

31. Was there anything in connection with the train that morning that would leave you to suppose that the brake was not efficient?—No, nothing whatever.

32. And with the weight of the train, the class of engine it had was quite capable of handling it efficiently?—Yes, there was ample power.

33. Did you examine the rails at all at the point of the collision?—Yes; the rails seemed all right then and some time after.

34. Were there any marks to indicate skidding?—Well, I saw marks on the rails some distance back which might have been caused through skidding.

35. Could you form any opinion as to whether those marks were likely to have been caused by No. 6 skidding?—It is just possible in making an emergency stop that those marks may have been caused through skidding. I could not say definitely what train caused them.

36. What did you think was the weight of the train?—111 tons 3 cwt. 1 qr.; and, including the engine, it was 148 tons.

37. It has been said that the speed of the train this particular morning was from fifteen to twenty-five miles an hour. Supposing she was running at twenty-five miles an hour, what distance would you expect her to be pulled up in on a grade of 1 in 204?—With an ordinary stop?

38. Yes?—With an ordinary service application of the brake she would have stopped in 370 ft.

39. Supposing she was running at twenty miles an hour?—Then probably in 302 ft.

40. That is with a good rail?—Yes, under normal conditions.

41. Supposing the rail was bad and sand was used, what distance would you expect the train to be stopped in at twenty-five miles an hour?—Probably 380 ft.

42. Now, was the sand appliance on the train all right that morning?—Yes, in working-order.

43. Supposing the train were travelling at twenty-five miles an hour and the emergency brake was used on a bad rail, what distance would you expect the train to pull up in on the same grade and with the same conditions?—Probably 250 ft.—approximately about half the train-length.

44. Supposing he had used sand and the emergency brake, would you expect him to stop in a longer or shorter distance?—He would probably stop in a shorter distance—one or two seconds less.

45. The distance from the home signal to the foot of this 1-in-45 grade is about 13 chains. Under the conditions that are said to have existed that morning, do you consider that the train could have been pulled up before she ran past the home signal?—She could have stopped anywhere easily.

46. There is practically 1,000 ft., and you consider she could have been pulled up in 300 ft.?—Yes, easily.

47. Did you have any conversation with Corich after your return to Auckland?—Yes; I spoke to him after I saw the position, and questioned him as to how the accident had happened. He explained that he had overrun the home signal.

48. And to that he attributed the accident?—Yes.

49. Did he say anything about the bad conditions?—No. I questioned as to the efficiency of the brake, and why he was unable to stop, and he explained that she had picked up, inferring that she had skidded when the brakes were applied.

50. From your knowledge and experience would you expect that train to pick up if running at a reasonable speed?—No.

51. Did you ask Corich anything about testing the brake at Henderson?—Yes; I questioned as to whether the brake had been tested prior to leaving Henderson, and he replied that it had not been. I asked him as to the speed, and he explained it was from twenty to twenty-five miles an hour.

52. *Mr. Veitch.*] You say that an emergency application of the brake should pull the train up in 150 ft. going at twenty miles an hour?—Yes, approximately.

53. You also said that if sand had been applied it would have considerably helped in the efficiency of the brake?—It should help to retard it.

54. What would be the effect of sand helping the brake?—The greater resistance between the wheels and rails causes an amount of friction which the sand would create.

55. What proportion of a train, say, 300 ft. long, would have the sand applied to it?—Very little—only the engine really, if pulled up in 150 ft.

56. The whole train would have to pass before the whole train was benefited by the sand?—Yes.

57. On the application of the brake the brake goes on to all the wheels at the same moment?—Yes.

58. Is it not a fact that if the brakes were on the wheels would skid?—Yes, at low speed.

59. And if the sand is applied after the wheels skidded is it likely that the sand would make the wheels revolve again and prevent them skidding?—I hardly think so.

60. In such a case the sand would be practically of no benefit to the driver provided he applied the sand after the wheels had skidded?—Once the wheels picked up while she skidded over that sand I should judge it would cause greater resistance.

61. How long was it after the accident that you arrived on the scene?—About two hours.

62. Can you state with any certainty whether the angle-cock of the back engine was shut or closed when the collision occurred?—No, I could not.

63. Is it a fact that the slower a train is travelling the more likely the wheels are to skid?—Yes; they would pick up on the point of pulling up.

64. *Mr. Kennedy.*] You say that Mr. Corich was on twenty-one trains on this north road?—Yes.

65. Did all those trains run past Henderson?—As far as Henderson, not past.