

182. *Dr. Fitchett.*] Were the Johannesburg proceedings before the proceedings in England?—No; after.

183. *Mr. J. Allen.*] After the amendment of the patent in England?—Yes. Our point is this: Our patent claims a solution containing cyanide or any compound of cyanide; and the strength of these solutions, as claimed by our amended patent, is of the equivalent of cyanide of potassium—2 per cent. and downwards. We want nothing above 2 per cent., but everything below it. We have worked it since 1889, and our only object is to treat the ores with as low a solution as we could, and that has been our only limit. We have always found that the cyanide will extract the gold from the ore. Directly we get below one-tenth of 1 per cent. we find we leave some in the tank. Different ores require different strengths of solutions. The object always is to treat them with the very lowest possible strength. I have carried out experiments at Waihi to test whether the zinc would extract bullion from the solution at a lower strength than it has been used in New Zealand, and I have taken stamps there which have contained only the slightest trace below 0.01, and that not from stamps which have just been made, but stamps used in the works, and from solutions coming to hand in the ordinary working of the tailings. And the test was made with 14 or 15 tons, which was separated from the rest for the purpose of the trial. Before it went into the zinc-box the solution would contain between 4 dwt. and 5 dwt. of bullion to the ton, and when it came out at the tail of the zinc-box the assay showed no trace, which shows that 99 and a decimal of the bullion was extracted—very much lower than ever before in New Zealand; and this shows that zinc is an excellent precipitate, and if the zinc is properly used, and used by people who understand it, that it can be used for any solution that will economically extract the gold. That has been my experience for the last five or six years.

184. *Hon. Mr. Cadman.*] Can you tell us from your own knowledge what is the strength of the solution of cyanide used by the four companies now exempt?—They vary very much. The Waihi use from 0.25 to 0.3; the Crown, from 0.2 to 0.4; the Waitekauri, I do not know. Directly they use lower than that they find their extraction of gold and silver falls.

185. *Mr. J. Allen* (to *Mr. Greenway*).] Do you contend, *Mr. Greenway*, that the lowest practical solution of cyanide is 0.01?—I did not say so. I said that those are the lowest solutions that have been found necessary in New Zealand.

186. You go further, and say that if you had to use 0.001 your zinc would precipitate satisfactorily. And you differ from *Mr. Dencker* on that point?—Yes. I have made personal investigations.

187. *The Chairman.*] You heard *Mr. Dencker* say that he did not think it would?—Yes.

188. *Mr. Dencker* says that 0.005 would not be satisfactory. Do you contest that?—I have not made a trial. I can only talk with absolute authority on what I have done. My opinion is that the zinc would take it.

*Dr. Fitchett:* The proceedings against the infringement of the Cassel Company's patent were taken at Home. These proceedings failed, but the Court of Appeal allowed an application for the amendment of the patent. That application was contested by the same counsel as contested the proceedings in the Courts, and after this judgment was delivered in favour of the Cassel Company, and the effect was to make it a good patent in England. On the facts before the Court of Appeal in England the patent was sustained as a good patent. The appeal was dismissed, but leave was given to amend the patent. The amendment was granted, and the effect of that was to make it a good patent.

189. *The Chairman* (to *Dr. Fitchett*).] The final English decision would almost certainly be applied here unless new facts were discovered?—Yes; they got all the facts they could up to date, and spent money like water.

190. *Mr. J. Allen* (to *Dr. Fitchett*).] Have any new facts come out since?—Not that I am aware of.

191. *Dr. Findlay* (to *Dr. Fitchett*).] It is true the Court of Appeal assails the action, but on a technical ground?—Yes, purely technical.

*Dr. Fitchett:* The Court of Appeal upheld novelty, invention, and utility, but on a technical defect it required to be amended. That was amended, and the patent stands invulnerable. Any facts since that date would not upset the patent, would not affect the validity of the patent. You would require to show some prior use to 1888. *Mr. Justice Edwards* relied on the English Court of Appeal to guide him in the judgment he made.