

*By the Chairman :*

Q. A cheap method?—A. An economic one.

*By the Hon. Mr. Domville :*

Q. Outside of that for the working of this corundum as an abrasive?—A. Yes.

Q. From that they turned their attention to how to reduce it?—A. Under the contract their attention was required to be directed to the discovery of a process continuously, but I have not heard any recent account of their doings on that line. I think, however, that they have not yet discovered a process, that there is something in the ore that makes it difficult to treat, possibly the presence of silica or iron, although as a matter of fact their chief attention is given to the production of abrasives; they claim to be able to produce corundum a little better than 98 per cent fine.

*By the Hon. Mr. Sullivan :*

Q. How is that process of reduction accomplished? Is it electrical?—A. No, mechanical. It is simply breaking up the rock and crushing it fine, and then separating it by screening and washing.

Q. It is a very difficult ore to get the metal from?—A. Yes. They have not succeeded yet.

Q. Is it the same ore that is used by the aluminium companies?—A. No, they use an ore that is very much lower in aluminium.

Q. But easier to treat?—A. Yes. At one time cryolite was used extensively. The deposit exists on the west shore of Greenland, but it is difficult to get at, and the cost of bringing it to the works is large. Bauxite is now the chief ore used in its production. This is found in France, in Austria, in the North of Ireland, and in some of the southern States of the United States. It is much lower in aluminium than corundum, and easy to reduce.

*By the Chairman :*

Q. In your research for the quantities in those places, you do not imagine that you have discovered all that may be there?—A. By no means.

Q. There may be other fields?—A. Yes, and even that field is not properly explored. There are large areas of it covered by drift, and there may be immense quantities underlying that.

*By the Hon. Mr. Sullivan :*

Q. You have found no bauxite—A. No.

Q. Is it likely, from the formation, that it may be discovered?—A. It may be. We are every year, almost every month, making new and important discoveries of minerals in the country. Kaolin, that is China clay, is also used, and it is very suitable for treatment.

Q. There would be a lot of silica in that?—A. Yes, but it can be washed out. All the ores have to be treated.

Q. Do you know anywhere where this corundum is treated profitably in any country?—A. As an abrasive?

Q. No, as a means for the production of aluminium?—A. Not yet.

Q. There is an insuperable difficulty so far?—A. I do not say that. The process has not been discovered yet. But the world is young.

*By the Hon. Mr. Domville :*

Q. As I understand you now, while the various ores exist they have not found a method to utilize them which would be superior to using bauxite; that is to say, having learned how to treat bauxite they have stuck to it and not so far tested any other rocks to see whether they could be utilized for the production of aluminium?—A. They have used cryolite and kaolin.