47. What is your estimate, roughly, of the cost of the sixteen miles remaining to be constructed to the 93-mile peg?—We have not any detailed estimate.

48. How much a mile, roughly?—I think we estimated it at about £10,000 a mile.

49. Mr. Stewart estimated that the western route would cost £93,000 more than the eastern. That would mean that your estimate for the eastern route is £160,000, and that Mr. Stewart's estimate for the western route would be £253,000, plus any additional cost for that mile and a half of difficult ground?—Yes. I reckon that the eastern route would probably cost £10,000 a mile, and that the western route would cost a little more—not a great deal; not as much as Mr. Stewart said.

50. You are not in accord with Mr. Stewart in his estimate that the western route would cost £93,000 more than the eastern?—No.

51. What is your estimate for the western route, roughly speaking?—We went into the matter a little while ago, and we reckoned, without allowing for slips, that the western route up to that point would cost about £10,000 more than the eastern route.

52. That is £160,000, as against £170,000, for the sixteen miles of railway to the 93-mile

peg?—That was it, approximately.

53. Then your approximate estimate and Mr. Stewart's are very wide apart-Yes.

54. Hon. Mr. Buddo.] You are thoroughly intimate with the rival routes for the North Auckland Railway?—Yes, fairly so.

55. You have been over both routes?—Yes.

- 56. When did you first make a survey?—In 1907.
 57. Had there been any previous survey?—There were exploration surveys carried out by Mr. Knorpp in 1885, I think it was.
- 58. Did he make a detailed survey, or only what is known as a flying survey?—A flying survey.

59. That, I presume, is entirely relying on elevation and depression?—Yes.

60. Have you been over Mr. Knorpp's original route? Did you go over it up, at any rate, as far as parallel with Whangarei?—His route is practically the eastern route.

61. You have been over it?—Yes.

- 62. Have you been over the other route closely, up as far as parallel with Whangarei !-Yes.
- 63. How long ago?—I have been over it off and on during the last two years—nearly three.
- 64. Have you been over it sufficiently to express any opinion as to its value as an investment, entirely apart from colonisation policy?—I have always been under the impression that the eastern route was the better one.

65. From what point of view?—The general serving of the country.

- 66. Assuming that you had instructions from a firm that wished to put a railway through this district, you would naturally feel that you had to consider not only ease of construction but also the financial returns when finished: have you looked at the matter from that point of view in connection with either of these routes?—Yes.
- 67. Apart from your profession, you have some knowledge of country from an agricultural or pastoral point of view?—Yes, to a moderate extent.

68. Which of these two districts do you think it would be more profitable to put a railway through?—I do not think there is much to pick and choose between them.

69. Is it not a fact that the eastern route runs along the base of a low line of hills, which are not of anything like as much value as the land to the westward?—Only for a short distance.

70. How many miles?—I think that 93 miles is beyond the end of the Waipu Range. strike the Waipu Range practically at Pukekaroro.

- 71. Seeing that the distance is so slight between the rival routes to McCarroll's Gap, is it not advisable, in your opinion, to go through the greater centre of population and the better quality of land?—Well, if the water carriage were not in existence I think I should feel inclined to favour the western route.
- 72. You have a good deal of bridging on the western route more than you have on the eastern?—Yes.
- 73. Are there any engineering difficulties in the bridging of the western route?—There is nothing out of the ordinary.

 74. In tunnelling is there likely to be encountered any difficulty more than usual?—No,

nothing more than usual, on either route.

75. With regard to this mile and a half of slipping ground that Mr. Stewart told us about, is that likely, in your opinion, to be seriously detrimental to that route?—Of course, it is detrimental, but I do not regard it as of an exceptionally serious nature. We have had slips of the same description to deal with before, and they have been successfully handled. There is one on the North Island Trunk line, just south of the Poro-o-tarao Tunnel, that gave a lot of trouble for many years, but it is not doing so now.

76. It has been estimated that the 16½ miles of railway would cost £93,000 more than the departmental estimate. Do you think it possible, on a £160,000 estimate for $16\frac{1}{2}$ miles of construction, to make an underestimate of £93,000?—No.

77. The Chairman.] This, I understand, is to be a main trunk line, to serve not only these particular districts, but the far North. When the line is running would there be any extra expense in maintenance on the western route as compared with the eastern !--Barring the short piece of bad country that has been mentioned on the Bickerstaffe Estate, I do not think there would be more than very little difference, if any, in the cost of maintenance of either route.

78. It would cost more for ballast on the west than on the east?—Yes.

79. Mr. Buchanan. Could you give the Committee any idea of the depth to which the earth moves in this slip that has been mentioned?—No, we have not done any prospecting yet.