

69. What sort of a survey was it?—A flying survey. He cut a line and chained it up, and took the bearings and barometer levels. Wherever it was in stiff country he might use an engineer's level.

70. At that time would the objective be Whangarei?—He joined Whangarei, and he went up the centre as well.

71. Do you imagine that his instructions were to lay off a line that would connect with the railway between Whangarei and Kawakawa?—I do not think those were his instructions. I think he had instructions to see whether a line could be put up the country, and he reported on both.

72. You know where Maungatapere Mountain is?—Yes.

73. Did not his survey go close to the side of Maungatapere—I always understood that he went up the Mangakahia.

74. Yes, but his survey went close to the Maungatapere boundary?—Maungatapere is too near Whangarei, is it not?

[Route discussed on map.]

*Witness:* Of course, I never got up anywhere near that, so that I really do not know much about it.

75. Did you know that the railway was authorised from Maungaturoto to the southern part of Maungatapere Parish?—Yes, I heard so.

76. And that authorisation was done by Parliament on Mr. Knorpp's survey?—Yes, probably.

77. Look at the red line on the map: that has been laid off quite recently?—Yes.

78. It does not go within five miles of where the line was originally authorised?—It is not advisable to depart from the red line.

79. From an engineering point of view, probably not; but if the intention originally was, on Mr. Knorpp's survey, to connect the North Auckland Railway with the Whangarei Railway, then it would be advisable to go there, would it not?—Mr. Knorpp broke off at somewhere about Maungakamea, and came off to Whangarei by Waikiekie. Then he also took the line up the Mangakahia Valley, and came out at Lake Omapere.

80. If the eastern route were adopted, the line would not go within five miles, straight across country, of where it was authorised by Parliament to go?—That is so.

81. Regarding the bridge over the Otamatea, supposing you were going to build a cylinder bridge, and you used 6-ft.-diameter cylinders, and assuming that a cylinder stands 35 ft. from the surface of the ground on the water-level, and that you sank 20 ft. in the ground, and made 80 ft. spans, and that the length of the bridge was 800 ft., how much would that bridge cost—£20 a foot, or £18?—Twenty-five pounds. But are you prepared to put in 800 ft. there?

82. That is the distance shown on the plans. The assumption is that the length of the bridge will be 800 ft.?—That is not my assumption. A longer bridge than that is wanted.

83. You were never over the country between Pukekaroro and Brynderwin, were you?—Yes.

84. When were you over the route there?—When I was up there—at the time it was first looked at.

85. What do you think of the country going along that gorge, from a railway-construction point of view?—Through the Mountain Creek?

86. Yes?—That will not be so bad, I think.

87. And before you get to Pukekaroro?—You are in worse country there.

88. Have you ever been along the western route to Bickerstaffe, as far as Maungaturoto?—I have been all along Bickerstaffe, as far as the Wakapirau Road.

89. Not to Maungaturoto?—Not on the route that you are on now.

90. As a matter of fact, the route is altered almost every day: we are prospecting now for the best route?—Yes.

91. When the railway was authorised, no engineer had been over the western route—I mean, taking the scheme as a whole, say from Ross's Hill to Mangakahia Valley?—It is about six or seven years since we were told to look at the western route.

92. No Government engineer ever made a trial survey of the whole route, and reported?—No, I think not. Nobody was ever over the western route.

93. You were never there yourself?—No. Nobody made a flying survey after Mr. Knorpp, that I know of.

94. Supposing that you wanted to make a report to the Minister or the Government as to which was the better route, could you make a fair and impartial report without seeing the country to be gone through?—I could from plans—a report that would suit myself. I do not know that it would suit you.

95. But you have already stated that there were no plans?—That is so.

96. Would it not, then, be a mere guess?—If there were no plans it would be a guess.

97. Up to last April or May there were no plans of the western route?—No.

98. Would it be possible for any one to say which would be the more expensive route or the more useful for the country, without those plans and surveys?—No, certainly not; you could not do such a thing without information.

99. You do not know the country as far as McCarroll's Gap, do you?—I have been along there.

*Mr. Buxton:* I understand that some deviation-work was done before any details were available?

*Hon. Mr. R. McKenzie:* That is not so.

*Mr. Buxton:* I understood from the engineer that there were no working details of either route beyond Maungaturoto?

*Hon. Mr. R. McKenzie:* The position is this: Last session this same Committee inquired into the petitions regarding this matter, and the Committee recommended the Government to have a survey of the western route made as far as McCarroll's Gap before this eastern route—or any