I would expect that at the next session detailed information would be given with respect to the production of magnesium metal in Canada. Recently and for some time past a famous engineer in Hamilton has produced a method of extracting magnesium metal from dolomite. In the area from Niagara falls to lake Huron there are billions of tons of dolomite or limestone ore from which the metal comes. What is the department doing to bring about the production of magnesium metal in Canada?

Hon. T. A. CRERAR (Minister of Mines and Resources): The possibilities of these metals are constantly under study by the mines bureau of the department. I am not able at the moment to say just what progress has been made in the process to which my hon, friend alludes, but the question is under continuous consideration. I am just informed that the Aluminum Company of Canada is building a plant up the Gatineau river for the production of magnesium and that tests are being carried on in the laboratory of the mines branch in respect to several deposits to ascertain their quality and possibilities. This is being done at the request of private interests.

Mr. MacNICOL: Has the department been cooperating with the inventors in Hamilton who are now producing the metal?

Mr. CRERAR: We have been cooperating with them.

Item agreed to.

181. Mines and geology branch. Drafting and map reproduction, \$122,865.

Mr. HAZEN: What is the explanation of the increase of \$10,462 in this item?

Mr. BLACKMORE: I should like to ask the minister something about the iron resources of Canada, and perhaps it may not be considered out of order on this item. Have we plenty of iron in Canada to meet our requirements if all deposits were fully developed? I have heard that there are great deposits in Canada which have not been developed for one reason or another, probably because they would cost too much.

Mr. CRERAR: There is quite a considerable body of low grade ore now being developed and worked in the Michipicoten area of western Ontario, and in the last few years there was an important discovery of high grade hematite ore 130 or 140 miles west of Port Arthur. While the exploratory work to delimit the extent of this ore body has not been completed, it has gone far enough to indicate that there is a substantial

tonnage of this quality ore. This ore is similar in quality to the ore obtained in the famous Mesaba range near Duluth. There are deposits of low grade ore in British Columbia and also some higher grade on Belcher island in Hudson bay, but until recently practically all our iron ore was secured from the United States or Newfoundland. The ore from Newfoundland is used at Sydney and other points in Nova Scotia.

Mr. BLACKMORE: Not very long ago I read in a miner's paper that there was a great range of iron ore in Labrador.

Mr. CRERAR: The surface indications are that there may be deposits of iron ore in Labrador, but they are three hundred miles from any transportation system. At the moment these deposits certainly are not an economic possibility for development, whatever they may be in the future.

Mr. BLACKMORE: Are we in position to develop our own iron ore deposits to the point where we would have a chance of matching Hitler?

Mr. MacNICOL: One of the mines the minister refers to is the Steep Rock mine, a specimen of the ore from which I hold in my hand. It is equal to that produced on the Mesaba range on the United States side of the line. The other mine referred to is the new Helen mountain mine in Algoma where a low grade ore is produced. They are now taking out about 4,000 tons a day, from which after sintering and purification they are able to produce about 2,000 tons of pig iron a day. This reflects great credit upon those who have helped to expedite the production of iron ore in Algoma.

Mr. BLACKMORE: Will the minister say that there is plenty of iron ore in Canada, that it is just a matter of development?

Mr. CRERAR: I should like very much to give my hon. friend the assurance he desires, but I can add nothing to what I stated a moment ago. Production of iron is a problem which depends not only upon the presence of iron ore but upon the means of converting the ore into iron. That is why these developments are usually found where coal and other minerals are in close proximity. There is probably a very large quantity of high grade ore 130 or 140 miles from Port Arthur, but there is no smelting coal within a thousand miles and consequently a problem is created in the development of this resource. To a lesser degree, the same thing can be said about the ore being taken out of the Algoma district.