

a leading outside expert on the proposals of their own Engineers. Mr. Bogue went over the line that had been selected by the Department, and confirmed the Department's choice.

96. But Mr. Bogue did make an estimate?—I expect he did, but it would be quite an approximate one.

97. The whole of the details of it are in the Appendices to the Journals of the House?—Yes; but you would not think Mr. Bogue would be in so good a position to make an estimate as we ourselves, because he would not know the cost of materials and labour in New Zealand.

98. You make 50 per cent. progress-payments on all the plant brought on to the ground in connection with this contract?—That is the condition in the contract. We are paying rather more than that now.

99. The water-power plant is specially included in the contract, is it not?—No. The contract is to construct the tunnel; the means of doing it are left to the contractors' own devising.

100. The different items of plant must be shown in the progress-payment certificates?—Doubtless the Engineer has them; we have not got them.

101. Does he not send them to the Department?—No.

102. Was the first advance of £20,000 made entirely for the purchase of new plant?—I do not think it could have been, because it was a condition of the agreement that £10,000 was to be paid down on the signing of the agreement. That would hardly be for the purchase of new plant.

103. Have you got the agreement there?—Yes. I see from it that £7,000 was in respect of plant then on the ground, and £13,000 for further plant.

104. You could not tell us what plant has been brought on to the ground since?—No. The Resident Engineer at the works could tell you.

105. *Mr. Nosworthy.*] With regard to the question I asked about Cochrane Bros., and the correspondence that passed between them and the Government with regard to the construction of the tunnel, I should like you to put that on record as a reference?—I find from the records that the High Commissioner cabled as follows: "Cochranes' estimate £400,000 actual cost without profit."

106. *Hon. Mr. Fraser.*] That was for the tunnel?—That was for the contract. Plans and specifications were in London. Cochranes omitted to tender. They said they would tender if we extended the time, but the Government did not extend the time. Apparently, however, they furnished the High Commissioner with an estimate, and he cabled as I have stated.

107. What would they want as profit on that amount?—At least 10 per cent., I should say.

108. *Right Hon. Sir J. G. Ward.*] It is quite clear that that was not a tender?—It was certainly not a tender.

109. Is it within your knowledge that Cochrane Bros. had not been on the ground where the tunnel was to be made?—It is not in my knowledge. We allowed ten months, so that prospective tenderers in both England and Australia could send agents to New Zealand. I am aware that one engineer came from London and went on to the ground and had a look at the work, but I am not aware whether he was advising Cochranes.

110. In all probability Cochranes would have called upon you if they had come?—The gentleman who did come was Mr. Carruthers, and he called upon me because he was an old friend of mine.

111. If Cochrane Bros. had sent a representative, probably he also would have called upon you?—I think it most likely.

112. A mere estimate as against a tender is of practically no use, is it?—I think it is valueless, but Mr. Nosworthy asked for it.

113. *Hon. Mr. Fraser.*] You cited the estimate of £22,000 for the tunnel at Big Hill and the tender for £34,000: has the one any relation to the other?—In the ordinary way they should have very close relationship, but in this case I think there was something wrong with the estimate. I believe that a part of the work included in the tender was omitted when compiling the estimate.

114. I suppose it is within your knowledge that occasionally, even with the Public Works Department, estimates are made that are not borne out by results when the work is completed?—Yes.

115. I suppose that is the case in every undertaking?—Yes, and it is also the case with contract work. The lowest tender is not usually within the estimate; it is usually in excess of the estimate.

116. I am not asking about tenders: I am asking about the estimate made for a work, and the cost of that work after it is finished?—It is usually in excess of the estimate. I can quote a few cases where the work has been finished within the estimate.

117. Therefore the estimate of £22,000 for the tunnel at Big Hill is no indication at all as to what the tunnel might cost?—I think it is.

118. I mean as far as comparing that with the tender is concerned?—As regards the actual tunnel, I think the estimate will be fairly reliable.

119. Did I understand you to say that the experience of the Department has been that tunnel-work done by co-operative labour is cheaper than any contractor would do it for?—The question addressed to me was whether work could be carried out on the co-operative principle as cheaply as by contract.

120. I want to know whether it has been done, not whether it could be done?—I think the answer must be in the affirmative, but it is difficult to prove, inasmuch as there has been no contract work in tunnels in New Zealand for the last twenty years or so. I can tell you exactly what every tunnel we have made has cost per yard, and you can see for yourselves whether this cost is fair or not,