

would have asked 3 per cent. Then we would have certainly got into a lawsuit with the MacArthur-Forrest people, and it would never have paid us at 3 per cent. to fight a big lawsuit. We have mines ourselves, and we have an interest to preserve our rights for ourselves.

84. So, if you had got the Government to litigate at their expense it would have served you very well?—Yes.

85. You want to get the Cassel Company's patent upset?—Yes, if the Government makes it valid it will exclude all other patents.

86. That all depends, does it not, on the validity of the patent?—Yes.

87. At best your method is one of precipitating gold?—Yes.

88. Do you know anything of a book published by Mr. Park, of Auckland?—Yes.

89. That book says your patent is a rival of the MacArthur-Forrest patent zinc patent?—No, it is quite another thing, though to a certain degree it is a rival.

90. You do not agree that yours is a rival of the MacArthur-Forrest zinc patent?—The difference is this: one is a zinc process and the other is an electrolysis. We are superior to the MacArthur patent because we can make use of a much more dilute solution and work more economically.

91. So long as the Company are entitled to use any solution there is a difficulty?—Yes.

92. Do you know what the cost of your process is per ton?—It depends on the country.

93. Do you know Mr. Izaller's book?—No. In South Africa ore treated by cyanide by the Siemens-Halske process used $\frac{1}{4}$ lb. of cyanide of potassium to treat the ton. The Cassel Company used 1 lb. or 2 lb.

94. Do you know that in New Zealand the most successful results have been obtained with 0.01 of KCN, extracting all the gold with a solution of one-hundredth part of 1 per cent?—You cannot do it.

95. Do you know whether a solution of 0.01 per cent. has not performed the best results in the Upper Thames?—No. You cannot get the gold out of it by zinc.

96. Do you know that by an assay afterwards no trace of gold was found?—Perhaps there was nothing in it before. I have made experiments, and the Chamber of Mines at Johannesburg has made experiments, and it has been found to be impossible to precipitate properly and economically out of cyanide by means of zinc under 0.1 per cent. At the Waihi and Woodstock the strength of solution used is very much above that.

97. Do you know the average cost per ton is 2s. per ton?—It depends absolutely on local circumstances. The question is, how much cyanide of potassium is used to the ton of ore to be treated. If I spend much money in charging and discharging my tanks, that has nothing to do with the cyanide at all.

98. What is your cost in New Zealand?—We have never worked it in New Zealand.

99. What is the cost of the two processes?—A difference of 6d. to 1s. per ton.

100. Can you say why the Waihi and others have not asked your permission to use your patent?—We have not tried in time to bring our process to them.

101. Would you have let them have it?—Perhaps. The Waihi have bought the rights of the Cassel Company, and they knew they could not get our patent for nothing.

102. Your process is described in Mr. Park's book?—Certainly.

103. The whole thing turns upon whether the Cassel Company's cyanide patent is valid. You have said it is not; the Court of Appeal says it is?—I am convinced that the claim of the Cassel Company about their dilute solution can never stand if properly assailed, and the full evidence proving this can be got from the Chamber of Mines, Johannesburg, which has worked for months and months preparing evidence against it by very renowned chemists. It cannot stand, and will be upset if properly assailed. Therefore we are quite right if we try to oppose the Bill. We should not pay royalty at all. If the Government pass the Bill we must pay it, and then our hands are tied.

104. You do not ask the Government to continue litigation?—The Government can do as it likes. That has nothing to do with it. We will defend our rights as soon as we come into collision. We wish to be left alone, and not forced to pay royalty.

105. *Mr. J. Allen.*] Dr. Findlay asked you whether your process was an improvement on the Cassel process as regards the precipitation, and I think you said yes?—It is an improvement, and quite a different thing. It works better, and therefore it is an improvement. It is quite another idea. The Cassel Company precipitate by zinc, and we do it by means of an electrical current.

106. Do you not contend that your process is an entirely different one from the Cassel's, so far as the solution of the gold is concerned? You say the dilute solution is an undefined one, and the patent right does not define what the dilute solution is. Your dilute solution is a different one to the one used by the Cassel Company?—Yes. Ours is a weaker one.

107. And you go further, and say that the Cassel Company could not use your weak solution?—No.

108. Your patent is a more dilute solution than the Cassel Company's?—Yes.

109. And the utilisation of a different method of precipitation?—Yes.

110. You claim that your dilute solution is 0.005 of cyanide. You can use as weak a solution as that?—We can. The electrical current takes out everything.

111. Is your average solution 0.01?—Yes. Anything from 0.01 to 0.005.

112. You say the only solution the Cassel Company can use and precipitate by the zinc is 0.4 to 0.1 solution?—Yes, but I do not believe they can use 0.1 at all. It is a strong solution everywhere above 0.1.

113. Pielsticker did not contest when the amendment was given?—Pielsticker did not contest the dilute-solution patent, because he had no reason to do so.

114. And you say that the question of the weak solution has been tested in Africa?—Yes, and very fully tested.