

167. It has averaged less than 9 ft. a week?—About that.

168. Or 6 in. a shift?—Yes.

169. Is there any reason why the work should not have been pushed on more from the Bealey end?—No, I know of no reason.

170. The plant there is sufficient to carry it on?—Yes.

171. Do you think it would have been an advantage to the contractor to have driven the Bealey heading to connect with the Otira one as quickly as possible, so as to get rid of air and water troubles?—Yes.

172. That would have saved a good deal of money, in your opinion?—Yes.

173. Do you know when work was started on the heading at the Bealey end—how long after the contract was let?—I could not tell you from memory, but it was a good long time. It would be about three years ago, I should think. They were a considerable time taking out the approach at the Bealey end.

174. You and I were there together before the Bealey heading was started?—I think we were.

175. That is three years and a half ago, I should think?—Yes.

176. And 27 chains has been driven during three years and a half?—Yes.

177. Regarding the stream over the tunnel at the Punchbowl, you said that the cover over the tunnel was about 50 ft. My recollection is that it is about 130 ft.?—I do not think it is so much as that.

178. The water from the Punchbowl is diverted by Mr. McLean already, for use for driving turbines?—Yes.

179. So that as a matter of fact the bed of the river is dry there?—Yes.

180. Except at flood-time?—The greater part of the water has been taken.

181. Do you think there is any probability of getting more water under the Punchbowl than they are meeting with anywhere else now at the Bealey end?—It is difficult to say.

182. But according to present indications?—I do not think so. We are hoping not.

183. The country over the tunnel is rock, is it not?—Yes.

184. If there was likely to be an increase in the water there, in all probability it would percolate through to the present heading, would it not?—Not necessarily.

185. Two or three chains on each side?—No, I should not think you would meet with the water until you actually arrived at the fault.

186. Provided there is a fault?—Certainly.

187. You said you reckoned to drive three-fourths of the tunnel from the Otira end and about a fourth from the Bealey end. That would be about four miles from the Otira end and a mile and a quarter from the Bealey end?—Yes, approximately.

188. Would it not be just as expensive to run cement and concrete and timber in at the Otira end—uphill—as to take out the material at the Bealey end?—Yes.

189. Would not the quantity of concrete and material taken in at the Otira end equal the quantity of spoil taken out from the heading at the Bealey end, approximately?—No; the quantities are about 5 to 1.

190. That is the total quantity: I am referring to the quantity in the heading?—The quantity in the heading, I think, is approximately the quantity of the concrete that is taken in.

191. The difficulty of running that concrete up at the Otira end would equal the difficulty of running the spoil out from the heading at the Bealey end?—Yes; well, you have to take the distance into consideration.

192. Say the distance is about two miles at the Otira end now, and 27 chains at the Bealey end. Would it not cost more to run that concrete and timber in at the Otira end than to run the spoil out at the Bealey end at present?—Yes.

193. Did you say that it would be possible to carry out this work by co-operative contract?—I do not think it would.

194. Do you find any difficulty in arranging other tunnels by co-operative contract?—No.

195. Except, perhaps, with regard to running out the spoil and running in the material, which would have probably to be done by day-labour?—No, we have no difficulty in carrying out other tunnels by contract.

196. Supposing that in this case you provided the ventilation and ran the material in and out, would there be any difficulty in letting co-operative contracts for the headings, or for widening out, or concreting, as you do in other tunnels?—I think so.

197. Why?—In the other tunnels we let the whole of the tunnel in one contract; the same party do the whole work; but in this case, owing to the magnitude of the work, it is probable that separate co-operative parties would have to be put on to the separate parts of the work. Unless they worked harmoniously you could not carry on.

198. Could you not arrange an agreement with them under which it could be done—take a certain quantity from each place in every shift?—Agreements are not of much use.

199. You said that you preferred not to answer the question why it should cost more to do the work by day-labour than under a contractor. You cannot give your reasons for saying that?—It is a question I would rather not answer.

200. Have you any reasons for saying so?—Yes.

201. What is the rate per lineal yard that Mr. McLean asked for this tunnel finished?—I think it is just a trifle over £60.

202. What is your ordinary cost?—The same-sized tunnels now run about £42.

203. How do you arrive at the opinion that it would cost from 15 per cent. to 25 per cent. more to finish the uncompleted portion than it has cost to do the completed part, knowing as you do that the plant is already provided?—Just on the rate of progress that has been made.