

MR. F. CIRKEL—I certainly never heard of the German government making any such proposition. If it had I should have heard or read of it in the German papers.

THE CHAIRMAN—The motion was passed, as Mr. Bell says, entirely under misapprehension. Is it the sense of the meeting that it be rescinded?

The motion was then put and carried unanimously.

ORE SAMPLING.

By J. T. DONALD, M.A., Montreal.

Worcester defines a sample as "that which is taken out of a large quantity as a fair representation of the whole."

Webster says a sample is "a part of anything presented for inspection as evidence of the quality of the whole."

Ore sampling may therefore be defined as any process which will enable us to obtain from a large quantity a fair representation of the whole. To fairly sample a pile of ore is indeed no simple matter, although there are many engaged in mining who think that all that is necessary is to pick up one or more pieces from the pile at random, and call this a sample.

For instance, some time ago a gentleman brought me a lump of phosphate weighing about half a pound as a sample of a pile of about 200 tons. He said he considered it a fair sample, although the pile contained some better and some worse, and requested that it be analyzed. A few months later the ore was sold, and the purchaser had the pile properly sampled; the results of analyses in the two cases, it is needless to say, showed a marked difference.

On another occasion, a company engaged in mining a certain ore determined to send samples to Canadian and English chemists. The party who was detailed to draw the samples went to the pile, selected a few lumps of ore and laid them aside as one sample; he then collected another few lumps of similar size and considered the latter as a duplicate of the first. In due time the certificates of analyses of these samples, by English and Canadian chemists, were laid side by side, and as might be