

1899.

NEW ZEALAND.

RAKAIA RAILWAY COLLISION

(REPORT AND EVIDENCE OF COMMISSIONERS *RE*).

Laid on the Table of both Houses of the General Assembly by Command of His Excellency the Governor.

COMMISSION.

To all to whom these presents shall come, and to ALAN GEORGE PENDLETON, Esquire, Railway Commissioner (South Australia), and JOSEPH GILES, Esq., Gentleman: Greeting.

WHEREAS on the eleventh day of March, one thousand eight hundred and ninety-nine, a railway accident occurred at Rakaia, resulting in loss of life and injury to persons and property: And whereas it is expedient to make inquiry into the causes of the accident and the circumstances attending the same, including the questions whether the accident was imputable to the negligence of any persons, and, if so, in what particulars and to what extent:

Now know ye that, in pursuance and exercise of the powers and authorities enabling me in this behalf, and acting by and with the advice and consent of the Executive Council of the Colony of New Zealand, I, Uchter John Mark, Earl of Ranfurly, Governor of the said colony, do hereby appoint you, the said

ALAN GEORGE PENDLETON and
JOSEPH GILES,

to be Commissioners for the purpose of inquiring into the matters hereinbefore set forth.

And, for the better enabling you to carry these presents into effect, you are hereby authorised and empowered to make and conduct any inquiry hereunder at such places in the Provincial District of Canterbury and at such times as you deem expedient; and also to call before you and examine on oath or otherwise, as may be allowed by law, such persons as you think capable of affording you any information in the premisses; and also to call for and examine all such books, documents, papers, or records as you think likely to afford you any information in the premisses; and generally to inquire therein by all lawful ways and means whatsoever. And, using all diligence, you are hereby required to report to me, under your hands and seals, your opinion, resulting from the inquiry hereby directed, in respect of the several matters investigated by you under these presents not later than the eighth day of July next, one thousand eight hundred and ninety-nine, or such extended date as may hereafter be appointed in that behalf. And it is hereby declared that these presents are subject to the provisions of "The Commissioners' Powers Act, 1867," and its

amendments; and also that these presents, and your powers and functions as Commissioners hereunder, shall continue in full force notwithstanding that the inquiry hereby directed may be interrupted from time to time by adjournment.

In witness whereof I have hereto set my hand, and caused these presents to be issued under the seal of the said colony at _____, this twenty-sixth day of June, one thousand eight hundred and ninety-nine.

RANFURLY, Governor.

Issued in Executive Council.

ALEX. WILLIS,
Clerk of Executive Council.

R E P O R T.

To His Excellency the Right Honourable Uchter John Mark, Earl of Ranfurly, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor and Commander-in-Chief in and over Her Majesty's Colony of New Zealand and its Dependencies, and Vice-Admiral of the same.

MAY IT PLEASE YOUR EXCELLENCY,—

In pursuance of the Commission issued to us dated the 26th June, 1899, and the instructions therein contained that we should inquire "into the causes of the accident (at Rakaia on the 11th March last) and the circumstances attending the same, including the questions whether the accident was imputable to the negligence of any persons, and, if so, in what particulars and to what extent," we have now the honour to state that we held an exhaustive inquiry at Christchurch on the 29th and 30th ultimo. On the first day named we travelled over the line between Christchurch and Ashburton, and carefully examined the road and working appliances on the up-journey between Ashburton and Rakaia. The line is laid with 53 lb. steel rails. The sleepers, of which there are 2,100 to the mile, are good, and have 6 in. of ballast underneath. The road is practically straight, and in excellent running-order.

It is desirable concisely to state the circumstances under which this accident occurred.

On the 11th March two excursion trains were booked to run from Christchurch to Ashburton, returning in the evening, leaving Ashburton at 6.5 p.m. and 6.15 p.m. respectively. The working-notice for these trains was issued in due course, and a copy is attached to the evidence. This notice provided for both trains crossing No. 21 south at Rakaia, and the first train, consisting of two Baldwin engines, thirty carriages, and one brake-van, left Ashburton punctually, arriving at Rakaia two minutes before the booked time—viz., 6.45 instead of 6.47. The second train, consisting of one Baldwin engine, fourteen carriages, two wagons, and one break-van, was twenty minutes late leaving Ashburton, and the guard of this train, William Climpson, was unfortunately left behind, in consequence, as he alleges, of the crowded state of the platform preventing his joining the brake-van. It is not apparent that his absence in any way led to the subsequent accident, but we desire to record our opinion that a guard of such lengthened experience as he possesses ought to have avoided so serious a blunder as missing a passenger-train of which he was in charge. This train, under the circumstances which are later on stated, overtook the first train at Rakaia Station, and the driver of it, Charles Henry Carter, instead of stopping outside the first facing-points in accordance with rule, overshot the mark, and ran into the front train, with the disastrous results so well known. The Coroner's jury, at the inquest held on the passengers who were killed, returned a verdict of manslaughter against Driver Carter, who stood his trial at the Supreme Court sittings in June, and was acquitted.

It is shown in evidence which we have taken that the driver (Charles Henry Carter) of this second train started from Ashburton at an unusually rapid rate and that his

speed of running on portions of the road, and especially through Chertsey and towards Rakaia, was not only in excess of the time-table rate—*i.e.*, twenty-four miles per hour—but also greater than was laid down by a regulation which limits the speed of his train, as an ordinary one, to thirty miles per hour. The evidence of Mr. Thomas Danks, who previous to 1878 had sixteen years' experience as a driver on the Victorian railways, is very clear upon this point. The Stationmaster at Chertsey also expressed an opinion that the train ran through his station "pretty fast," and the guard's assistant, Burrows, who took charge of the brake when he found his guard had been left behind, expresses the opinion that the speed was that of an express train.

Engine-driver Carter, when called upon to explain his breach of the rule in not stopping outside Rakaia Station, pleaded: First, that, his guard having been left behind, the brakes in the van were not applied when called for; second, that the Westinghouse brake upon his engine did not act; third, that when his fireman, at his instruction, "cut in" the air for the Westinghouse tender-brake, that failed to act for a few seconds; fourth, that he was misled by the head-light of an engine standing on the Methven branch, which he believed to be the head-light of No. 21 south, which train he was to cross at Rakaia; fifth, that he believed the tail-lights of No. 1 excursion standing in the Rakaia Station to be much further away than they actually were; sixth, that no danger- or stop-signal was given to him until he was close to the first facing-points.

With regard to these pleas we have to state,—

First: The evidence of Burrows and of Mr. Fitzpatrick, who was in the van with him, goes to show that the brake was applied either at Chertsey or immediately afterwards, and kept on until the time of the accident; and it will also be noticed that Engine-driver Hughes saw the brakes of the van were on at the time of the collision.

Second and third: The admissions of Carter himself immediately after the accident that his brakes were in good order (*vide* Mr. Beattie's evidence), and the fact that the engine and tender have continued to run with those brakes in good order since, suffice to negative his statement that they did not act properly before the accident. On this point Carter, at the inquiry which we held, entirely failed to account in any reasonable manner for the difference between his statements immediately after the accident and his argument before us to the effect that the brakes had failed him. It is beyond question that verbally and above his signature he fully admitted, within forty-eight hours of the accident, that his brakes were in good order and had acted properly, suggesting rather that the accident had arisen either from his misjudging the distance until it was too late to stop, or from the fact that the preceding train had made, as he expressed it, "bad braking-ground." His statement "I thought I had a clear road up to the platform, and whistled for a platform-signal, but did not get one," is very significant; and we are further of opinion that it is in the highest degree improbable that a Westinghouse brake would be in good order at Ashburton, fail to act within an hour subsequently, and work well without any repairs for three months afterwards.

Fourth: We admit that Carter may have been misled by the head-light of the Methven engine in the manner alleged by him, but this does not in any way exonerate him for running into a station before he received a platform-signal in accordance with the regulations. The Methven engine was not mentioned in his working-notice, and the only lights at or near the station by which he should have been guided were the platform-signal (which he did not receive) and the tail-lights of the train in front of him.

Fifth: He also probably misjudged the distance of the tail-lights of the train in front of him; but this, far from being a valid excuse, is rather an admission of a serious error of judgment on the part of an experienced driver.

Sixth: According to the evidence of Mr. O'Neil, who showed the danger- or stop-signal, it was exhibited about 300 yards from the facing-points, a distance quite inadequate, in our opinion, for protective purposes; but, as no rule provides for the showing of such a signal, Carter had no right to rely upon its exhibition, and should have had his train under sufficient control to enable him to stop before reaching these facing-points until the platform-signal admitting him was shown in accordance with rule.

We are of opinion that this accident arose through Driver Carter maintaining too high a speed in running his train between Chertsey and Rakaia, and from his misjudging his distance from Rakaia Station when he shut off steam. There is not the slightest reason to suppose that Carter was other than perfectly sober; but, as in his evidence he has admitted his extreme desire to make up on his journey the time which had been lost in starting from

Ashburton, we believe that he allowed that desire to override his better judgment, and consequently maintained an excessive speed, expecting that No. 21 south would be in Rakaia in due time, and that the first excursion train would have cleared that station. The supposition that his mind was almost exclusively bent upon this one object seems to afford a reasonable explanation of the failure of himself and his fireman to see the green light which Burrows, the guard's assistant, alleges that he waved almost persistently between Chertsey Station and the scene of the accident.

We believe we shall not be travelling beyond the scope of your Excellency's Commission in making a few comments on the method of working as disclosed by the evidence :—

First : The system of crossing passenger-trains at a station unprovided with home and distant signals is one which should, with all possible despatch, be discontinued as dangerous. In this case, had such signals been in existence, Carter would have been instructed, under the usual rules governing their use, to come to a stop at the distant signal, immediately afterwards pulling slowly within and proceeding to the home signal, or as far as any obstruction on the road would permit ; the distant signal therefore protecting his rear.

We beg to submit that every station used for crossing passenger-trains, and having a resident staff, should be supplied with such signals, and that where trains have to be crossed at stations without resident staff the working time-table should provide for each train coming to a stand outside these points, and specify which train was to enter the station first.

Second : We are of opinion that the practice of running double-engine trains, consisting of anything like thirty carriages with passengers, is unwise, more especially in the absence of continuous brakes. Even with such brakes double-engine trains should not be used for the carriage of passengers except where such additional power may be necessary to assist a load over an exceptionally bad grade.

We are informed that an expenditure of £275,000 would equip the whole of the New Zealand railway stock with the Westinghouse continuous brake, and, as doubtless this work could only be done gradually and charged over a series of years, it seems probable that the burden of the annual interest would be less than the cost of repairs following slight accidents on some of the heavy grades worked in this colony.

Third : It would be very desirable to institute a system under which stations in advance of a fixed crossing-place should be advised of the late running of a train so booked to cross. For example, if in this case prompt advice had been given to Ashburton of the late running of No. 21 south, and it had been the duty of the Stationmaster to advise Carter to that effect, he would have been forewarned, and doubtless would have run more steadily between Chertsey and Rakaia.

Fourth : We are of opinion that an important rule such as 317 should not be allowed to fall into abeyance. We are aware that the working-book provides a maximum speed for (a) express and (b) ordinary trains, but it does so without expressly amending or cancelling an authorised rule (317) which forbids the making-up of lost time ; and even these maximums are, we believe, exceeded by the drivers. This is a state of things likely to bring about a comparatively lax adherence to regulations, and we suggest for consideration whether Rule 317 should not stand, with an added authority to the driver to exceed time-table speed only at the written request of the guard, and within stated limits. This system has been found to work well elsewhere.

In conclusion, we desire to express our thanks to all the officers of the Railway Department with whom we have been brought into contact in the discharge of our duties, the performance of which has been facilitated by the courtesy extended and the anxious wish manifested on all hands to contribute to the efficiency of our work.

We remain,

Your Excellency's most obedient servants,

(L.S.) ALAN G. PENDLETON.

(L.S.) J. GILES.

Wellington, 5th July, 1899.

MINUTES OF PROCEEDINGS.

THE Commissioners met at the old Provincial Council Chambers, Christchurch, at 10 o'clock a.m. on Thursday, 29th June.

The Commission was read.

Mr. Commissioner Pendleton stated that he and his colleague (Dr. Giles) had agreed that it was necessary to visit the place of the accident before proceeding to take evidence, unless any person had any matter to bring forward calling for immediate attention.

The Commissioners adjourned until 10 a.m. next day.

FRIDAY, 30TH JUNE.

The Commissioners met at 10 o'clock a.m., and sat until the taking of evidence concluded.

JESSE THOMAS PARSONS, Stationmaster at Ashburton, examined on oath.

1. *Mr. Pendleton.*] Is that the working-notice under which certain excursion trains were run to and from Ashburton on the 11th March last [produced and identified] ?—Yes, that is the one.

FOR THE CHRISTCHURCH MEAT COMPANY'S EMPLOYEES' EXCURSION, CHRISTCHURCH, ROLLESTON,
AND INTERMEDIATE STATIONS, TO ASHBURTON.

Passenger-trains.

		a.m.	a.m.		p.m.
Christchurch ..	.. dep.	7.25	7.40	Ashburton ..	.. dep. 6.5
Addington ..	.. arr.	7.31	7.46	Rakaia ..	.. arr. 6.47
" ..	.. dep.	7.32	7.47	" ..	.. dep. 6.52
Hornby ..	.. arr.	7.49	8.2		7.2
" ..	.. dep.	7.50	8.3		
Islington ..	.. arr.	7.55	8.8		
" ..	.. dep.	8.5	8.15		
Templeton ..	.. arr.	8.11	8.21		
" ..	.. dep.	8.12	8.22		
Rolleston ..	.. arr.	8.30	8.40		
" ..	.. dep.	8.31	8.41		
Selwyn ..	.. arr.	9.5	9.5		
" ..	.. dep.	9.2	9.10		
Dunsandel ..	.. pass	9.2	9.2		
Ashburton ..	.. arr.	10.15	10.25	Christchurch ..	.. arr. 8.35

The 7.25 a.m. special and No. 6 north from Ashburton will cross at Dunsandel. The 7.40 a.m. special and No. 6 north from Ashburton will cross at Selwyn.

These trains will each cross No. 21 south from Christchurch at Rakaia.

The south specials will stop at other stations between Christchurch and Rolleston, if there are any excursionists to be picked up there. The return trains are to set down at all stations from Rolleston to Addington inclusive.

Factory fares, *plus* 6d. adults, 3d. children, for committee's expenses. Tickets from Christchurch and Hornby only are being printed, for issue by the Stationmaster, Hornby, to the committee in advance. Christchurch tickets to be used for Christchurch and Addington, and Hornby tickets for Middleton, Rolleston, and intermediate stations.

The specials may run with an interval of ten minutes between. The 7.25 a.m. south special may run five minutes behind No. 5 south, and No. 7 south ten minutes behind the 7.40 a.m. special.

2. Were you on duty when those trains arrived?—Yes.
3. Did they arrive to time, or fairly to time?—Yes.
4. Were there any peculiar or exceptional circumstances in connection with their arrival?—No; not in the running or anything of that sort.
5. Nothing connected with the working?—The first excursion train was a bit crowded, the second was not so.
6. The first one was due to return from your station at 6.5 p.m.?—Yes.
7. *Dr. Giles.*] Did that start to time?—Yes.
8. What was the difference between the arrival of the trains?—Ten minutes, I believe.
9. *Mr. Pendleton.*] The first train left to time?—Yes.
10. Can you tell me of your own knowledge what the first train was made up of?—Thirty vehicles. The majority of them were "C" cars.
11. Was there a brake-van?—Yes.
12. Did the second train leave to time?—No, that left twenty minutes late.
13. It was due to leave at 6.15 and left at 6.35?—Yes.
14. What was the reason of the delay?—The van was off the siding.
15. Was that caused by shunting?—Yes; by bringing it out of the siding.
16. Was that due to the negligence of any one in charge of the train?—No.
17. Did you see that train start?—Yes.
18. Did you authorise its starting?—Yes.
19. What is the method of starting?—I give the word to the guard to start, extending my right hand.
20. Did you see the guard give the authority to start on that?—Yes.

21. How did he do that?—He did it with his right hand, blowing his whistle.
22. Where did he stand?—At the north end of the platform.
23. Near the engine?—The engine was out on the main road. There is a loop going to the platform. The engine was about on the main road, and therefore the guard had to stand at the end of the platform to be seen by the driver on account of the curve.
24. How many carriages were there between the engine and where the guard stood?—Four or five.
25. And how many carriages were there on that second train?—Fourteen carriages and a truck (a box-wagon)—fifteen vehicles besides the van.
26. Did the guard join his train in the usual manner?—No; he missed the train.
27. How was that?—There was an understanding between him and the assistant that his assistant was to get in at the front part of the train and the guard was to get into the last carriage, and they were to meet in the centre after checking the tickets. They worked towards each other.
28. What was the guard's name?—Climpson.
29. And his assistant's?—Burroughs.
30. That arrangement having been made, you say it was not carried out?—Burroughs got on the first carriage all right, and Climpson was getting back to the last carriage, but the train was well away; and as he was just going to the last carriage three or four intoxicated persons, in a rough-and-tumble with the police and railway-porters, obstructed them. The train was well in motion, and he missed that carriage, but as the van was passing he tried to catch hold of the stanchion, sufficient to pull him off the platform; and then he ran after the train, but could not catch up to it.
31. Did you see all that?—Yes; I was standing close to him.
32. At what speed did the train pass him?—Probably from twelve to fifteen miles an hour. It had probably gone from the time it started to the time it reached him 150 yards. He stood four or five carriages from the engine, which would leave eleven behind him. Some of the carriages were long carriages.
33. What would be the average length?—Perhaps 30 ft. to 35 ft., taking them altogether. It may not have been 150 yards, but from 100 to 150 of the run.
34. Do you think it possible to get that speed in the time?—Yes.
35. Did you take any steps then to advise other points that the guard had been left behind?—Yes; I sent a wire to Chertsey.
36. Immediately?—Yes.
37. Was there any delay in either calling up or sending to Chertsey?—There was a slight delay. The cadet was only calling about a minute, but he delivered a parcel, and in the meantime another clerk sent the message.
38. Was the message copied?—Yes.
39. Do you know the time it was sent?—The message is in the hands of the Coroner. It was received at Chertsey at 6.48.
40. Thirteen minutes after the train left?—Yes. The message had to be written out, and there was the calling. I believe the wire was occupied at the time.
41. Is it a railway telegraph-service?—Yes.
42. Had you any knowledge that 21 south was running late?—No.
43. You were responsible for starting certain trains: is there any system by which you would have official advice so as to enable you to advise the guard leaving your station?—One station advises another, but I would not be advised of that crossing of trains. Probably Rakaia would be advised if the train was late.
44. Is there any system of advanced stations being advised?—I had no advice of that train crossing.
45. How long have you been Stationmaster?—Twenty-two years to-day.
46. How long have you been at Ashburton?—About eighteen months.
47. Was your platform very crowded when these trains were starting—crowded not only with excursionists, but with other people?—Yes, by their friends.
48. Is there no method of keeping them off the station?—No; it is an open platform.
49. Did you also wire to Rakaia the fact of the guard being left behind?—Yes.
50. Did you call him up in good time?—If I remember rightly, it was 6.53.
51. Eighteen minutes after?—Immediately after we got the wire off to Chertsey we sent a message to Rakaia.

GEORGE WILLIAM ATMORE, Stationmaster at Chertsey, sworn and examined.

52. *Mr. Pendleton.*] Were you on duty on the 11th March?—I was.
53. Did you see both of the excursion trains of which this working-notice speaks passing through your station to Ashburton?—Yes.
54. Were you on duty when they returned?—Yes.
55. Did you notice anything specially in connection with either train that went through your station?—Nothing exceptional.
56. Both trains were running at the ordinary speed?—Returning, I thought the second one was going pretty fast.
57. Could you estimate the speed?—No; I have had no experience with regard to speed.
58. The second one you think was going faster than the first?—Yes.
59. Is it the rule for you, as Stationmaster, on seeing trains going through, to give any signal to them?—Yes.
60. You gave them in both cases on the return of these trains?—Yes.

61. What is that signal?—At night-time, a steady green light.
62. Shown towards the driver?—Yes.
63. As either train passed you on the return, was your attention called to a signal by the guard, the driver, or anybody else?—No, I did not see any signalling at all.
64. Did you get any notice from the Stationmaster at Ashburton as to the guard of the second train having been left behind?—Yes.
65. Can you say what time that was received by you?—I think about 6.45, or something like that; some time before the train passed.
66. That being the case, did it not strike you that it was necessary to see whether any person was in the brake-van, or that any light was exhibited?—When I got the telegram I asked the operator whether there was any guard at all on the train. He said, Yes, there was an assistant guard. He said, "He has a friend on the train working back to the brake-van." So I considered he would be sure to know. The guard was in the van before he got to Chertsey, because he would be through the train by that time.
67. Did the operator tell you what he was going through the train for?—Collecting tickets.
68. Approaching your station, would a driver give you any whistle, or is there any recognised signal?—Sometimes they whistle when they see the signal as an acknowledgement, but they do not always do it.
69. They do not whistle for a signal?—Oh, yes, they just give a long whistle.
70. Is it prescribed by any rule?—No.
71. Is it a custom?—Yes.
72. There is no rule to that effect?—I do not know of any rule to that effect.
73. Did you think it necessary to advise Rakaia when you were told that there was no guard on the train?—No.
74. You absolutely did nothing?—I had no one to put on in the guard's place, and the train was already running twenty minutes late; and I thought that, as the majority of the trains only have one guard with them, it was quite as safe as the rest of the trains going through. The operator told me at the time he was going to call up Rakaia.
75. It would appear as if you had not a thorough knowledge of the rule-book. Rule 354 says, "When approaching a junction or station the engine-driver must give the proper notice by whistle to warn the signalman or Stationmaster of his approach, and must not, until he has seen the proper signals exhibited to proceed, run at a greater speed than will admit of his being able to stop his train before arriving at the home signal, or the points and crossing protected thereby, or short of any obstructions that may exist; and he must so stop his train if the signals are against him. The engine-driver must, as far as practicable, have his fireman disengaged when approaching or passing a station or junction, so that he may keep a good look-out for signals."—Of course, I knew the train always whistles at the station. I understood you to mean whether there was any instruction for whistling.
76. Here is the instruction for whistling before the train proceeds, and you said you did not know there was any rule to that effect?—I must have misunderstood you, then.
- JOHN MAY, Stationmaster at Rakaia, sworn and examined.
77. *Mr. Pendleton.*] Were you on duty on the 11th March last?—Yes, I was.
78. When the excursion trains in reference to which this inquiry is being made ran through your station to Ashburton?—Yes.
79. Were you there on their way back?—Yes.
80. Did you see when the first train came in from Ashburton?—Yes.
81. Did it run to time?—Yes; well to time.
82. Did you receive any notice from Ashburton or Chertsey as to the guard of the second train having been left behind?—I just received the notice as the second excursion train was signalling—when she blew her whistle for a signal.
83. *Dr. Giles.*] From what station did you receive the notice?—From Ashburton.
84. *Mr. Pendleton.*] About what time would that be?—I think about 7 o'clock—within a few minutes. I could not say exactly.
85. Did you bring a copy of the message?—Yes. I was on the platform; but there was no one to bring that to me. [Message produced.]
86. Who took it?—The cadet. I was continually watching the train on the platform to see that "Clear" was not given. I was afraid some one might give the signal by mistake. I remained on the platform when the second train arrived.
87. The telegram did not come into your hands until some ten minutes after it was received?—Not until about the time the second train whistled for a signal.
88. Can you put a time to that?—Yes; about a minute after 7.
89. Who is your cadet?—Fowk.
90. A boy?—A lad about eighteen.
91. Do you not think, seeing that it was an important message, that he might have left the office, or sent it to you?—I do not think so. He could not leave the office.
92. Why? Could he not lock the door, and go out?—I do not think he would, unless he got instructions from me.
93. *Dr. Giles.*] How far is the office from the platform?—Perhaps 8 or 10 chains from where I was standing.
94. *Mr. Pendleton.*] Did you get advice of the late running of 21 south?—No official advice.
95. How late did that train arrive at your station?—I think she arrived on the bridge at eight minutes after 7.
96. When ought she to have been there?—She ought to have been at Rakaia at 6.52, and on the bridge at about 6.45 or 6.46.

97. The first train had arrived, and you were on the platform with the view of seeing that no signal was given too soon for the second excursion train to come in?—Yes; that is correct.

98. What, if any, steps did you take to protect that first train, seeing that it was exceptionally long in standing at your station?—I got a signal-lamp and saw that it was well trimmed and lighted and given in charge of a competent man, and I saw the light turned on before he left me. I instructed him to go well back and exhibit that signal, so that no train should pass him until he got a signal from me.

99. Is there any rule to that effect, or was that voluntary?—There is no printed rule; it was voluntary.

100. You told him to go well back?—Perhaps outside the station limits, where the semaphore signal would be fixed in case one was erected, so that the train would have a good view of that signal; and it would have the effect of stopping it, as I considered. By "well back" I thought 300 yards or 400 yards would be sufficient.

101. You started a competent man to go well back; do you know of your own knowledge that he went?—Yes; I saw him go.

102. To what point? You do not know of your own knowledge where he went?—No.

103. Did you see the head-light of the second train approaching?—Yes; I saw it immediately it came up the rise: that is about a mile from the platform.

104. Had the driver of that train at that time whistled or not?—Yes; he whistled immediately he came on the rise, just as I saw the head-light.

105. Did you give him a signal to come in?—Nobody gave him a signal; I am certain of that.

106. Did you form any idea at what speed the driver of the second train was approaching the station?—I could see just after she was coming out of the rise that she was travelling at a very rapid pace, because she came on us very quick.

107. Was the steam on?—I could not say; it was too dark to check that.

108. Did you form any opinion as to the speed?—She appeared to be coming at full speed.

109. Do you mean the steam was full on?—I cannot tell that. If she was running at full pace she would be running at full speed without steam.

110. As a matter of fact, did the second train approach your station without any signal from you, or any one on the platform?—Yes.

111. And did it exceed the station limits?—Yes.

112. And came into contact with the other train?—It dashed into the tail part of the train on the platform.

113. Had you left the first train standing?—Yes, where she stopped when she arrived. When I saw that the collision must occur, I went up and signalled the driver of the first train.

114. There were two engines on that first train?—Yes.

115. Were the drivers and firemen ready to go?—They started at once, and I believe the guard was signalling further on.

116. What signal did you give the driver?—A green light to start.

117. And how far had they gone before the contact?—I estimate about two carriage lengths.

118. Which would be some 60 ft. or 70 ft.?—Yes, I should say so.

119. Is your station one at which passenger-trains either frequently or regularly cross?—They regularly cross every day.

120. Is it a line on which there are many excursions trains running?—Yes; but I never found excursion trains to cross there before. This is the first occasion.

121. How long have you been at Rakaia?—About three years.

122. How long have you been Stationmaster?—Twenty-four years.

123. During the three years you have been at Rakaia, and with trains every day, as I understand you, crossing there, have you known anything approaching any irregularity on the part of a driver coming within the station limits without a signal?—Never before.

JAMES O'NEILL, Clerk at Rakaia Railway-station, sworn and examined.

124. *Mr. Pendleton.*] How long have you been at Rakaia?—About five years and eight months.

125. Occupying the same position as you do now?—Yes.

126. Were you on duty on the 11th March last?—I was.

127. Were you on duty when the first return train from Ashburton arrived?—I was.

128. Were you on duty subsequently?—Yes.

129. And were you sent out by your Stationmaster to in any way protect the first train against any other engine or train coming in?—Yes; I was sent out with a danger-signal. On the arrival of the first train I went to Mr. May, and asked him what signal I was to have. He said, "Take Porter Kerr's light." I turned it on to "Danger," and went straight down the line. It was an ordinary signal-lamp, with changing glasses. I turned it on to red, and walked down the line behind the van which was standing at the station. When I got down about 300 yards I saw the Methven engine standing on the branch line, which is about half a chain off the main line. There being no sign of the special, I went over to speak to them. I stayed there about a minute, and went out on the main line again and proceeded down to where I stood, and exhibited the danger-signal until the train passed me. I exhibited the signal on my right shoulder.

130. *Dr. Giles.*] How much further did you go after speaking to those on the Methven engine?—I should say, fully 50 yards.

131. *Mr. Pendleton.*] Did you go and take shelter from the rain on the Methven engine?—No, I did not.

132. You only remained there for a minute?—For a minute. I stood on the step of the engine and asked the time.

133. And did you get to the position you took up before you saw any approaching head-light?—Yes, some time before I saw it.

134. Are you quite certain that in exhibiting the light you stood towards the approaching engine?—Yes.

135. And that neither your hand nor elbow could in any way affect the flash-light from your lamp towards the road?—I took particular care of that.

136. Did you see the head-light of the approaching engine?—I did.

137. Can you form any idea as to the distance at which you saw it, from the point at which you stood?—I saw it before she came into the dip. I would be positive in saying I saw her over a mile away.

138. The head-light is of what character?—A white light.

139. Small or large?—Very large.

140. Do you think any man, at the point where you saw that large head-light, would see your danger-signal held on your shoulder?—He would not see it so soon as I saw his.

141. He would not see it a mile off?—No, I do not think so.

142. As far as you can tell, did the approaching driver take any cognisance of your danger-signal?—Not until he was close to me. I heard him give the one whistle, and shortly afterwards three whistles for brakes. They almost followed. He gave one short whistle. I thought at the time he was going to whistle for a signal, and he saw my danger-signal and signalled for brakes at once. They were almost one after another.

143. Was the second train run at any undue speed, in your opinion?—Yes, it passed me very fast.

144. What do you call very fast—can you form any idea?—I have not had much experience. Very few pass Rakaia.

145. Was he running at an exceptionally high speed for the distance he was from the station?—Yes; I did not think it was possible for him to stop at the pace he passed me.

146. Did you see any signal lights from the train coming towards you?—No; I could plainly see the back lights of the train at the station.

147. Did you notice whether the brakes of the engine, tender, or van were on; can you say of your own knowledge?—No, I cannot.

148. I noticed in reading the evidence you gave before the Court that you seemed confused as to the distance of 300 yards with three-quarters of a mile?—I was incorrectly reported in that particular.

149. *Dr. Giles.*] It was a dark night?—No.

150. What sort of weather was it?—It was very bad weather, but not very dark.

151. It was in March?—At a quarter to 7 it was just dark enough for the use of signals, but it was not such a dark night as is currently thought. It was raining very hard—very heavy rain.

152. You were not able to see whether the wheels were skidding or anything of that sort?—No.

MICHAEL GARDINER, Driver, sworn and examined.

153. *Mr. Pendleton.*] Were you driver of the leading engine on the first excursion train on the 11th March last?—Yes.

154. Did you leave Ashburton on the return journey at the right time?—Yes, about 6.5.

155. Did anything occur in running down to Rakaia of a special character to you?—No, nothing whatever.

156. Did you run at about time-table speed?—Yes.

157. Did you arrive at Rakaia at the book-time?—Two minutes before.

158. That is to say, instead of taking forty-two minutes you did it in forty?—Yes. This was the understanding between me and the guard. He wanted to get there a little bit earlier and I gave him two minutes.

159. Did you on approaching Chertsey get the proper signal to run through?—Yes; after whistling for it.

160. Did you on approaching Rakaia get the proper signal?—Yes; after whistling for it.

161. At what distance from Rakaia did you whistle for it?—About on an average a quarter of a mile, or sometimes less. It all depends upon the speed I am travelling at. On this night I whistled well back—I should say a quarter of a mile at least.

162. From the first facing-points?—Yes; about that.

163. Had you shut off steam then?—Yes.

164. And the train was well under control?—Yes.

165. Supposing you had not got the signals you expected, could you have pulled up in that quarter of a mile?—Yes, easily.

166. Did you run direct into the station?—Direct into the station.

167. At what distance did you shut off steam—approximately?—It was between a quarter and half a mile. It might not have been quite half, but it was from a quarter to half a mile. I could not say the exact distance.

168. Your load was a heavy one?—Yes; it was a heavy train.

169. Did the driver of the second engine shut off steam when you did, as far as you know?—Just immediately after me. I looked behind to see.

170. Had you any difficulty, both of you, when shutting off steam between a quarter and half a mile, in coming into the station and pulling up?—No difficulty whatever.

171. Did you use any exceptional brake-power?—I did it with my own engine. It was an understanding between myself and the second engine that I should do the braking myself. That was to prevent the jerking of the carriages.

172. How did you brake the train in?—By using the tender-brake: first by getting the couplings tightened, and getting the carriages together and taking the weight of it, and then using the air-brake.

173. Did you use sand at all?—No; I do not require sand. As a rule, when I am braking a train I make a practice of always having the sand running lightly; but I did not use sand, because I was not forced to pull up, or anything of that.

174. Do you make it a practice to whistle for level crossings?—Yes; always.

175. Any level crossings between Ashburton and Rakaia?—Yes; every level crossing, in accordance with the regulations.

176. *Pro Driver Carter.*] Did you, when driving a Baldwin engine, run past two stations (Styx and Sefton) in consequence of your air-brake failing to act?—I remember running past those two stations. It was not in consequence of the air-brake failing to act; but on those occasions—it happened on the same day—it was the second day the Baldwin engine ran. It was the first day she ran with a mixed train, and the brake was not in working-order, and was not taken up as it should be; and it was also my fault to a certain extent. It was not due to any failure of the air-brake.

177. *Mr. Pendleton.*] You say it was partly your fault: can you make your statement more complete by saying what part was your fault?—The brake had not got into working-order.

178. Was it through inexperience?—No. It was rough, and the cylinders did not act smoothly.

179. How long have you been a driver?—I have been a full driver under two years. I have been acting driver for about nine years.

180. Do you act in accordance with Rule 317 with regard to increased speed?—Yes; I always have done.

181. You did not exceed your time-table speed?—No.

WILLIAM HYLAND, sworn and examined.

182. *Mr. Pendleton.*] Were you driver of the second engine on the first return excursion train from Ashburton on the 11th March?—Yes.

183. We have had it in evidence that you left to time; I suppose that is correct?—Yes.

184. Did you shut off steam on approaching Rakaia Station?—Yes.

185. At about what distance?—I shut off while in the dip, and left the first driver to take the train in himself.

186. You did not use any brake then?—No.

187. Neither air-brake nor tender-brake?—No.

188. Had you any difficulty in stopping, or your first driver?—I never noticed any.

189. Did you observe the signal from Rakaia to allow you to enter?—Yes.

190. Have you any idea how far off you saw that?—I suppose it would be about a quarter of a mile.

191. *Pro Driver Carter.*] Will you express an opinion as to whether a semaphore signal would be an advantage to Rakaia Station?—I do not think that is a question I can answer. I think that is an expert question.

192. *Mr. Pendleton.*] There is a rule—No. 317—which says that the time-table speed is not to be exceeded, nor lost time to be made up by drivers?—Yes.

193. Do you adhere to that in practice?—Yes. Time is made up, but I have no specific case to give. We do not overrun the maximum, but if we are kept at stations we are allowed to make up the time, but not by overrunning the speed.

194. Is that the table you mean by “maximum speeds” [produced]?—Yes.

195. I understand you to mean that, notwithstanding Rule 317, if a train were kept at a station by traffic or for any other purpose you would exceed your time-table speed, so long as you did not exceed this allowed maximum?—Yes.

CHARLES HENRY CARTER, sworn and examined.

196. *Mr. Pendleton.*] You were driver of the engine of the second return excursion train from Ashburton on the 11th March?—Yes.

197. We have it in evidence that you left somewhat late?—Yes.

198. Do you recollect the time of departure?—At 6.31.

199. And you were due to leave?—At 6.15.

200. You were sixteen minutes late?—Yes.

201. Were you aware in starting, or at any time on the journey, that the guard of your train—Climpson—had been left behind?—No.

202. Who gave you the signal to start?—Guard Climpson.

203. Is there any rule by which either you or the fireman should look out, in starting from a certain station, that the train is coming after you all right, or any signal given to you to interrupt your proceeding?—There is a rule to see that the train is clear of the platform.

204. Do you know which it is?—I cannot say which it is, because my rule-book and time-tables and appendix were all taken away from me directly after the accident. I have had nothing to go on.

205. Rule 318 says, “When the engine is in motion the engineman is to stand where he can keep a good look-out ahead, and the fireman must at all times be ready to obey the instructions of the engineman, and assist him in keeping a look-out behind when not otherwise engaged. He must be ready to assist the engineman in looking out for all signals, especially when nearing a station or a junction. They are also, before starting, and frequently during the journey, to look back and see that the whole of the train is following safely, especially just after starting and after

passing a level crossing or a platelayer. The engineman must at all times be prepared to act upon any signals shown by platelayers or others on the line." Now, I want to know whether you, or to your knowledge the fireman, just after starting from Ashburton, looked back for a signal to see if anything was given, or anything extraordinary had occurred?—My fireman looked to see if everything was clear on the platform. It was very hard to see on account of the bad night, and the crowds of people on the platform.

206. I asked whether you or your fireman, to your knowledge, looked back for a signal to see if anything was given or anything extraordinary had occurred, and then you go on to say, "It is very hard to say, on account of the bad night." Can you not answer the question?—We both looked back.

207. And you were looking back until clear of the platform?—Yes, until our train was clear of the platform, to the best of our knowledge.

208. And at 6.31, on the 11th March, you found it difficult to see back the length of seventeen vehicles—to see whether there was any signal given or not?—We did not see any signal.

209. *Dr. Giles.*] You say the difficulty was partly caused by the crowd on the platform?—Yes; and if the guard had given any signal it would have been very hard to see it on account of the people.

210. *Mr. Pendleton.*] If a hand were held up would you see it?—Yes.

211. Would not any guard in the railway service give a signal in that way?—Yes. We did not see any signal. If one had been given we should have seen it.

212. It has been said in evidence this morning that the train started away at a very rapid rate—from twelve to fifteen miles an hour. Are you of opinion that you left the platform at that rate?—Not at that speed.

213. What do you suppose your speed was?—It might have been eight or nine miles by the time I got clear of the platform.

214. By the time you cleared the platform, am I to understand you were running at the rate of eight or nine miles an hour?—Yes, about eight miles.

215. Did you get a signal to go through Chertsey?—Yes.

216. Did you whistle for that signal?—Yes, one long whistle.

217. Did you go through Chertsey at an exceptional speed?—No; nothing out of the usual running.

218. You have heard the Stationmaster say that you were going through pretty fast. At what speed do you consider you were running through?—I expect it might be something like thirty miles an hour. I do not think it was anything over.

219. Did you take your time going through Chertsey? Had you any knowledge of what time it was?—No, I did not take my time going through Chertsey.

220. Did you increase your speed between there and Rakaia at any point?—We ran from thirty-three to about thirty-five miles an hour, I reckon.

221. Do you think that thirty-five was your maximum?—I do not think I ran anything over it.

222. And in approaching Rakaia did you shut off steam?—I shut off steam in the usual place for that class of train, and load, and wind.

223. Where was your usual place?—A good way over the rise, across the dip: close on half a mile or more away from the first facing-points. It might have been more.

224. Did you whistle for a signal?—Yes, one long whistle.

225. Did you get it?—No, I got no signal.

226. What efforts did you make, not having got that signal, to pull up?—The brakes were applied. The tender-brake was applied first—that was shortly after I shut off—by my fireman.

227. Did you see him do it?—Yes. He put the tender-brake on.

228. *Dr. Giles.*] Was that before you whistled?—Yes; and then I applied the engine-brake.

229. *Mr. Pendleton.*] The air-brake?—Yes. After applying the air-brake I found it was not holding at all. The engine-brake did not hold at all, so I turned round to the fireman and told him to cut in the air on the tender-brake. It held, but did not have much more effect than the hand-brake, because the hand-brake would skid the wheels without the air-brake.

230. But skidding the wheels is not the best way of retarding a train?—No; we have to avoid that as much as possible.

231. But did the tender-brake, when you cut the air in, not answer?—It did not seem to answer straightaway, but it did a few seconds after. It seemed to have a better hold.

232. Did you, on the run down from Ashburton through Chertsey and towards Rakaia, look back at all for any signals that might be given to you?—I looked back after leaving Chertsey. My fireman every now and then looked back on my side.

233. Did you look back at every level crossing?—Yes; every one, to my knowledge.

234. You know that is in the regulations?—Yes; but it was very hard to see some of the crossings that night.

235. Do I understand you to say—going back to the question of the brake—that the engine-brake never answered?—The engine-brake never answered at all.

236. There was a delay of some seconds in the tender-brake answering?—Yes.

237. And the result was what?—I ran past the station on account of the brake not holding. Had the brake held I should have been able to stop twice in that distance from where I shut off, quiet easily.

238. And how far do you estimate you did overshoot the mark: how far do you think you ran beyond the first facing-points?—I could not say the exact distance.

239. Do you not think, if you had been sufficiently on the alert, that, even without (admitting this for argument's sake for a moment) the air-brake on the engine, you could have brought your train to a stand, seeing how short the train was?—Not under the same circumstances. If we had been running before time, or—

240. Do you ever do that?—Sometimes. I think we all do it more or less sometimes. If we had been running before time, and were doing what we call “killing time” before coming on to the station—

241. You must have a very liberal allowance on the New Zealand railways if that is the case. How long have you been a driver?—To the best of my knowledge, about twenty-three years.

242. Surely you know, having regard to the serious results of running into a train in front of you, that every possible exertion should be made to stop before you hit it?—Yes; but I had no knowledge of the brake not acting in any way.

243. Do you not think that if you had reversed your engine, and done all that an alert, quick man should do, you might have stopped your train?—If I had reversed the engine that night she would have picked all the wheels up.

244. You did not do it at first?—I did not do it at first. I worked the lever over past the centre to work her on the back pressure as much as possible without skidding the wheels, with the sand full open, and as a last resource I reversed altogether. But it was of no use, she picked up the wheels straight.

245. *Dr. Giles.*] Made them skid?—Yes.

246. *Mr. Pendleton.*] You have heard the evidence given by Gardiner and Hyland as to the absolute ease with which Gardiner, with the leading engine and thirty or thirty-one vehicles behind him, stopped when going into Rakaia; and I would like you to explain how it is that you, with a smaller engine and only seventeen vehicles in all behind you, found it so impossible to avert serious collision?—I think you will find that they ran into that station before time.

247. Gardiner, with perfect ease, with one engine, controlled another engine behind and thirty-one vehicles in the rear, and you, with a similar engine and seventeen vehicles, go smashing in?—They had plenty of time. They got away at the right time at Ashburton and arrived before time at Rakaia, and had time to lose time going into the station, which they could do.

248. You surely would not urge before me as a reasonable thing that you should go smashing in because you were behind time. Your first care is the safety of the public. That is the first consideration, and surely you do not want me to suppose you wanted to make up time at any cost?—I was bound to make as good time as possible on account of No. 21 waiting to cross Chertsey behind me. I was bound to make as much time as possible on that account to get into Rakaia.

249. Punctuality is a necessary thing in railway-working. I admire you for that. But you should know that there are certain risks to be avoided, even at the risk of unpunctuality. I do not want you to leave on Dr. Giles's mind and my mind this impression: that your first intention was to make up your lost time and hammer away regardless of consequences?—I have always worked the trains with the greatest safety, and with the hundreds of thousands of lives which have been behind me I never made a mistake. I left Ashburton that night sixteen minutes late. I got no notice from the guard or Stationmaster whether there were any alterations to be made in the running. I did not even get stopped at Chertsey to be informed that No. 21 was about thirty minutes late into Rakaia. Had that been done I should have found out about the failure of the brake. The guard was left behind, and I knew nothing about it until I stopped at Rakaia.

250. Did you see any signal before the collision?—Just before the collision, but it was a very faint one.

251. You have heard the evidence of Clerk O'Neill, who said that this was shown some 300 yards from the station?—Yes.

252. He expressed an opinion that it could be seen some distance off?—Yes.

253. And you say you never saw the signal?—Only when we got close on it, and it did not appear to be a great distance from the tail-van we struck of the first excursion train; but it was a very bad light—a very dull one.

254. I think he has stated it was a very good one?—Well, it was a very dull one, and we could scarcely see it.

255. Did you see the tail-lights of the first excursion train?—Yes; before I saw the hand-signal.

256. How far off do you suppose you saw the tail-lights?—Just after getting over the rise. I saw a dismal-looking light, but it appeared as if it was 600 or 700 yards on the other side of the station by the look of the lamps; but the rain was beating on the lamps and showed a very bad light.

257. At about what distance from the rise did you first see the light?—I could not give you the distance.

258. A quarter or half a mile?—I should say a little over a quarter of a mile. I could not estimate the distance.

259. A quarter of a mile away, with three red lights staring you in the face, you still go on?—It was such a night that you could not pick up any signs along the road. You could see nothing, and the lamps on that engine are small lights, and they do not show a good light on the rails. You cannot pick up the road so well, and you cannot see landmarks or anything in that way.

260. Well, what does that point to? Does it not suggest that you could not pick up your landmarks, and you did not know where you were?—I knew about the place I was in, but I could not swear to the distance.

261. But if you know what place you were in the distance can be stated. If you say the top of the rise, then from that to the tail-lights is such a distance?—I could not say that I saw the lights at the top of the rise. The bright head-lamp on the Methven line took off the view. It has a brighter lamp.

262. Was it because yours was not properly trimmed?—No; they are properly trimmed.

263. Are they a different kind of lamp?—Yes, with a shallower reflector.

264. You cannot give me any idea of the distance the tail-lights were in front of you?—It would be some 500 or 600 yards; but it was only just a very slight glimmer. The weather was so thick.

265. At a distance of 500 or 600 yards you saw the tail-lights. Does it not suggest itself to you that you should not have gone rushing on?—Yes. I did everything in my power, and found my brakes would not act, and then I gave the danger-whistles. I actually gave the danger-whistles before I saw the danger ahead of me.

266. *Dr. Giles.*] What was the object of the danger-whistles?—To warn the Stationmaster that I was coming in and could not stop.

267. The other witness said it was to get the brakes put on?—It is both to warn the station and to warn the guard, so that he will put his brakes on and prepare the station in case of danger.

268. *Mr. Pendleton.*] Did you after the accident promptly attribute the collision to the failure of your brake, when speaking to the Stationmaster or any other official?—Well, I do not know that I spoke to the Stationmaster.

269. To any one, I say?—I could not say now whether I did or not. It is so long ago.

270. Have you ever attributed the accident to any other cause than your brake-failure?—No, I do not think so, any more than I have just said—that if I had been warned at Chertsey I should have found out the failure of the brake.

271. Did you ever state to any person in the service that the accident arose through your mistaking the distance of the tail-lights of the first excursion train, and that when you were aware of your mistake it was then too late to stop your train?—Not in that way.

272. In what way, then? Will you give it in your own language?—Only what I have stated.

273. Did you ever state that you thought the tail-lights were further down the station-yard than they actually were, and that when you found out your mistake you could not stop in time?—Not when I found out the mistake. I did state that I thought they were further away; but that made no difference to my stopping, because I was bound to stop outside the station limits at all hazards, if possible.

274. Did you state to any one that you attributed the error in judging distance to the wind and the rain, and that that was what brought about the collision?—No.

275. This telegram is sent in the name of Mr. Gaw by Mr. Stringleman, and he alleges that you made this statement to him in the presence of a witness?—I cannot say what statement I did make then, because I was in a flurried state, and I had not time to collect myself, just after bringing the train from Rakaia.

276. There is another telegram in the name of Mr. Gaw: "Rakaia collision: The driver of the second special, who at first stated he had found the brake defective on approaching Rakaia, now admits that his brakes were all right and acting properly"?—Yes, the brake acted all right before I left Ashburton and after I left Rakaia. I thought something must have come uncoupled, but on examining the engine I tried and found it went on. I could not understand it, because I had never heard about the brake sticking up before.

277. "The driver, who at first stated that he had found the brake defective on approaching Rakaia, now admits that the brake was all right"?—Not all right when I was coming into the station, because the brake never went on. But it acted well before and well after. It worked well at Ashburton. I had had the engine somewhere about three months, and had never found any failure about the brake before.

278. *Dr. Giles.*] Your answer is that you never did admit that the brake was all right on that point?—Not on that point—going into the station.

279. The telegram says you made that admission. You say now that you did not make that admission?—Not at the time of the accident. What I said was this: The brake acted well before I left Ashburton, and was all right after leaving Rakaia, and even before I left Rakaia I tried it and it went on all right; but at the time of accident going in the brake did not act.

280. The question put to you is, Did you ever admit that at the time of going in it did act?—No, I did not.

281. *Mr. Pendleton.*] How long have you been working this particular engine?—I could not exactly say. Mr. Beattie would be able to tell you that. Somewhere about three months, off and on.

282. Had you any reason to complain of the brake before?—No; only because it was too tight in the grip.

283. Did you make any report about a month before this accident, stating that the brake was working very well?—Yes, I made reports after getting the engine from Dunedin, about the conveniences made on the foot-plate being satisfactory. I admit all that.

284. And the brake worked all right after leaving Rakaia, when you took the train on to Christchurch?—Yes, as well as it did any time before, and it worked well at Ashburton when I was shunting there. I had no cause to think it was going to stick in any way. I am not well acquainted with the Westinghouse brake—the interior of the brake, the treble valves, and so on.

285. Had you not been working the Westinghouse brake before?—Only the steam-brake for years.

286. How long were you working the Westinghouse brake?—Somewhere about three months, off and on.

287. I do not quite see the point you wish to make—that you are not well acquainted with it?—I do not know how the valves are placed. After I had the engine a day or so I asked Mr. Dickenson if he had any drawings of the brake, or any information he could give me.

288. I ask you how a knowledge of the valves would assist you in the brake-power?—They might get dirty, or I might use the wrong oil through my ignorance in not knowing.

289. Is it your ignorance of the machinery that makes you think that on this occasion the brake went wrong and then went right immediately afterwards?—I cannot say that it is.

290. Had you any conversation with the Stationmaster, or any of the staff at Rakaia, after the accident?—No more than that I think I spoke to the Stationmaster about being able to get away with the train as soon as possible, or getting the wounded away to Christchurch. I did pass some remarks about that.

291. I see in the report that you had some conversation with O'Neill?—Yes.

292. What was that?—He came alongside after the collision and passed some remark to me. He said, "Oh, God, Harry! It is you and me for it." This was alongside the engine. And then, after examining the engine, I went in to send a wire, and O'Neill said, "It is you and I for it, Harry." I said, "Never mind that; let us look after the engine."

293. I think in your first report you said O'Neill's remark was, "I am in for it." Subsequently you altered it to, "We are in for it." Which is correct?—I have carried it in my head, but I think that is the outline of it.

294. The first was written on the 13th, and then you altered it to "we," subsequently?—"We" is what I meant to have said.

295. *Dr. Giles.*] As far as you knew, the brake was on in the guard's van?—Yes, the brake was supposed to be on.

296. Do you know whether it was?—I do not think it was. I do not think there was any brake at all on.

297. You supposed it to be on?—It should have been on.

298. When you signalled you presumed it would be on?—Yes, I did.

299. You did not know anything about the guard being absent?—No; I did not know that the guard was left behind.

WALTER STRINGLEMAN, Traffic Clerk in Mr. Gaw's office, sworn and examined.

300. *Mr. Pendleton.*] Were you acting for Mr. Gaw on the 11th, 12th, and 13th March?—Yes.

301. In his name, did you send a telegram as follows: "Regret report collision Rakaia last night between two excursion trains Ashburton to Christchurch with Christchurch Meat Company's picnic, with four deaths; injuries, mostly serious, to fifteen—all passengers; and destruction of three cars train. One train left Ashburton six five p.m. to time; other, six thirty-five, twenty minutes late; both cross twenty-one, Rakaia. First was standing clear at Rakaia, not blocking as in report mailed last night, waiting twenty-one, which was late; second train could not stop in time, so caused collision. S.M. states stop-signal given three hundred yards soon as second train. Driver says shut off steam usual place, in slight dip, where station not visible. On seeing lights of standing train, thought further down station-yard than actually was. When found mistake could not stop in time. He says saw no signal at all chain away from train. Main line blocked by collision, but after considerable delay trains got away through siding; line cleared to-day. Had special just leaving Christchurch with doctors, &c., when advised locally doctors had attended to injured and sent most in by express; few stayed Rakaia and came in to-day. Kept doctors to see to people on arrival express, and provided conveyance taken them hospital and elsewhere." Then follow the names of the dead. The telegram is signed "W. H. Gaw." Did you send that telegram?—Yes.

302. You have heard Driver Carter state that he did not say to you or to any one that he thought, on seeing the lights of the standing train, that it was further down the station-yard than it actually was, and that when he found his mistake he could not stop in time. Did you hear him say those words to any one?—Yes, certainly.

303. Was any one else present?—Yes; Mr. Dickenson.

304. You also heard him say that he attributed the error to the wind and rain?—Yes.

305. And in the presence of any one?—Yes; Mr. Dickenson, Running-shed Foreman.

Driver Carter: I quite understand the way that reads—the error was in the distance of the train. I thought it was standing down about the tanks, 600 yards away; but that had nothing to do with my stopping. I was trying to stop all the same. I thought these lamps were further down the line, 600 or 700 or 800 yards away. That is where I thought the train was, and that is where I acknowledge finding out that they were at the station. I did not mean that it was an error in my going in.

306. *Mr. Pendleton* (to Carter).] You positively swore you did not use those words to any one; now you admit you did use the words, and want to put your own interpretation on them?—This has been brought to my knowledge fresh again. I had no note of anything of the kind. There was no writing.

307. Can you tell me how Mr. Stringleman saying that he told you so can bring it before your mind any more than any one else?—I have thought over it since. I did not intend it to mean in the way it reads.

308. I read the words over to you, and asked you if you did say those words to any one, and you said No?—Not in the manner you put it.

309. Then, how should you have put it before?—I did not mean it in the way you understand it.

310. If any man driving a lorry down the street ran into something and said, "I mistook my distance, and when I found out the mistake I could not stop in time," what would you or any other man understand by that—that he misjudged the distance and went into the obstruction? Would you not say, "I misjudged the distance of the train," and that was the object you ran into?—But it was not where I misjudged the distance, but where I tried to stop outside the station limits.

311. *Dr. Giles.*] I understand you to say you had misjudged, but that was not the cause of your running into the train?—That it was not the cause of running into the train. That is what I meant.

312. Then, did you use the expression, "I could not stop in time"?—No, I did not make that remark, because, as I stated before, when the brake failed to act, if the brake had acted I could have stopped twice in that distance, and when I found the failure of the brake I did all I could to stop and alarm the station and the guard.

313. That telegram does not quote a word about the brake: did you say anything about the brake to Mr. Stringleman?—I could not state what I said. It was only a few minutes when I went in and out again.

314. If you knew that at the time, is it credible that you would not have mentioned it to Mr. Stringleman?—We do not always do so until we make out a report of anything.

315. *Mr. Pendleton.*] Is there anything more you would like to say?—No.

316. *Dr. Giles.*] Can you tell us the first person to whom you mentioned the brake as having been the cause of the accident? When did you first say that?—I could not say who was the first person I mentioned the brake to.

317. When was the first time you mentioned it?—I think the first time was in the written report. I do not remember saying much until that.

318. When was that written?—On the 13th March.

319. To whom was the report made?—To the Locomotive Foreman, Christchurch.

WILLIAM HOOD GAW, District Traffic Manager, sworn and examined.

320. *Mr. Pendleton.*] This is the original telegram sent presumably by you to the General Manager, I think, on the 13th March:—"Rakaia collision: The driver of the second special, who at first stated that he found the brake defective on approaching Rakaia, now admits brake all right and acting properly." Was that sent by you?—Yes. I got the information from Mr. Beattie, who had examined Carter that morning, and I wired it to the head office at once.

ALFRED LUTHER BEATTIE, Locomotive Engineer for the Hurunui-Bluff Section, sworn and examined.

321. *Mr. Pendleton.*] You have just heard portion of a telegram read which was sent by Mr. Gaw to the General Manager, and you have also, no doubt, heard Carter say that he did not make that statement. You have also heard Mr. Gaw state that he got the information from you. Will you kindly state what the basis of the information is?—Perhaps I had better begin from the time I arrived at Rakaia. One of my first actions after arriving at Rakaia was as soon as possible to see Driver Carter, and to ask him for his explanation of how the accident occurred.

322. When did the interview take place?—About twenty minutes after the time of the accident—say, within half an hour. Driver Carter, in his explanation to me, in effect stated that he thought his brakes did not hold as well as he would have expected, and the reason was the alleged slippery or greasy state of the rails, which prevented the brake-blocks from holding or gripping so firmly as he would have expected. Nothing was said to me at that time about any defect in the brake itself—merely that the brake-blocks did not grip so firmly, on account of the greasy state of the rails, as he would have anticipated. I remained at Rakaia, and on the Monday I had Carter before me first thing. The accident was on the Saturday. On Monday, the 13th, I saw the engine, and satisfied myself that the brakes were in perfectly good working-order. I had Carter before me, and I took down from him this statement, which I produce. Each page of this was read over clearly and distinctly word for word by me to Carter before he was asked to sign it.

323. Has he signed each page?—He has signed each page in my presence, and before he signed he had ample opportunity to read it over if he so desired.

Driver Carter: This was after I was suspended.

Witness: I might say he was suspended. The following is the statement: "Christchurch, 13/3/99. Charles Henry Carter stated: I am a first-grade engineman, located at Christchurch. I was driving Baldwin U Locomotive No. 284 on night of 11th instant, bringing excursion from Ashburton. Mine was the second half of a big excursion. The first half left Ashburton at about 6.5 p.m., and my train followed at about 6.31 p.m. I had seventeen total on, I think. Very wet—pouring. On approaching Rakaia Station I 'shut off' at the usual place for the class of train I had on—that is, the bottom of the dip, about half a mile south of the station. I had previously eased at the preceding down-grade to save any jerking of train. When I shut off we were going at about thirty miles an hour. I had been doing my best to make time after leaving late away from Ashburton, so as to avoid delaying No. 21 at Rakaia, where we were to cross. Just coming up the rise out of the dip my mate had his screw-brake on, and before reaching top of rise I put on my air-brake very gently. As I was coming up this rise, and nearly to top of it, I saw three red lights ahead, and judged them to be the tail-lights of the preceding train, which I knew had also to cross No. 21 at Rakaia. I judged that these lights were away beyond the north end of Rakaia platform, because they looked very dull and distant. I thought I had a clear road up to the platform, and whistled for a platform-signal, but did not get one. Then, finding my train had not reduced in speed as much as it should have done, I applied the air-brake full on, 'emergency' position. Called fireman to pull up the rod which applies air-brake to tender, and I whistled for guard's brakes, giving three separate calls of three short whistles each. I opened the sand, and found train was not slowing down as much as she ought to have done, and could not feel any assistance from the van, for I can tell at almost any time when guard's brake is put on. I was not aware Guard Climpson had missed his passage and was not on train. He is a guard I can always depend upon, and I could not understand how it was that he did not put on his brake. Had van-brake been properly applied directly I called for it, there would have been no trouble in stopping the train in time to avert collision. My engine-wheels were not skidding. I looked over to see if they were. I have previously noticed that with a dashing rain the sediment washes up from ballast on to rail, and brake has very little effect. I have known where

a train could not be pulled up in its ordinary distance on this same account. I did not think the rail would be so bad on this occasion, or would have shut off earlier and made earlier preparations for stopping. It is a side rain which makes the rails slippery usually, as described, and on Saturday night the rain was behind me—a heavy southerly gale blowing almost in line with the track. This gale would assist train towards Rakaia, and help to nullify brakes. My engine-brakes were right and in good order—nothing wrong with them. Engine in splendid fettle. Addington, 14/3/99. On approaching Rakaia Station, before I applied Westinghouse air-brake, the air-pressure gauge was showing 125 lb. (one hundred and twenty-five pounds) on the square inch. My boiler-pressure was 160 lb. at the time, and as I began to apply the Westinghouse brake I opened the steam-valve to Westinghouse pump one additional full turn. It was previously opened about five turns or thereabouts. You have to open it three turns before enough steam passes to work the air-pump. I do not usually carry more than 80 lb. to 100 lb. of air-pressure. I had 125 lb. this time. There was no special reason for this. The pump had been freshly oiled leaving Ashburton, and was working very freely. 100 lb. is ample pressure under any circumstances. It is quite enough. Directly I saw the red lights ahead I opened the sand. The box was full leaving Ashburton, and I tried it there, finding it running freely on both sides. I had not used it between Ashburton and Rakaia. The first I saw of the red light said to have been shown by O'Neill was just as I ran past it, and it was a very poor light at that. I am positive that this light had not been exhibited to us in such a way as to enable us to see it before getting right up alongside. We were looking ahead for a signal from the time we came out of the dip. We saw no lights at the station until after topping the rise, or nearly up the rise north of the dip. Then we saw the red tail-lights of the van ahead of us very faintly. Rain was coming down then in sheets, and our smoke blew right ahead of us, making it still more difficult to see ahead. I judged that O'Neill's red light was shown about 2 chains south of the first train's van. It was only just flashed to us as we passed. Something was sung out to us as we passed, but I could not hear what was said—storm too heavy. After we struck van O'Neill came up to me and said, 'Oh God! I am into this.' I promptly felt my engine brake-blocks, finding them fairly cool; tender-blocks pretty warm. I examined my engine at front end, and seeing that there was already a big crowd of people around the cars of front train, and that I could not apparently do any good, I walked back to my brake-van and felt at the blocks. They were quite cold, and by shaking the brake pull-rods I found that the brake was not 'on.' I tried both sides of van, and neither side was 'on.' The brake-blocks were just up to the wheels and no more. I then examined the train back to the engine. The concussion was not heavy. We felt next to nothing of it on the engine. It was just as if our engine pushed the van right into the cars beyond. My Westinghouse brake worked perfectly all the way afterwards from Rakaia to Christchurch, and was all right on arrival. My opinion is that the first special had made bad 'braking-ground' for us at Rakaia—that is, the sediment and slime off their wheels made the rail much worse for us. I had expected a 'bad braking-ground,' and shut off earlier in consequence. Directly I stopped at Rakaia I pulled out my watch, and made the time 7.15 p.m. At Ashburton, after arrival of 10.15 a.m., we did about fifteen minutes' shunting, turned, cleaned fire, &c., and put engine in shed. I sat down on engine shortly afterwards and had my dinner. I had not then been into town. I went into town for a few minutes, got some tobacco and matches, had one glass of beer, and returned to shed, remaining there until time for train. I did some packing about engine, and odd jobs about engine. I should not have gone into town if it had not been for wanting matches and tobacco. I state positively that the one glass of beer was all I had to drink that day. I do not think the other special enginemen left the shed at all. There was not the slightest sign of intoxication about any of the loco. or traffic train men. My mate was at shed all the time.—C. H. CARTER; witness, A. L. BEATTIE, L. Engineer. 14/3/99."

324. *Mr. Pendleton* (to Carter).] Now, you see, Carter, there is not only an admission that your engine-brakes were all right and working well, but there is a further admission that you got off the engine and found the blocks of the engine fairly warm?—I did not write it myself. "Fairly warm" means only a little warm.

325. Was that statement read over to you when you signed it?—What I mean is that I did not write it myself. I do not mean to say that there has been anything put into what was read over to me.

326. Do you mean to insinuate such a thing?—No, I do not.

327. It is not a fair or just thing to say. It seems like an insinuation that some officer had been getting at you?—My brake-blocks I worked very close to the wheel, and without the brakes ever going on at all they would be a little warm.

328. I presume before getting warm there would be some retarding influence?—If the brakes had been at work they would have been that hot I could not have put my hand to them.

329. But is it a fact, as you stated, that your engine-brake was working well?—Not in the accident.

330. It is stated so there?—I did not mean it that way.

331. You say, "My engine-brakes were right and in good order—nothing wrong with them"?—But before we left Ashburton, and after we left Rakaia, is what I meant by that.

332. And when you say your engine was in splendid fettle, it was so at Ashburton and Chertsey, and north of Rakaia it was so still?—We did not use it at Chertsey. If we had stopped there I should have been able to see.

Mr. Beattie: Carter discussed with me the reason why he thought his brake-blocks did not hold, and at that time, and for some days afterwards, until the defence was put in in the Supreme Court, I knew nothing whatever about this theory of the engine-brake failing. The point discussed with me was whether the blocks on his brake would give the maximum holding-power. He contended that these blocks were not of a pattern to give the maximum holding-power.

333. *Mr. Pendleton* (to Carter.)] Is there anything you want to state, Carter?—Seeing the place I was in, and finding I was the only one suspended, I did not think it was wise to give Mr. Beattie all the information, as I had to stand my trial for manslaughter.

334. The inquest was not until the 17th March: there was nothing about manslaughter when you made your statement to Mr Beattie on March 13th and 14th. You say you were the only man suspended. It is an inevitable thing, I suppose—it is certainly on any railway I have had experience with—that if a driver has a collision with loss of life he is promptly suspended until the matter is cleared up one way or another?—A case of this kind is quite different to any other. I do not know how other countries go on—whether they only suspend the driver or all concerned.

335. You are explicit in stating that the brake-blocks were right, that they were warm and hot at Rakaia; and you say now you never authorised any one to say that the driver of the second special, “who at first stated that he found the brake defective on approaching Rakaia, now admits that the brake was all right.” There is the admission signed by yourself?—The brake was all right after and before, but not at the time of the accident. It was not all right, because it was all wrong. That brake acted all right after the accident.

336. You said “My engine-brakes were right and in good order—nothing wrong with them?”—Yes.

337. If you meant before and after the accident, why did you not put it in?—I did not intend it to be meant as it is given there.

338. *To Mr. Beattie*] With regard to cutting in the tender brake and its not answering immediately: is that mechanically, a possible thing?—No.

339. And if it does not act instantly, what then?—It takes at least a minute and a half to fill up the auxiliary reservoir. If the reservoir is charged, it will act instantly, or in such a measure of time that you cannot define it. The tender-brake could not act unless the tender-reservoir was previously charged.

340. *To Carter*] On arrival at Christchurch did you make any report to your foreman of the alleged defect on your engine?—No, not on that night.

341. Is it in accordance with rule that you should immediately report on arrival?—Yes, I am quite aware of that. The foreman came to me and said I was wanted in the Manager’s office.

342. Mr. Gaw’s office?—Yes. I went up there and we had a few words about the accident, and then Mr. Dickenson told me I could go. Mr. Dickenson asked me to be up on Sunday morning, which I was.

343. Did you, when discussing the accident, either with the Manager’s representative or your foreman, say that the accident was to be attributed to the defect in the brake?—No, I do not think I did say so.

344. *To Mr. Beattie*] It has been stated that the engine head-light which Carter had was not giving a very good light, and not nearly so good a light as that of the Methven engine. Is there any material difference in them?—Speaking on the spur of the moment, I am not prepared to say what lamp was on the Methven engine; but I can say that the lamp Carter had is a good lamp. I do not say it is as good a light as some of the larger ones, but it is a good and sufficient one.

345. *To Carter*] You were talking about not having an intimate knowledge of the Westinghouse brake, its intricacies, and so on. Have you had any experience of the Westinghouse brake on other engines besides the Baldwin?—Yes, on the N class.

346. The same kind of brake?—This one on the Baldwin is the English Westinghouse brake.

347. Is there any difference?—There is a difference. It is only about a fortnight the longest I had them, and I did not have them long enough to know the difference.

348. What is the difference?—There is a difference in the air-ways.

349. Is there a difference in the way you pull the lever to apply the brake?—No, I do not think there is.

350. *Dr. Giles* (to Carter.)] I gather from your report that has been read that you attribute the cause of the accident to two causes: One, that the guard’s brake was not put on. You found after you had a signal, from the feeling of the train, that that brake was not on?—Yes.

351. And the other cause was that owing to the bad breaking-ground the brake never held?—Yes.

352. Do you say that now?—Yes, that the brake failed to hold altogether on the engine.

353. But in the same report you say that the brake was in good working order?—Yes, before I left Ashburton and after I left Rakaia.

354. May not a brake be in good working order and yet fail to hold in consequence of the greasy nature of the rails?—Yes, that might be so as well; but the brake did not hold. It was the fault of the interior of the brake that it did not hold. That is what I meant.

355. Your theory is that suddenly something went wrong with the interior of the brake itself, and immediately afterwards it got right itself?—It was all right after I left Rakaia. At the next stopping place I had no trouble whatever.

356. I do not know whether you know enough about the Westinghouse brake to give us any idea as to how anything could go wrong?—I do not know, because I do not know anything of the interior of the brake.

357. Then it is only a guess of yours as to something being wrong? Is it more than a guess?—No. I know that that brake never went on.

358. Never went on to the wheels?—No. The pressure never went on.

359. That would be a guess if it was owing to the greasy rails?—But it would have gone on if the rails were in a greasy state in the way it was that night.

360. *Mr. Pendleton*.] With reference to your statement that you do not know anything about the interior of the Westinghouse brake: Are you a mechanic by trade or profession?—Not by trade. I am what you call a handy man, and can do almost anything.

361. Do you consider you know all about the machinery of an engine?—I think I do. Of course there are parts I do not know the names of, but the working of the engine and the like of that I understand.

WILLIAM CLIMPSON, Railway Guard, sworn and examined.

362. *Mr. Pendleton.*] You were guard of the second excursion train to Ashburton on the 11th March?—Yes.

363. And in the usual way ought to have accompanied the train back?—Yes.

364. How did it come about that so important a man as the guard of a train was left behind?—After I got the signal from the Stationmaster I gave the driver the signal to start. I had to go down to the north end of the platform to give the driver "Right."

365. How far from the engine were you?—About five or six carriage lengths. After I had given the driver "Right," I made my way back to the van to get on to that, and in trying to keep the passengers and people back I could not get up. There was a big crowd of passengers, and the platforms of the carriages were crowded.

366. Did you leave any passengers behind?—No.

367. Why were those people crowding the steps?—Just to wish their friends good-bye. I got blocked by keeping these people back, and was unable to get on to the van. I tried to get on to one of the carriages, but I saw that I should have to knock some of the people down or knock myself down, and when I got back to the van it was worse.

368. I suppose you could have gone from one carriage to another?—Yes, if I had got on to a carriage.

369. You say you were standing about the fifth or sixth carriage: could you not have got on the seventh and worked towards the van?—Yes, I tried; but I wanted to get to my mate.

370. How long have you been a guard?—Nine or ten years.

371. Working on this line?—Yes.

372. And is it your usual practice, when you give the driver the starting-signal, to travel back to your van?—Yes. We start to collect tickets from the van. There is usually no difficulty in getting on the train, but there was such a crowd of people on this occasion. I was trying to make my way back to the van.

373. Did you report at once to the Stationmaster?—Yes; he was there.

374. And you saw?—Yes.

375. Had the train gone any distance when you told the Stationmaster you were left behind?—Yes.

376. Had you a signal in your hand?—Yes, a hand-lamp.

377. Was it getting dark at 6.5 on the 11th March?—It was getting dusk, being such a wet night. I ran for the van, and found I could not get on. I was running all the time. I gave the signal to the driver to stop, and in running to catch the van over the rails I slipped and got the lamp knocked out of my hand.

378. Do you think you showed the lamp in such a way, before it was knocked out of your hand, that the driver ought to have seen it?—Yes.

379. *Dr. Giles.*] That would be a signal to stop if they saw your lamp?—Yes. I took the lamp with me, although it was not sufficiently dark for it.

JOSEPH JOHN BURROUGHS, Porter at Christchurch, sworn and examined.

380. *Mr. Pendleton.*] Did you act as assistant to Climpson on the 11th March in running the second excursion train?—Yes.

381. From Christchurch to Ashburton?—Yes.

382. Did you join the train on the return journey from Ashburton?—Yes.

383. Where did you get on board the train?—On the carriage next to the engine.

384. How soon were you aware that the guard was left behind?—The only time I have got was when I had collected the tickets from the passengers in four coaches.

385. How did you learn that the guard had not been on board?—From one or two of the passengers—young people.

386. Were you looking out of one of the windows when you left Ashburton?—I was holding on to one of the irons.

387. Did you see Climpson trying to join the train?—No, because as soon as the train started to move I could not see. It was a bit of a curve.

388. Did you look out afterwards?—Yes.

389. Did you see any signal shown by any one running after the train?—No.

390. When you found the guard had been left behind, what was your action?—I started to make my way back to the van.

391. Did you get there?—Yes.

392. And then?—I did not take any action to stop the train, or anything of that sort.

393. Had you any notion where you were? Had you got through Chertsey?—No, we had not got to Chertsey.

394. Did you notice anything when you went through Chertsey?—Yes; the Stationmaster, with a green light showing.

395. You saw him do that?—I saw him from the end of the van.

396. *Dr. Giles.*] That meant "Go on"?—That is an "All-right" signal.

397. *Mr. Pendleton.*] Have you often run as assistant to the guard?—Yes; several times.

398. On that road?—Yes.

399. Can you form any idea as to the pace or speed?—No; my experience has not been sufficient to tell me any mileage.

400. Were you going at what you consider a usual pace, or slower or faster?—I reckon we were going at about express speed.

401. Do you know what that is?—No.

402. Have you ever travelled with expresses on that line?—Yes.

403. And you thought you were travelling that night at express speed?—Yes.

404. Did you at any time, on the road running from Ashburton to Rakaia, endeavour to give a signal to the driver?—Yes.

405. When?—After leaving Chertsey.

406. Why did you do that?—In the first place, an assistant guard does not compare his special-train notice with that of the driver; and, in the second place, the guard having been left behind, I wanted to make sure that the driver understood his crossing-place.

407. Do I understand that your exhibition of the signal was with the view of stopping the driver?—Yes; at the next station.

408. Where was that?—At Rakaia.

409. *Dr. Giles.*] What signal did you use?—A green light on the sideways.

410. *Mr. Pendleton.*] You first showed that after leaving Chertsey?—Yes.

411. Did you get any response?—No.

412. Did you continue to show it?—I continued to show it.

413. Did you show it continuously?—Barring the time I went into the van. I went into the van to give the brake a turn.

414. What for?—Because I thought we were getting very near to Rakaia. There was a young man in the van named Fitzpatrick, one of the committeemen. I said to him, "Give the brake a turn."

415. Whereabouts was this?—I could not form any opinion where it was. He said, "Which way do you turn it?" and I stepped inside and got hold of the brake myself, and gave it several turns, and he said, "Oh, I can do the rest," and then I saw him turning it on. I went to the door again and saw him turning it on pretty well as far as he could do, and I continued to wave the green light after that.

416. You knew that the train would have to stop at Rakaia?—Yes.

417. Then, why were you waving a green light to the driver to stop at a station where you knew he was going to stop?—I was not aware that he knew he had to stop. Of course, he had his special-train notice, as I had.

418. Do you know that Fitzpatrick put the brake on some distance from Chertsey, and kept it on, or did he not?—Yes; after he had put it on he leant on it, or rested on it.

419. Did you continue to show the green light right into Rakaia?—Yes.

420. Did you at any time see any one give you a response—either a whistle, a light, or anything of the kind?—No.

421. Did you see O'Neill at Rakaia?—My attention was drawn to him by him singing out. He was on the opposite side of the train. He called out, and I saw his red light.

422. I notice that you expressed an opinion at the trial that there was no reduction of speed after leaving Chertsey up to the time of the accident: do you adhere to that opinion?—No. I think my expression was that there would be no reduction of speed until the driver got up to about where O'Neill was with the red light.

423. Is that your opinion now?—Yes.

424. Was the van attached to the train on which you were riding one in which you had been before?—I have been with the van once or twice on country lines and branches before—on this particular van.

425. Running at a lower speed?—Not express speed.

426. You said the van swung all the way?—Yes, it was rocking from Ashburton.

427. Unusually so, in your experience?—No, I do not think so—not more than these vans would do. I do not suppose it would rock so violently at low speed.

428. Have you travelled with the vans of the express trains?—Yes.

429. Did the van rock more than the vans of the express?—Yes, much.

430. Are they of different construction?—Yes.

431. They are not smaller vans?—No, larger.

432. *Dr. Giles.*] Did you hear three whistles at the time you approached to where O'Neill was standing?—No.

433. And you had had your brake on long before that?—A considerable time before.

434. Did your brake hold or bite properly?—I looked down to see if the wheels were skidding, because it is against the rules, but they were not skidding.

435. Was it retarding the pace?—I think it must have been.

436. You do not know whether there was anything faulty with it? It was not missing its hold?—Not that I could tell.

437. The driver says that he gave three whistles, which meant, amongst other things, that the brakes were to be put on, and he noticed, notwithstanding, that the brake of the guard's van did not appear to be acting?—Yes.

438. You do not corroborate that?—No.

439. You never heard the three whistles at all?—No.

SAMUEL HUGHES, Driver, sworn and examined.

440. *Mr. Pendleton.*] You were driver of the Methven engine on the 11th March?—Yes.

441. Standing at Rakaia Station on the branch line?—Yes.

442. Were you there when the first excursion train came in from Ashburton?—Yes.

443. Standing in the same position?—Yes.

444. Was your head-light burning then?—Yes.
 445. Did you continue to stand in that position until the second excursion came in sight and in?—Yes.
 446. Tell me what you know about it? What did you notice as the train approached?—I did not see anything unusual, but I thought the train was going a little bit too fast.
 447. You would call that unusual, would you not?—Well, yes.
 448. Did you hear Driver Carter whistle for his brakes?—Yes; he gave one short whistle, and then three for the brakes.
 449. Have you any idea how far off he was when he whistled for the brakes—say, from the first facing-points?—I could not say.
 450. Did you continue watching the train as she approached?—Yes; that drew my attention when the brake-whistle went.
 451. Can you say whether the brakes were on when she passed?—I think the guard's brake was on.
 452. Why? Could you see that it was on and held?—Well, I saw sparks coming from the tire, and the wheel was skidding.

VINCENT JOSEPH FITZPATRICK, sworn and examined.

453. *Mr. Pendleton.*] You were a passenger by the excursion train to Ashburton and back on the 11th March?—Yes.
 454. On the return journey did you join the second train as a passenger?—Yes.
 455. Did you get into the brake-van at Ashburton?—No; I got on about two carriages from the van.
 456. Did you subsequently go into the brake-van?—Yes.
 457. Were you requested to do so?—It was understood by the committee that they were to get into the van and distribute from there the toys amongst the children.
 458. Were they loaded in the brake-van?—Yes.
 459. And you went there to get them and distribute them in the carriages?—Yes.
 460. Did you get the toys and distribute them?—There were three of us. One was sent ahead to communicate to the assistant guard that there was a guard left behind, and the two of us tried to get into the carriages, but the oscillation was too great, and we stayed there.
 461. Did you return to the brake-van?—Yes. I stayed in the brake-van; and when nearing Rakaia I put on the brake from Burroughs's instructions.
 462. Did Burroughs instruct you what to do?—Yes, he told me to put it on. I put it on full, and held on till after the collision.
 463. Did you turn it on full?—Yes, with both hands.
 464. Do you know anything about railway whistling-signals?—No, I am not acquainted with them at all.
 465. *Dr. Giles.*] Did you hear any whistles or signals?—No.
 466. Not until after the collision occurred?—I did not hear any whistles whatever all the time.

ARTHUR GRAY WATKINS, Engine-fitter in the Running-shed, Christchurch, sworn and examined.

467. *Mr. Pendleton.*] Do the Westinghouse brakes on the engines come under your inspection?—Yes.
 468. Tell me what you know about the Westinghouse brake on this particular engine on this occasion?—It was U 284. It was in first-class working-order.
 469. When did you inspect it?—On Monday, the 12th, after the accident.
 470. Had you seen it before, recently?—No; there had been no defects called attention to to me about it.
 471. Had you any conversation with Carter as to the cause of that accident?—Yes, I had a conversation with him, and I asked him if his brake acted right, and he said that when he applied the brake he could see that it was not going or answering, and he cut the air in in the tender-brake.
 472. Did he make any further reference to the tender-brake?—No.
 473. When did this conversation take place?—A week after the accident probably.
 474. And he did not then in any way, directly or indirectly, attribute the accident to the failure of the brakes on the engine?—Not to me.
 475. If any alterations had been made in the brake on the engine since the 11th March, would you be aware of it?—Yes.
 476. Have any alterations been made?—None whatever.
 477. Is the engine now practically in exactly the same condition as it was at the time of the accident?—Yes.
 478. Has she been running to Rakaia since?—Yes.
 479. Have you had any complaints, either verbally or in writing, as to her brakes?—None whatever.

HENRY CURSON, Railway Guard, sworn and examined.

480. *Mr. Pendleton.*] How long have you been a guard?—Seven years and a half on the Midland of England, and railway guard here between seventeen and eighteen years.
 481. Were you guard on the first excursion train to Ashburton and back on the 11th March?—Yes.
 482. Have you anything to tell me about the run, either to Ashburton or back to Rakaia?—Nothing more than that the train worked in proper order right through.

483. And you were standing at Rakaia for some time?—Yes.

484. Did you notice the approach of the second excursion at all?—When I heard the engine.

485. Whereabouts was that?—I could not say how far—a short distance from the station. When I heard one whistle I got on to the platform to get a straight view, so that I could see both my drivers and the train could go ahead. Before my train started to go ahead I heard three more whistles.

486. In giving the signals to your drivers to go ahead, were you prompted simply by hearing the brake-whistles, or because you thought the other train was coming too fast?—Yes; knowing the danger, I wanted to get my train on the move.

487. Did you think it was coming too fast?—Yes.

THOMAS DANKS, sworn and examined.

488. *Mr. Pendleton.*] Have you been a driver in the New Zealand Railway Service?—No; I was a driver on the Victorian railways.

489. How long is it since you were there?—I left in 1878.

490. How long had you been driving there?—Sixteen years.

491. Did you resign?—I resigned to come to New Zealand to start business.

492. Were you a passenger on either of these excursion trains?—I was a passenger in the last returning train.

493. Have you any recollection of what part of the train you were in?—I was in about the fifth carriage from the engine.

494. Did the train start, according to your old railway experience, very quickly from Ashburton?—From my experience, it started decidedly too quick, considering the conditions of the night—it was rough and wet. They were running at a speed of from thirty to thirty-five miles an hour in less than a mile.

495. Was it a speed you thought too great for the line, and the night, and otherwise?—It was an unsafe speed at any time, seeing the conditions of the gauge and the general character of the railway.

496. Did the carriages rock unusually?—No. I was in a very good carriage, and it ran more like a sledge than a railway-carriage.

497. As an old railway-man, you would be alert for any whistles, or would note if the steam was shut off. Can you tell us what was done? Did you observe anything at all?—As far as my recollection serves me, it appeared to be about half an hour after we left Ashburton that we felt the brakes suddenly applied.

498. Would it be the front or the back brakes?—It appeared to be from the front. We were all put at a severe angle in the carriage—the brake was applied so strong.

499. Was that shortly before the collision?—It appeared to be about the intermediate time from when the whistles from the guard's brake were used until we arrived at the station.

500. Then, you heard the whistles from the guard's brake?—Distinctly, and made the remark to my son—who was sitting alongside me—"Jack, there's trouble brewing."

501. Did you form any idea of where the guard's brake was put on? Did you notice any pull from behind?—No, there was no oscillation.

502. Or bumping?—Or bumping of the carriages together, or anything of that sort.

503. *Pro Mr. Carter.*] How could you tell what speed we were going, sitting in the carriage?—The intuitive knowledge of an engine-driver, with the pulsations, is what he has to go by in the matter of speed in the dark; and the quick-recurring noise of the joints of the wheels going over the rails gave me an idea of the speed. It is a sort of knowledge you gain through being so many years on a railway.

504. You felt the shock half-way between the whistles?—The brake was on before the whistling. The whistlings for the brake to be put on seemed to be about intermediate from the time the brakes were applied and the time of the shock of the collision.

505. *Mr. Pendleton.*] Was there any slackening of speed noticed by you when the whistling for the brakes occurred?—No. I only noticed the gradually retarding effect of the brake-power on the train. There was just one continual pull-up all the way. The entire passengers in the coach seemed to have the idea that they were being held back by the brake-power.

FRANCIS MATHER, Fireman, sworn and examined.

506. *Mr. Pendleton.*] How long have you been a fireman?—Since 2nd June, 1898.

507. You were fireman under Driver Carter on the 11th March, when running this excursion, were you not?—Yes.

508. Will you give us any information you have bearing on the case?—We left Ashburton late; I do not know the exact time. On leaving Ashburton I looked behind, as was the custom always with me. I stood on the driver's side, and saw Burroughs on the carriage looking back also. I saw no signal whatever from the station. When we got towards Rakaia the driver shut off in a place called "the dip." After he shut off steam I applied the hand-brake and the driver applied the Westinghouse brake, and in a moment or so he called on me to cut in the air on the tender-brake, as his brake did not seem to be holding. I did so, and then I saw the flash of a red light, and also the lights of a train in front of us.

509. The flash of a red light was from O'Neill?—Yes.

510. Did you not see the tail-lights until you saw O'Neill's light?—I saw them about the same time.

511. From your own knowledge, can you say anything about the acting or non-acting of the brakes?—The tender-brake seemed to hold after it was applied.

512. What opinion did you give as to the reason why the train ran beyond its proper point without stopping? Did you form any opinion?—Only that the brakes did not seem to take sufficient hold to stop the train.

513. What knowledge have you that they did not hold: have you any knowledge?—I have not any knowledge that the engine-brake did not hold.

514. Do you think that the train approached Rakaia at a higher speed than usual?—I should say we were travelling about express speed when the driver shut off steam.

515. Which, I believe, is a maximum of thirty-six miles an hour, is it not?—Yes.

516. Did you not give evidence at the trial in the Supreme Court?—Yes.

517. Were you correctly reported there in saying that you formed no opinion as to how the accident occurred?—Yes.

ALFRED LUTHER BEATTIE, recalled.

518. *Mr. Pendleton.*] I should like some information with regard to the Westinghouse brake?—I have here the *Railway Times* of the 26th November, 1898, with a leading article on continuous train-brakes, giving the official returns.

519. On what is it based? Are they official figures?—These are based on the Board of Trade returns for the United Kingdom, in November, 1898, for the preceding half-year. The article says, "We are glad to note the extremely small number of cases, only four in all, in which the brakes failed when called upon in ordinary circumstances. Although these instances are all reported as due to negligence of staff, they are absolutely insignificant when considered in relation to the enormous mileage of ninety millions in the course of which they occurred." That is to say, in ninety millions of train-miles, only four brake-failures occurred.

520. I should like to ask you this as an expert: Is it a probable thing in the working of the Westinghouse brake that it should be all right at 6 o'clock or 6.31 at Ashburton, should go wrong about 7 o'clock, and be right again in an hour or so afterwards without anything being done to it—that it should run to Christchurch all right and continue right ever since?—Knowing what I do of this particular brake, I should say it is highly improbable. The possibility is a very remote one. Nor do I know from subsequent examination of any reason at all why this brake should have failed.

521. Is there anything in the opinion which Carter seems to have formed, that there is a difference somewhat against him between the English and American brake?—None whatever. You simply put the brake on by moving a handle in exactly the same way. The one brake has an equalising arrangement, while the other has a graduated arrangement. The newer brake-valve is improved in this respect: The English or newer brake-valve is so designed as to render it less easy for a man to roughly handle a train.

522. But there is no difference whatever in using it?—No more difference than in winding up two ordinary watches.

523. *Dr. Giles.*] The newer invention would be to prevent too abrupt stopping?—Yes, that is the main improvement. In principle they are identical.

JOHN DICKENSON, Running-shed Foreman at Christchurch, sworn and examined.

524. *Mr. Pendleton.*] How long have you been in the service?—In the regular service since the 1st May, 1863.

525. And you know a great deal about the Westinghouse brakes?—Since we have had it here we have been practising the brake.

526. Did you examine the brake on Engine U 284 when it arrived at Christchurch at midnight on the 11th March?—Yes. The same driver brought the same engine into Christchurch Station and stopped perfect.

527. Did your examination show that the brake was in good order?—Yes, it was in first-class order.

528. Did Driver Carter, either then or subsequently, complain to you that the brake failing was really the cause of the accident?—No.

529. Did he say to you that it was in any way defective?—No, he did not.

530. Did he give you any idea of the cause of the accident?—Our Engineer being away South that night, and the Traffic Manager in the North Island, Mr. Stringleman, the Chief Clerk, asked me to bring him, so that we could send a report to Wellington.

531. What did he say?—I really forget the words exactly, but they were similar to these: that he had misjudged his distance, to the best of my knowledge.

532. There was a telegram sent by Mr. Stringleman to the General Manager in the name of Mr. Gaw, in which he says, "On seeing the lights of the standing train he thought the train was further down the station-yard than it actually was, and when he found out his mistake he could not stop in time." Do you believe those were the words, or something like them?—Yes, they are something like what he said. Mr. Stringleman took the words down as he said them.

533. *Dr. Giles.*] Did he give you any reason for misjudging his distance at the first interview?—No; he gave me no reason, to my knowledge. He is a man who ought not to misjudge, because he ought to know every inch and movement of the road.

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