71. Francis Drake?—Yes; and also a large quantity of tailings.
73. Barewood?—Yes.
74. Preservation Inlet?—Yes.
75. Cromwell?—Yes. Big tailings there.
76. Rough Ridge?—Old Man Range, &c.
77. Could any of these be treated?—Yes; and there are lodes there which the process might encourage.
78. You think there is a field in the South Island?—No doubt of it.
79. It has been suggested that if a company is working a poor ore, and has the prospect of being able to treat the tailings with cyanide with a cheap royalty, it would be induced to treat these low-grade ores?—Yes; it would be a great accessory to every other process.
81. There is a process called the "Permanganate process"?—Yes; it is a French invention.
82. Do you know anything about it?—Yes.
83. Can you tell me if that process is likely to conflict with the cyanide process?—No; they occupy different fields altogether. With the permanganate roasting is always necessary, but in the case of the cyanide there is no such thing necessary.
84. Would that roasting keep the permanganate out of the field?—No.
85. Will the cyanide extract as much gold from the same ore treated with permanganate?—I could not answer that. Different kinds of ore give different results.
86. The chief objection you see is the cost of fuel in roasting?—Yes; there is the cost of roasting to be considered always. If the cyanide is suitable they would never dream of using the permanganate, and there would be no competition between them. The two of them together would be a very good thing for the goldfields of the colony.
87. Have you heard of the process called "Siemens-Halske"?—Yes.
88. Do you know if it has been used in the colony?—No; it may have been used.
89. It was registered here?—Yes, subsequently to the cyanide. They use cyanide.
90. What is the difference?—There is no difference in the solvent. The solvent is the same in the two cases. The essential fact is the solvent cyanide is common to both.
91. Assuming that the cyanide patent is valid, the Siemens-Halske must withdraw the cyanide?—Yes. The only additional factor is that they precipitate by a different method, that is by electricity. The only difference is the electricity.
92. Assuming the cyanide patent stands, that is the only part they can use?—Yes.
93. It has not been used commercially in the colony?—I do not think so.
94. *Hon. A. J. Cadman.*] I will ask a question or two which may appear hostile to my own Bill, but I want the Committee to see both sides of the question. You named certain districts in the North Island which you said this process would suit, and then later on I understood you to say that 2 dwt. or 3 dwt. extracted would pay?—That is, the tailings. The tailings being already ground and ready for the process right away would have no further expense upon them. For unmined ore of that value it would never do. It would not at all pay.
95. You are aware that, in the North, silver largely predominates in the ore. When you say 2 dwt. or 3 dwt. do you mean 2 dwt. or 3 dwt. of bullion?—No. Of pure gold value. Ten or twelve shillings' worth of bullion.
96. You mentioned certain districts in the North which you gave as samples of where the process could be applied. What proportion of the goldfields have you named?—I have not named very many yet. The best of the eastern side, from Cape Colville down to Te Puke, is all suitable for this process; over an area of 120 miles in length by 10 or 12 miles in breadth, down to Te Puke.
97. Are you satisfied that the mines there can treat this process?—The Coromandel and Thames mines are utterly unsuited for it. There might have been some previous treatment by which it would have been rendered suitable, but I am not aware of it.
98. You mentioned the Waiorongomai district. Do you know of any claim which could use the process?—No. I do not know about the tailings there, whether by a previous roasting of the tailings they destroyed some of the objectionable stuff.
99. *Mr. Lang.*] In that case the permanganate process would be as well?—Yes. The copper of the Waiorongomai would be an objection to the cyanide process.
100. *Mr. J. Allen.*] I think you said that there were ores varying in value from 5s. a ton to £1 a ton that could be treated by cyanide?—No; I did not say that. I was asked what was the value of the ores in that country; what was the average value. I would not give the average value, but said that there are reefs there containing from 5s. to pounds value per ton, and that I did not think anything under 30s. would pay to work by any process.
101. Dr. Black: the Bill makes provision that, "On and from the expiration of one month after the passing of this Act it shall not be lawful for any person to directly or indirectly use or employ, for the purpose of extracting gold or silver from ore or other compounds,—(1) The said patent rights or any of them, or (2) In the absence of the said patent rights, or in so far as they or any of them may cease to exist or may not extend, any process wherein cyanide of potassium, or any compound of cyanogen in any form, combination, or strength whatsoever, is employed as a solvent, unless he is the holder of the license under this Act." Is not that going beyond the patent rights of the Company? Is it not possible that some combination of cyanogen could yet be discovered which would not infringe this patent, but would infringe the above clause, and be useful as a gold-extraction process?—There may be a combination of cyanogen capable of dissolving gold. It may well be. Such as the chloride or bromide of cyanogen.
102. *Mr. J. Allen* (to Mr. Greenway).] You appear with Dr. Findlay, and with your witness, Dr. Black, on behalf of this Bill?—Yes. On behalf of the agreement.
103. You told us that there were several companies using the cyanide now who pay no royalty?—Yes.
104. Why is that?—Because we have had our hands full with our litigation with the Govern-