

3. At what time did you get out to New Lynn?—I took the first train. We got out very shortly before 10. I made a point of looking to see the position of everything there, and made a note of it.

4. What was the position of the vehicles of No. 5 when you arrived?—The No. 5 vehicles had been pulled away from the engine. The engine, I understood, was in the same position as it was after the collision. Of course, it would be, because the bogie was derailed. The other engine had been pulled back on to the cars. I understand that after the collision when they pulled up there was a space between the cars and the engine—a space of a few feet. When I got there the engine had been put back on to the cars, and the space was between the two engines.

5. Did you examine the engine of No. 6?—Yes.

6. What was its condition, in connection with the brake particularly?—Of course, with the collision the whole of the train-pipe was smashed: it had burst open at the back. The back angle-cock was shut: I did notice that.

7. *The Chairman.* That is the brake-pipe?—Yes. The collision had done that; but the cock was shut: I noticed that particularly.

8. Did you test the brakes of any of the cars?—I tried the brake of the first car—1224. I pulled the wire to see if there was any air in the auxiliary, and there was air. At different intervals I pulled the wire, up to about 11.30, and then there was just the last fizzle: it went out then. That showed there was air in that car.

9. Did you make an attempt to test any of the other cars?—Yes, except 425 and 465; one could not do anything with them—they were telescoped on the bridge. The next car I tried, 1281, there was a little air in her, but by the time I got over, with some little difficulty, and got to the other cars there was no air, and they had all been uncoupled by the gang that were there, who probably had bled those cars.

10. Did you make any subsequent test of the brakes?—I tested the brakes on every one of them—the cars and the engine.

11. What condition did you find them in?—In perfect order. I found nothing wrong with any of them. Mr. Scott was present with me when we tested the engine.

12. The result of your tests, then, after the accident, was to show that the brake appliances were effective?—In perfect order throughout. There was nothing wrong with any of them.

13. At what do you estimate the weight of that train No. 6?—I took out the weight exactly. I make the total weight 155 tons, including 37 tons weight of engine.

14. Was that a reasonable load for that engine: that is a load that it could easily handle?—It was much under her load.

15. Then, so far as the load was concerned, there was nothing to have prevented the train being stopped before she fouled the home signal?—No.

16. You have had considerable experience in testing Westinghouse brakes, have you not?—Yes. I think I have been privileged to know more about tests of the Westinghouse brake than anybody else in New Zealand.

17. Supposing that that train was running at twenty-five miles an hour on that morning, under the conditions that have been stated to exist, in what distance do you reckon she could be pulled up in with a service application and 10 lb. reduction?—With a 10 lb. reduction she would pull up in 300 ft., going at twenty miles an hour.

18. Suppose she had been running at twenty-five miles an hour, how then, with a 10 lb. reduction?—About 365 ft.

19. And at fifteen miles an hour?—I did not take that out. It would be somewhere about 200 ft. You will understand that all those distances I have given you are not with emergency applications of the brake—they are just with light applications.

20. Assuming that the speed was from five to eight miles an hour, what distance would she travel after an application of the brake with 10 lb. reduction?—You could pull up with the emergency in 33 ft. at ten miles an hour.

21. Give us a light application—something that would stop her without breaking the couplings, at five to eight miles an hour?—You could pull up in 30 ft. or 40 ft.

22. I want some information now with respect to emergency applications. Give us the distance at twenty-five miles an hour with an emergency application?—262 ft. I am allowing for the grade, 1 in 204.

23. Now twenty miles an hour?—164 ft.

24. Supposing the rails were greasy you would require a longer distance in which to pull up?—It would make a slight difference.

25. What difference do you estimate it would make?—Only a matter of a few feet in each case.

26. Are these estimates that you have given the result of actual tests that have been made?—They are the result of my actual experience and tests, and also from calculation.

27. You have heard the evidence that has been given about the movements that were gone through and the tests applied at Henderson that morning before the train started?—Yes.

28. Do you consider, from the evidence and from your own observations, that the brake was satisfactory when the train left Henderson?—Whether it was in operation throughout?

28. Yes?—It is a matter that I gave a considerable amount of thought to. I finally came to the conclusion that the brake was in operation throughout that train.

30. Then under the conditions that existed that morning, seeing that the distance between the home signal and the foot of that grade is about 13 or 14 chains, there was nothing to have prevented that train from pulling up before?—Absolutely nothing. 300 yards I reckon the distance.

31. The train could have been stopped in about a third of that distance?—Yes.

32. *Mr. Dickson.* To what does that 300 yards relate?—That was the distance from the foot of the grade to the semaphore.