110. Mr. McLean (petitioner).] In regard to those slips, as a contractor, do you consider that you can remove slips at the same rate that you can any other portion of the work?-No.

111. It costs a considerable amount more?—Yes, for the more reason that you have to shovel

every bit of it.

112. And if the slip is of a wet nature it is more difficult?—Yes.

113. Now, it is stated in an earlier paragraph in clause 8 of the specification that "During the execution of the work, and during the period of maintenance, the formation and slopes shall be properly drained so as to prevent any lodgment of water; and should any slips occur, either in cuttings or embankments, from want of proper drainage, or from neglect to keep the drains clear during heavy rains, the contractor shall remedy them and restore the slopes to the specified or a flatter rate of inclination, such inclination being that at which the material will naturally and permanently stand." What do you understand by that?—If you had not these drains cut prior to the slip, I have no doubt, under that clause, responsibility would be put on you.

114. Mr. Lawry.] I suppose the Committee is to understand you that if the contractor has carried out the conditions relative to the preventive measures being taken, he will be indemnified against any loss that may be caused by slips?—Yes, I think so.

115. Mr. Morrison.] There is a further question arising out of that, and that is that not only

the drains are to be kept properly cut, but that they are to be kept clear after being cut. But as

long as the drains were made, and a slip took place through the drains being blocked up, the contractor is responsible?—Yes; I had experience of that on the Midland Railway.

116. I suppose you have examined the method of working Mr. McLean pursued in connection with this tunnel?—There is only one method of working under these circumstances. The great question is the question of timbering. I give him all the credit in the world in the matter of

handling timber.

117. But, speaking as an experienced contractor and a man who understands this work, you are perfectly satisfied that the method pursued by Messrs. McLean in the Makarau Tunnel

was the correct one?—Certainly. Of course, circumstances alter cases generally.

118. Mr. Hales.] Suppose that though there was no mention of increasing the section of brickwork there was another section of tunnel much heavier with an invert shown on the plan, and it said on the instructions in connection with it, "To be used only where directed in soft ground," would you consider that you would have to provide that under the contract, and do it at the schedule rate?—If I was called upon to give a separate schedule I would, of course, give it. I have seen a separate schedule asked for.

119. But suppose there was no separate schedule, was not the contracter bound to do that work at the schedule rate?—If previously provided for. But I would have taken very great care to allow amply for such a thing as that.

120. Mr. Lawry.] With regard to the cuttings, the specification says, "Any alteration in the slopes of cuttings will be ordered in writing. No slips will be paid for under this clause except those that are in the opinion of the Resident Engineer due to steepness of slope, and for which an order has been given beforehand." Suppose the cutting had been taken out to the slope required by the terms of the contract and a slip occurred, according to this specification do you think that the Engineer has power to pay for that with the public money?—I do really think he ought to do so, speaking as a contractor.

121. Now, what would you call a slip that was due to steepness of slope, taking in any country that you know?—Do you mean when completed or in progress?

122. When completed. Suppose you completed your slopes to 1 to 1 and the slip occurred, would you consider that slip due to steepness of slope?—It might be water, it might be a greasy bank, or anything else.

123. Not steepness of slope?—Of course, if it was 2 to 1 it might not have slipped.

124. You did the Newmarket Junction Station contract. You know the cutting at the Auckland

That cutting would be taken out in the ordinary course?—Yes.

125. And one side of the valley slipped back from the cutting about 10 chains, and it filled the cutting and broke the contractor, and broke the Provincial Government, I think?—I was in Auckland when that occurred. You could not expect a man-of-war's-man to know much about tunnelling

126. But what kind of a slope would you have? How far would you have to go back?—Well,

we did not go back as it was, because it was timbered.

127. There is no amount of slope, in fact, that would have prevented that slip?—Well, you would have to make it nearly horizontal; it would have to go into Parnell.

Mr. Crowther: The ground there is all full of springs.

ROBERT McGonagle, Manager of Works, Coromandel Recovery, examined.

- 1. The Chairman.] You know a petition has been lodged by the contractors of the Helensville Northwards Railway, and we are now inquiring how the contract has been carried out?-I am aware of that.
- 2. Mr. M. McLean (petitioner).] You have been for some years connected with tunnel-work? -Yes.
- 3. In what position ?—First as manager of works, and afterwards Inspector of the Public Works Department.
 - 4. What were the tunnels you were connected with?—One was the Kai Iwi Tunnel.
- 5. And what was the nature of the ground there?—Sandy and heavy.
 6. What class of timbering did you require?—Some very heavy timber.
 7. Did the tunnel in question have an invert?—I very much doubt whether there was an invert or not.