I = 9a.

be the use of carrying on the work. My instructions were to take out those sills or cut them off. It simply depends upon the honesty of a man building them up, Mr. Crowther.

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181. You said just now that it would depend more or less upon the work in stopping that hole?

-Yes.

182. Very well, the work was under your supervision. I have known you a very great many s. We are bound to admit that you are a workman. You having supervision of this work, can you conscientiously say that you could not have had this work done under your guidance with your length of experience and skill. Could not that have been done?—Not equal to the way the contractor was instructed to do it.

183. Is that sill in terms of that plan? Is that in the arch?—The whole would be in the

spring of the arch.

184. You said that there was one stream of water that could not very well be got rid of. How much was that stream below the surface? You said that the surface water was cut off?—One portion was cut off.

185. Which portion of the water was it you said was not cut off?—One of the portions on this

plan [produced].

- $1\overline{8}$ 6. Can you give us a reason why you did not see that portion of the contract was carried out in terms of the plan?—Mr. Vickerman gave instructions several times in reference to cutting off the
- 187. Although you say this was a portion of the contract not being carried out, you still allowed it to go on without being carried out?—The plan had not been completed.

188. Mr. Holland.] In reference to these holes Mr. Crowther has been speaking about, you

say they are about 11 ft. apart. The wall behind is packed, is it not?—Yes.

189. If you filled the holes full of soft cement, and then drive the bricks into it, it might be just as solid?—Just, but the weight was travelling up behind; that would require to be done as you go along

190. There is another danger in building 14 in. there apart. You see, the arch strikes there [indicated] and goes over. Supposing you were going to take that wall [indicated] there, you would put handles there [indicated]. Take Macarthur's building in Queen Street, Auckland: Is not there a great weight there above the ground-level?—When you are excavating a large hole in the ground, you know, the ground travels. It is not like "taking up" in a building here, where it is permanent. You are putting in work here where you require it to be kept in position in an arch. The arch depends upon its true shape; the moment it is out of its shape it becomes weak.

191. This hole would not interfere with the arch coming out of its true shape. The first of the arch will not allow that to bulge there. That is just as strong then as if all this post [indicated] were left in. The 14 in. of brickwork through the surface to the arch, do you think it would weaken

that arch?—It would split it all to pieces.

192. You had 11 ft. of work between each of those holes?—Yes; but sometimes we had 5 ft.

193. Do you think that wall would be very much weakened by those holes?—Experience has shown me that it does weaken it.

194. Some of them were left in ?—But they were correct.

195. No matter how solid the work the extra pressure will crack?—You know when an arch is put out of position it becomes a weak structure.

196. Did these slips occur after their contract had expired?—Most of them occurred about the

end of the contract time.

197. If they had handed that over the Government would have been liable for these slips?

While they had the contract in hand they were liable?—Yes.

198. The Chairman.] Did you consider it safe to cut that miner sill, and to leave it there while the brickwork was to be finished overhead? Was it safe for the men?—It has proved perfectly safe for 21 chains 25 links, because there has never been a slip.

199. Is it perfectly safe to cut the ends off?—Yes.

200. If a crush comes on it, would it be sufficient during the time the brickwork is going up?  $-\mathbf{Y}\mathbf{e}\mathbf{s}$ 

201. What length of time does it take to finish this arch?—From seven hours and a half to eight hours and sometimes more. It simply depends whether the bars are clear so that you can allow the brickwork to go into its proper thickness.

202. Will you tell me that to leave it six hours endangers the structure?—As you come up you

must take out those struts.

203. The fact that this sill is not firm after six hours, is it then taken out and the place filled up?—Say this sill [indicated] was left in, a bricklayer starts here [indicated] to construct that arch. In perhaps an hour from the time they start that strut is taken out on the other side. Perhaps in the next half-hour this one is taken out, and this one [indicated] is taken out.

204. Have you measured up the quantities of all these laths yourself?—No, Sir.

205. Did any one measure them up?—Not that I am aware of, because Mr. Vickerman has

charge of that.

206. If you had this work and a lot of men attached, to either lose or gain, would you make up your mind to allow a man to superintend that work, though he had never had any previous experience in that work before?—If he was a mechanic, and built work of that description, although never in a tunnel, I would employ him as a straightforward man.

207. This is a very strong point with the Committee all round, this supervision of the man that was in charge, and giving directions to see that this was to be done?—I considered that I was

competent.

208. You said, further, that there was nobody there to take charge of the men that knew anything about it when they under-built the wall?—I did.