plaintiffs solved this problem appears to us upon the undisputed facts of the case established, for it is proved that by their application of a very dilute solution containing an extremely small quantity of cyanide of potassium to the tailings of South African ore they have profitably extracted gold therefrom in a commercially pure state, even though the ore contains only such extremely small quantities as 2 dwt. to 3 dwt. of gold in a ton weight of ore. Professor Austen, of the Mint, stated that in the year 1893 some 500,000 oz. of gold were produced by the cyanide process, and came to this country, a large proportion of which, but for the plaintiffs' process, would have been wasted and unproduced, and this represents a very large sum in pounds sterling. Evidence was unhesitatingly given by, amongst others, Professor Dewar, Professor Austen, and Professor Crookes that a dilute solution of cyanide of potassium has been found to have the properties which the plaintiffs claimed for it—that is, of having "a selective action so as to dissolve the gold in preference to the baser metals, and that this was not known before." The evidence upon the other side as to this was feeble in the extreme. No evidence was given as to how it was that the plaintiffs brought about the results which they unquestionably did if they did not bring them about in the manner they claimed. A suggestion was made at the Bar that South African tailings were such that the gold therein could be easily extracted therefrom without the cyanide having the properties claimed for it, and it does appear in the evidence that some ores are more refractory than others. Mr. Horland, on behalf of the defendants, however, stated that in the experiments which he had made he found that the base metals—the iron, the copper, and other metals, as the case might be—went into solution along with the gold, and that he had always found in his experiments that in "a short time or a long time, with a strong solution or with a weak solution, he got out both the base metal and the gold together." We would point out that, though this was the result of Mr. Horland's experiments, it still remains to be answered how did the plaintiffs bring about these results, which they undoubtedly have. To this we can find no answer in the defendants' case. The defendants sought to explain this paucity of evidence which they brought on their part, as to the selective action of small quantities of cyanide of potassium, by asserting that they had been misled into the idea that Sir R. Webster had abandoned his claim to the selective action, and they pointed to an answer he gave to my brother Romer towards the end of his reply. But when the whole course of the trial is looked at we have no manner of doubt that Sir R. Webster never gave up the point at all, and he has fully explained how it was that he came to give the answer he did, and that it had no reference whatever to his abandonment of this claim. We must add that, even assuming defendants thought, when he gave the answer which he did, that he had abandoned his claim to the selective action, that would not account for the meagre evidence which they gave upon this point, for Sir Richard Webster's answer was not given until the whole of the evidence had been closed, and, indeed, not until he had come to almost his last words in his reply upon a six-days' trial. The selective action claimed by the plaintiffs for the application of a very dilute solution containing an extremely small quantity of cyanide of potassium to ore containing gold has, in our judgment, been proved. But, it is said, even if so, yet there was no novelty in what the plaintiffs have claimed, by reason of the information which had been set forth in prior publications. To establish that this was so, a series of published documents was put in evidence by the defendants, commencing with a specification of Elkington in 1840, and ending with the specification of James Hanny in 1887. They were in all twenty-four in number, and amongst them were contained five specifications—viz., Elkington in 1840, Rae in 1867, Sanders in 1881, Simpson in 1885, and Hanny in July, 1887. It is not suggested that under any one of these specifications gold has, in fact, been commercially extracted from its ore. But it is said that these specifications (apart from the question of anticipation which we will deal with hereafter), together with the other documents put in by the defendants, show such a state of general chemical knowledge of the fact that cyanide of potassium would dissolve and thus extract gold from its ore as it is found in nature that no novelty exists in the plaintiffs' invention. We do not propose to go through this list of publications, for it is sufficient to take those which the defendants' witnesses point to as being the best for elucidating that for which they were put in—viz., Faraday's paper in 1857, Rae's specification in 1860, Dixon's paper in 1878, and Simpson's specification in 1885. As regards Faraday's paper, it deals only with gold in its pure state in the form of a very thin leaf or film; it in no way deals with gold as found in nature in ore combined with the other baser metals which are its associates. Faraday knew what many since, if not before, have known—that cyanide of potassium was to some degree a solvent of gold; but he in a way foreshadows its applicability or utility to the extracting of gold from the other baser metals as it exists in the earth. As regards Rae's American patent, which was for treating auriferous and argentiferous ores, he declares that his invention consists in treating these ores with a current of electricity for the purpose of separating the precious metals from the gangue. It is true that he uses chemical preparations—such, for instance, as cyanide of potassium—in connection with the electric current, in such a manner that, by the combined action of the electricity and of the chemicals, the gold contained in the ore is first reduced to a state of solution. He describes how he pours his chemicals upon the rock—*i.e.*, the ore—and then applies his electric current. It appears to us, as far as this specification is concerned, that Rae might just as well have used *aqua regia*, or any other known solvent of gold, in connection with his current of electricity, and brought about his desired result, which, however, as a fact, he never attained. Professor Crookes, under cross-examination, stated the reason why he thought Rae added his electricity was because he had got an imperfect solvent action, and he consequently added electricity. Sir Edward Clarke argued that the first process, as regards the solvent, sufficed without the electricity; but where is the evidence of this? On the contrary, in our judgment, it is established in this case that, unless the solvent—*i.e.*, the cyanide of potassium—is used in the extremely small quantities in solution, as discovered by the plaintiff (and in Rae's patent it is unlimited), it is simply useless, for, as Professor Crookes and others pointed out, a strong solution attacks the baser metals without attacking the gold, whereas a weak solution is feeble and