerk he felt was the same that caused the separation of the train.

It may seem at first sight an extraordinary circumstance that a large portion of a train should become separated from the remainder, and take its departure from a station in the opposite direction to that in which it was intended to travel, almost unnoticed, excepting by one man; but it must be remembered that the night was rather dark, that the whole train was between two and three hundred yards long, and that, even after 17 carriages and a van had disappeared, there still remained a train of vehicles measuring with the engines upwards of 100 yards in length.

The statement of the guard, Cook, to me, was to the effect that he turned his break on, perhaps 20 yards before the train stopped at Round Oak; that the couplings appeared to snap with the rebound of the buffers when he eased his break off; and that he put on his break again, and skidded all the four wheels, as soon as he felt the carriages coming back upon him. He states also that his break was in very good order; but that though the speed slackened at one point, it gradually increased again as the carriages went down the incline until it attained to 10 or 12 miles an hour; that he first saw the other train when he was passing under the Moor Lane Bridge; and that, having previously implored of the passengers to jump out and save their lives, he dropped off his van just before it struck the engine of the second train.

The accompanying diagram, with which, as well as the others which, are enclosed with this report, the engineer of the company has been so good as to supply me, shows distinctly the exact site of the collision, the curves and gradient over which the two trains were running, and the distance at which they would be seen from each other before the collision took place. As the driver of the second train pointed out to me on the spot, he first saw the lights of the van in front of him when that van was near the Moor Lane Bridge, which is about two thirds of a mile from Round Oak, and when, he was

about 300 yards from it. He states that as soon as he found that the van was running back upon him he did all he could to stop his train, and that he had reduced its speed from about 10 to 2 miles an hour before the collision occurred.

The shock appears to have been severely felt in the second train, though that train had almost come to a stand, and, from the breaks having been all screwed on, presented, as it were, a compact mass for the vehicles of the first train to impinge against. The guard in the hind van of the second train was knocked from one end of his van to the other, and temporarily stunned by it; but the whole of the killed, and the greater part of those who were seriously injured, appear to have been in the first train.

In order to ascertain as nearly as possible what would be the actual effect of one break van on this incline at the rear of 17 carriages, a train was prepared in the course of my inquiry, to resemble as nearly as might be the portion of the first excursion train to which the accident happened; and 16 of the carriages were loaded with 22 cwt. each, to represent the weight of the passengers which they probably contained at that time. This experimental train was started a number of times from the Round Oak station, and was allowed to acquire different rates of speed before the break was applied and the experiments showed, that at a speed of about 10 miles an hour, acquired in 440 yards, the train was stopped in 883 yards after the order to apply the break was given, and 111 yards short of the point of collision; that at slower speeds the train was stopped, as might of course have been expected, in shorter distances; and that when the break was put on in the manner described by the guard, soon after the train was found to be running backward, a short distance only was accomplished, and no further speed was acquired.

It is true that the rails were in better order when these experiments were tried than they are described by some of the witnesses to have been on the night of the 23d August, and that there may have been, variations in the weights of the van, or of the train, or of both, which would have influenced the results; but, allowing ample margin for such contingencies, it is still impossible, if the break, was as the guard states, in proper order, and if it was applied, as he also asserts, as soon as he discovered that the train was actually running back upon him, that so violent a collision should have occurred; and it is even certain that the train would under these circumstances have been brought to a stand at no great distance from the Round Oak station, and long before it reached the point of collision.

Inasmuch as the experimental train acquired, before any break was applied, a speed of about 10 miles an hour in 440 yards, so the accelerating force acting upon it uniformly, up to that point, may be assumed to have been .081 feet per second; and neglecting the increased resistance of the atmosphere at increased speeds (which would

increase perhaps from a quarter of a pound to about four fifths of a pound per square foot of frontage between the speeds of 10 and 18 miles an hour), it may easily be calculated by the formula,  $V = 2fs$ , that the same train would acquire a speed of about 18 miles an hour on the same gradient in 1,434 yards, or by the time that it arrived at the point of collision. Taking into account the increased resistance of the atmosphere, the speed, thus acquired in reality would, *cæteris paribus*, not be so great, and 18 miles an hour may be safely assumed as the maximum speed which the carriages would have acquired on the night of the accident if no break had been applied to stop them. A much less speed could hardly have been productive of such awful results.

The retarding influence of the van upon the train after the application of the break, was, during my experiments, as shown by the distance in which the train was stopped after it had acquired a speed of 10 miles an hour, about  $\frac{1}{2589}$  of a foot per second; and though the retarding influence of the break may have been different on the night in question, in a more slippery state of the rails, and with a somewhat altered arrangement of the respective weights in the train and van, yet it cannot by any conceivable conditions, other than that the break was not acting, have been so far annihilated as to have permitted the speed of the loose carriages to have increased gradually to 10 or 12 miles an hour in the manner described by the guard Cook.

If an thing had been the matter with the break, or had prevented it from acting, Cook would not, it may be presumed, have hesitated to say so; and if he had been in the van when the carriages ran back, he would certainly, as he was an experienced guard, have turned on his break without much loss of time, and have stopped the train before it reached any great distance from Round Oak. The conclusion, therefore, is hardly, as far as I can see, to be avoided, that Cook was not in his van at all while the carriages were running backward; and that, no break having been applied to prevent it, the carriages, acquiring fresh velocity at every turn of their wheels as they descended towards Brettel Lane, came into collision with the train behind them at a speed somewhat under 18 miles an hour, more or less, according to the strength and direction of the wind, (which is stated to have been blowing across the line on the evening in question,) and according, to other minor conditions.

It was already as clear as reasoning of this description could make it that Cook had not employed his break as he might have done for the purpose of stopping the carriages; but I endeavoured, by an examination of the wheels and break apparatus of the van, to throw further light upon the subject, and, if possible, to discover some positive indication as to whether the break was on or off when the collision occurred.

The wheels had evidently been in recent use for breaking purposes, as there were numerous flat

places, and marked discolorations, upon their circumferences; but there was nothing to show whether any of these symptoms had been produced on this particular occasion, or whether they had all been the result of the application of the break blocks, and skidding of the wheels along the rails, on the previous morning journey, or even whether some of them were not of still longer, standing.

The break screw, however, afforded evidence of a more important character. The portion of it on which the nut had been working was distinctly shown, in strong contrast to the remainder, by the oil which still moistened its surface; and the nut itself was at the bottom of that oily portion of the screw. If the nut had been at the top of that portion, then there would have been, proof that the break was on at the time of the collision: if the nut had been in the middle of that, portion, then it might have been a matter of doubt as to how far the break blocks were acting on the wheels; but as it was at the bottom of that portion no doubt remains that the break must have been *off* when the collision occurred. I may add, that the bent condition of the break screw precluded the supposition which might otherwise have been entertained, of the position of the nut having been in any way, altered subsequently to the collision.

When I pointed out to Cook the evidence that thus existed, he endeavoured to convince me that it was not to be depended on; but I observe that in an examination that he afterwards underwent before the coroner who investigated the circumstances of the accident, he made the extraordinary statement that he took the break off again just before the collision occurred. It would be impossible to assign any reasonable motive for such a proceeding; and I can only suppose that he gave this piece of evidence, in order to account for the condition in which the break screw remained.

Two of the passengers who were riding in the van with Cook, and who are now, recovering from the injuries which they received in the collision, assert that he was in the van with them whilst the carriages were running back, and to a certain extent corroborate his statements; but their evidence is of such a nature, and they so far contradict either themselves or each other, that it becomes impossible to attach importance to what they say; and it is equally impossible to credit the evidence of a woman who states that she heard Cook, from her house, as the train was passing, telling the passengers who were riding with him in his van, that he had done what he could for them, and that they must jump out to save their lives.

The statement of the driver of the second train, and of other witnesses, to the effect that fire was flying from the wheels of Cook's van before the collision, may at first sight appear to indicate that the wheels were skidding along the rails; but it must be remembered that such an appearance is produced simply by the abrasion of small particles of iron, and by their ignition in the oxygen of the atmosphere, for which their bright surfaces possess

a strong attraction; and that this effect may be produced by the friction of wheels passing at speed round a curve when, they are not skidded by the break blocks, as well as by wheels on which the break has been tightly applied.

Looking to all the circumstances of the case, I am inclined to believe that the break of Cook's van was not employed at all to check the speed of the loose carriages between Round Oak and the point of collision; and the most favourable, and most likely supposition, as far as Cook himself is concerned, is, that he got out of his van at the station, in the execution of his duty, as soon as the train stopped at the Round Oak station, without taking the precaution of turning on his break, that the rebound of the buffers after the train stopped snapped the couplings, and that he was unable to reach his van again when he discovered that the carriages were running back, though he may either have followed the train on foot, or ridden down for some distance on the footboard of one of the carriages. At all events, he appeared with his lamp in his hand, to take the necessary precautions, and to render the necessary assistance, soon after the occurrence.

The amount of blame which devolves upon Cook must of course depend upon what his conduct and motives actually were; and this can only be matter of conjecture, though it is certain that he has not correctly represented them. If the supposition referred to in the last paragraph be correct, then his fault has been a want of care and forethought, in neglecting to apply his break and secure the tail of the train before leaving his van; a fault which he would have been the more likely to commit from being capable of such irregular conduct as he was guilty of throughout the day; but which would have been productive of no bad consequences, and would not have come to light, if it had not been for the breaking of the carriage coupling, though it was serious in the extreme, from the enormous risk which it involved.

The immediate cause, however, of the accident, was the fracture of the couplings which united the carriages at the point where the train separated; and this happened apparently from the force with which the buffers rebounded after the carriages had run forward upon the engine in the course stopping at the station. It is not an unusual circumstance for the rebound of the buffers to snap the couplings, and it was the more likely, unless care was employed, that this effect should, be produced in so heavy a train and on so steep a gradient; though it may be observed, that, if Cook had applied his break at the proper time, before the train stopped, the carriages would not have run forward on the engine, the rebound would not have taken place, and the fracture would not, in all probability, have occurred.

The carriages were united at the point of fracture in the usual manner, by means of a screw coupling and two side chains. The screw coupling, of which I enclose a full-sized drawing was broken in two places in the screw itself (marked A), and in

the eye of the strap which connected the nut with the stud securing it to the draw-bar (marked B). The latter fracture was evidently the first to occur, because if the former had occurred first there would have been no strain to effect the latter, and because the former appears to have been occasioned by the cross strain to which the screw was subjected, by one strap only holding on to one side of the draw-bar after the other had given way. The screw was of good size (1" internal diameter), and of a good quality of iron; the strap was also of sufficient size ( $\frac{7}{8}$ " diameter) but the iron, was not so good, and it gave way at the weld of the eye, which was so defective that only about a third of the section had been holding. As this was one of two straps, by which the coupling was secured to the draw-bar, two thirds only of the whole strength was available. The coupling was not perhaps of the best form, as a "D" link on each side of the screw may be considered preferable to the arrangement shown in the drawing, where there is a "D" link on one side only, and where the connexion with the draw-bar is by means of two straps, containing four-welded eyes, and a cross stud.

These couplings were supplied with the carriages by a first-rate carriage builder, Mr. Williams of London, and the company do not appear to have had much trouble with them before; but upon experimenting upon some of them since the accident they discovered that the greater proportion of those tried had welds similarly defective. This was so much the case, indeed, that it seems desirable to discard these sort of couplings from use altogether; though it is only right to add, that even in this defective state they are stated to have required strains of from  $16\frac{1}{2}$ , to  $18\frac{1}{2}$  tons to fracture them, and to have been broken by weight hung perpendicularly from them, about which there could be no mistake.

The side chains gave way, one of them at the hook, which was of ample size and tolerable quality, and the other by the screw pulling through a defective nut, by which it was fastened to the carriage framing. The side chains generally, as far as I had an opportunity of observing them, appeared to be roughly manufactured, and fastened to the carriages; but, indeed, I am not disposed to lay stress upon that fact, for they are a description of fastening of doubtful utility. If too tightly coupled, they may produce accident by causing the carriages to be thrown off the line on a curve; and when loosely coupled, they rarely resist the jerk which comes upon them after the fracture of a screw coupling; though it must be added, that they did so on one of the three occasions on which the central couplings parted in the course of the journey to Worcester on the morning in question.

As regards couplings too, in general, they must not be made too strong, because it is sometimes most desirable that they should give way, in cases where an engine, and perhaps part of a train, runs over the side of a bridge or an embankment, and in which, but for the giving way of the couplings, the

remainder of the train might be pulled after them; but it is exceedingly desirable, on the other hand, that such couplings as it may be determined to adopt, as those best fitted for the duties to which they are subjected, should be made of like strength and with due care; and this important point does not appear to have been sufficiently attended to in regard to the couplings in uses on this line; though I may add, and it is only right that I should do so, that I believe them to be at least as good as those generally in use on other railways.

The duty required of the couplings varies, again, very materially, even with passenger trains; the strains upon, them being comparatively small in the case of a light train running upon a level road, and increasing with the weight of the trains and the steepness of the gradients, up to a point at which a careful use of the breaks is required to prevent fracture. It would be impossible, of course, in practice, to vary the couplings with the different trains, and to provide in each case precisely that which was best suited to the occasion; and it must be expected that couplings will occasionally fail, though this will occur less frequently in proportion as the couplings are of good quality and the servants of the company careful. But in truth, the fracture of a coupling rarely occurs with fair treatment in the ordinary course of passenger traffic, and when it does occur it ought not to be productive of any serious results; the best insurance against accident, in this, as in, many other cases, being found in the selection of intelligent men of known character and steadiness for the execution of responsible duties.

If this precaution had been taken on the occasion in question, if Cook's place had been supplied in the excursion train, both in the morning and the evening, by a trustworthy man, then it is probable, and in fact it may almost be considered as certain, that the couplings, with all their defects, would have been found to be sufficient, and would have been running to this day, because, as I have already observed, they none of them gave way under circumstances in which they could have been severely tried in any other respect than by being subjected to the strains, most fatal of all to them, caused by a careless use of the breaks, or the rebound of the buffers.

And this is the particular point in which direct blame attaches to the company on account of the present accident. Cook had been a goods guard in their service for eight years; and had been employed during several summers to take charge of excursion trains. It cannot for a moment be supposed that a man habitually trustworthy should on this occasion only have so far forgotten himself as to invite the passengers into his van, to smoke and drink with them, to employ them at his break handle, and four times to fracture the couplings in one day by his carelessness; and if the company or their officers were not aware of his character previously, then it can only be said that they ought to have been aware of it, and that they ought to

have used an amount of circumspection, that would have prevented them from appointing a careless man, as he proves clearly to have been, to such important duties.

Cook's fellow guard on this occasion was a porter in the service of the company, who had acted in that capacity for three years, and had been employed when required as an assistant guard over a period of twelve months. He was riding in a break van next behind the engine, and only heard of the carriages having been separated from the train from the driver, of whom he went to inquire as to his reason for not starting the train, in compliance with a signal which he had given him to do so.

As I have already stated, there were four breaks at work in the morning besides the tender break, when the train descended the incline towards Worcester; but even then there were only two men regularly acting as guards to the train, the third break having been taken by an assistant superintendent of the company who accompanied it from Dudley to Worcester, and the fourth by the bank foreman who happened to be travelling in that direction; and on the return journey there were only two guards, as has been seen, one at either end of the train, to attend to the breaks and control the passengers. The one break at the rear was certainly sufficient to have prevented the accident that actually occurred, if it had been in better hands, and had been properly employed; but such a proportion of break power as two vans to 28 carriages cannot be considered otherwise than most insufficient for general purposes; and such a proportion of controlling influence as that which could be exercised by two guards, with their own peculiar duties to attend to, is equally inadequate for keeping 1,000 pleasure seeking excursionists in order.

I have before had occasion to draw their Lordships' attention, in the case of accidents which have occurred on other railways, and more particularly in the case of those which have happened in the manufacturing districts of Lancashire and Yorkshire, to the fact that these excursion trains, which are run at irregular times, which convey unlitally large numbers of passengers, always more or less unruly, and which for every reason require extra care and attention, are worked without the precautions that are considered necessary with the ordinary passenger trains; and there has evidently been too much of a similar system adopted with regard to this train, in which the carriages were overcrowded, and the break power was insufficient, in which passengers were allowed access to an unprotected break, and attached to which there were no regular passenger guards, but only two men, one of whom was not well selected, acting in that capacity. And here I would observe, that the overcrowding of third, and even second class passengers and excursionists in railway carriages, is an evil which might well be made a matter of legal interference, as it is of much more importance that the number conveyed should

be properly proportioned to the size of the vehicles, on railways, than that such a provision should be enforced, as it is to a great extent, in the case of vehicles in public use on common roads.

I am happy to learn that the company have made arrangements since the present accident for employing the continuous breaks of Mr. Fay, as it is of great importance that a system of this description should be employed upon a line of this nature.

As a great deal has been said with reference to this accident, as to the insufficiency of the interval, 11 or 12 minutes, which was allowed between the running of the two portions of the excursion train, it is right that I should observe that in this particular case the collision would, up to a certain extent, have been still more fatal if the interval had been greater, because the runaway carriages would in that case have attained a higher speed; and that it would have been less and less violent in proportion to the decrease of the interval, because, the shorter the distance which the carriages had to run, the less the speed that they would have acquired. I may also remark, that though on this occasion the electric telegraph would have availed nothing after the fracture of the couplings, even if it could have been got to work, still it is exceedingly desirable that more use should be made of it on a line of this description, and particularly that it should be employed in announcing the approach or reporting the progress of trains of this nature from station to station. It will be remembered, as I stated near the commencement of the present report, that the booking clerk at Round Oak endeavoured ineffectually to gain the attention of the clerks at Brettel Lane, Kidderminster, and Stourbridge, after he heard that the train had become divided, and it is therefore clear that the telegraph would not, as it is at present worked, be likely to be of much use in the case of any sudden emergency.

There are two further matters, on which it is my duty to remark, as indicating a want of proper discipline in the administration of the company. The one is, that a distinct intimation, to which I have already referred, and which was contained in the printed bills of the excursion train, signed by the general manager of the company, to the effect that the teachers and children only of the schools would be allowed to avail themselves of the train, was wholly unattended to at the different stations from which passengers were conveyed; and the other is, that I found that the record-book of the trains at the Round Oak Station, in which the arrival and departure, of each ought to have been entered, had fallen into disuse for three weeks before this accident. This book appeared to have been under the charge of a porter at the station, who, having filled the one which he had in use, had neglected to apply for a new one, waiting, as he said, until it should have been time to make a requisition for a fresh supply of stores at the end of the month. Such a book, to be of use, should be regularly attended to, under the eye of the station-master.

A very few words will suffice for summing up, in conclusion, the causes of this accident. A man was selected by the company for the, important duty of head guard to a, heavy train who proved to be anything but trustworthy and careful, and who, in not performing that duty with the attention that it required, caused the fracture of a defective coupling, and permitted the greater part of his train to run backwards down a steep gradient, on which it came into violent collision with a following train.

The consequences have been deplorable in the extreme, and are not likely to be soon forgotten by the company on whose line the catastrophe has occurred. To that company no further warning will be necessary to induce them to use all reasonable means for preventing a similar accident from again occurring; but it is to be hoped that other railway companies will not neglect to profit by the lesson that is thus afforded to them, and particularly companies that are in the daily habit of running passenger trains without any break vans at all behind them. They may, and do, carry on this practice for many years, without any serious results, but the risk and responsibility that they incur are far greater than any saving of expense or trouble that they can effect.

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

I am, &c.  
H. W. TYLER,  
*Captain, R.E.*

# THE ADVERTISER, AND BRIERLEY-HILL AND STOURBRIDGE GAZETTE.

Saturday October 16th, 1858

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ANOTHER ACCIDENT ON THE OXFORD, WORCESTER AND WOLVERHAMPTON RAILWAY.—The Oxford, Worcester, and Wolverhampton train arriving at Chipping Camden Junction at 6.10 on Tuesday evening was run into by the Chipping Norton engine. It appears that the Chipping Norton engine came in contact with the train arriving from Worcester, upsetting one of the carriages and throwing two others off the rails. Five or six persons were in the carriage that was turned over, but not one of them was injured; their escape can only be attributed to the slow pace the Worcester train was coming in at the time, and immediate application of the brake by the engineer of the Chipping Norton train. After a delay of three hours the train proceeded, and arrived (by special engine) from Bletchley, in London at 1.30 Wednesday morning.

Chipping Norton Junction is attended by *one man*, who always seems steady and industrious, and who performs the combined duties of clerk, porter, and station-master.