others in treating tailings in South Africa was established new details were from time to time introduced and patented. It is not the intention of the writer to enter into a detailed description and history of each, but rather to point the salient features in the development of the process.

Mr. Von Gernet stated that electrical precipitation of gold extracted from ores by cyanide was in use in Europe and Asia before the year 1888. Dr. Siemens found while electro-plating in Berlin that gold anodes lost weight while standing in a cyanide solution, without any electric current passing. This induced him to try the precipitation by the electrolytic method, and in 1888 he commenced operations on a large scale which were successful. In May, 1894, a plant treating 3,000 tons of tailings per month (at the Worcester mine, South Africa,) was completely successful while using this method. Many more have now adopted the same method, which has become a formidable rival to the zinc process. I might also add that since the introduction of lead peroxide as anodes many former objections have been done away with.

Another very important improvement has been introduced by Messrs. Sulman and Teed, who in 1894 patented their process (No. 18592 Eng.) This consists of introducing a small quantity of bromide of cyanogen (or any haloid cyanide) into the potassium cyanide solution. This has been done to give a greater activity to the solvent, thereby saving time and hence loss of cyanogen by decomposition. They have succeeded in introducing their treatment in at least two places. I might here state, in regard to the history of the process in Canada, that we have a plant at Deloro, Ont., where mispickel ore is now being treated successfully by the Sulman and Teed method. This ore could not be worked successfully by amalgamation or chlorination.

The Regina Mine in Western Ontario has been using the cyanide process for treatment of tailings, but I have not been able to get any definite information as to its success. I believe it is meeting with success, however, as it has been in use for some time and no complaints are heard.

The recent introduction of zinc fume as a precipitant is also worthy of notice. This is a decidedly cheaper and an easier way of treating the solution. Many improvements might be also given in regard to the treatment of the precipitates, but some of them will be spoken of later on.