

CYANIDATION IN THE TRANSVAAL

(July 20, 1907)

The Editor :

Sir—I must take exception to your Johannesburg correspondent's remarks in your issue of June 8. Possibly he does not understand the matter he criticizes, otherwise it is altogether difficult to understand why he should so strongly depreciate the work of the Denny brothers because the local people are apparently unable to estimate accurately the assay-value of their ore.

That the "new metallurgy" consisted merely of a method of assaying is news to me. What the Messrs. Denny announced was that :

(a) The old method of treating coarse sand by a long percolation was wrong in theory and in practice and that in spite of opposition the mines would abandon it in favor of fine grinding, for which purpose they introduced tube-mills.

(b) By the use of tube-mills they expected to obtain not only a higher extraction from the resulting finer grinding, but also a higher output.

(c) A continuous method of slime treatment by having solution occur during the flow or travel of the pulp instead of in special agitators after collection and settlement was cheaper, both in first cost of plant and in working, than the prevalent decantation method.

In order further to increase their extraction they employed filter-presses instead of decantation.

All their points the Messrs. Denny appear to have proved to the hilt. Indeed, the use of tube-mills, starting from the one imported by the Dennys, has now spread all over the Rand; and I note no fault whatever is found with the extraction obtained by the "new metallurgy," and that in the same speech Mr. Albu apparently states his satisfaction with the work of the filter-presses. His one cause of dissatisfaction seems to be his difficulty in obtaining reliable preliminary assays, but this surely should not be insuperable, and is an entirely subordinate matter to the obtaining of the highest proportion of gold at the minimum cost