

64. And with an expenditure of £5,000 the line could be made perfectly safe for an efficient passenger traffic?—Yes.

65. *Mr. Buchanan.*] Do you mean twenty to twenty-five miles average speed or maximum speed?—Twenty-five miles maximum.

66. Applying that to the Taupo line, what would be the average speed?—Well, I would run through the sharp curves at about ten miles an hour. There is not one-third of the line that has sharp curves.

67. The average speed would, of course, depend upon the number of times you would have to slow down?—I think it is pretty safe to say we could maintain an average speed of fifteen or sixteen miles an hour.

68. With suitable rolling-stock?—Yes.

69. The steepest grade you have on the line is what?—Something like 1 in 40.

70. *Mr. MacDonald.*] The steepest is 1 in 47?—Yes; but I cannot say exactly. With suitable rolling-stock for passenger traffic you would never feel those grades. You want good big engines. You cannot make time up and down without good rolling-stock. One in 47 is nothing for light trains. Two or three carriages would carry all the passengers there.

71. *Mr. Buchanan.*] In other words, you want powerful engines?—Yes; to make the traffic pay you always want that.

72. And that would apply to overcoming the friction in getting round the curves too?—Yes.

73. But would that not necessitate more solid fillings, embankments, and ballasting?—No, it would not affect them. I have seen in the reports that banks have been weathered away somewhat, and they would have to be improved for the purpose of holding the sleepers well.

74. Probably, to some extent, the result of frost upon the porous land?—Yes.

75. Widening the cuttings now that the line is at work would mean a considerably heavier cost than if the cuttings were made the proper width in the first instance, would it not?—No; you could make the excavations much more cheaply now by removing the soil in railway-wagons.

76. You have said that the running speed on the Frisco line is so-and-so?—Yes.

77. Would that be permitted in New Zealand? In other words, life is held at a much higher value in New Zealand than in Frisco, is it not?—Well, I suppose it is. I have seen people have to look out for themselves in the streets there, but I have seen a woman pull up a whole train because she would not hurry herself. That was in Portland. Trains there go through on sufferance. The railway has no more right in the street than a woman, and she made a train slow up for her.

78. You have stated that £5,000 would be sufficient to widen the cuttings that are supposed to be rather too narrow at present?—As a general thing. I might say that I have not made a close estimate of that. I have not been on this line for some years.

79. What about flattening the curves?—I should not like to do much flattening of the curves. In this general principle of railways you do not flatten the curves unless you can see it is going to save working-expenses.

80. *Mr. Wilson.*] Do you not think that a light line such as this is quite sufficient for opening country like that, which is mostly for settlement purposes?—Yes, certainly.

81. And you would advocate a light line where settlement is required?—Yes, certainly.

82. And you consider this line is quite sufficient for all that would be required for traffic there?—Yes, with other rolling-stock.

83. When the timber is cut out you will never have such heavy traffic there, will you?—No.

84. How many million feet of timber a year do you carry?—Between seven and eight million.

85. Have you ever seen the Tarangamutu line?—Only a portion of it.

86. The Taupo line is a much better line, is it not?—Yes.

87. Have you seen the Pukaweka line?—No, I have not.

88. *The Chairman.*] You say an average speed of sixteen miles an hour would be perfectly safe?—Yes.

89. Do you think the public would put up with that in the face of motor-cars?—The only danger of curving is from centrifugal force. You have also to consider the public, because it feels queer going round sharp curves, and you would naturally slow down there.

90. But do you think the average speed would be sufficient to induce the public to go over that line rather than take motor-cars down to Taupo from Rotorua?—I cannot speak about the charms of motor-cars. It would be much cheaper, and, of course, you could carry a large number of passengers at much less expense by rail.

91. You say that £5,000 will remove all the objectionable curves and cuttings?—I do not say it would remove the curves, but it would widen the cuttings. There are one or two curves I would certainly cut out.

92. And you think £5,000 would be adequate?—Yes.

93. Would that cover embankments?—I have not seen the line for years. I understand it has been well maintained, but embankments are always being weathered away and require making up. Perhaps the amount would be a little fine, but very little more would be required, at all events.

94. How much do you consider it would run into? The company estimates it would cost at the utmost £7,500: would that cover it?—Yes. The more money you spend on it the better the line you get; but you do not want to spend more on it than would give an adequate return. If you think the improvements would attract more passengers, then it would pay to make the railway better.

95. If some one said it would cost £450,000 to make it fit for passenger traffic, would you agree with that?—I would say they have a lot more money than I have.

96. You would not agree with that?—No, it would be nonsense, unless you want to make a Philadelphian line of railway, or one of the best railways in England.