

Mr. STEWART (Edmonton): We are very much interested in low temperature carbonization and have been watching closely for developments in this regard. We have also been doing work ourselves. This work presents one of the widest fields for the treatment of coal. In my opinion, research work in low carbonization, and the treatment of iron ores, are two problems of paramount importance at the present time.

Mr. LUCAS: On that point I would ask the minister if he has investigated the process used in Great Britain, which I think is known as the Illingsworth process, for the low carbonization of coal?

Mr. STEWART (Edmonton): Yes, we are keeping very closely in touch with every development in England in this connection, as well as those in Germany and Belgium.

Mr. BIRD: I wish to make a few remarks, but not of a critical kind, because I realize that the department has been doing good work under somewhat restricted circumstances. I would refer particularly to northern Manitoba, where nature has been very lavish but at the same time very perverse in the intricate manner in which the elements have been mixed together. The question of copper mining in northern Manitoba is a standing challenge to the scientific minds of Canada, and I am curious to know just how far the department has been addressing itself to these problems which loom very large to us in that part of Canada. I think it will not be denied that there we have some of the finest copper deposits on this continent, but these are awaiting the discoveries of our scientists. I understand that with regard to the well-known Flin-Flon property, an American firm has been experimenting there for some two or three years; I think it somewhat of a humiliation to us as Canadians that the solution of these immensely important problems should be left to the enterprise of scientists outside our borders, but so it has been in this regard. I do not know just what progress they are making along these lines, but I wonder if the department knows; I wonder if there is any coöperation and if our Department of Mines has been keeping track of the work undertaken by this private enterprise. If that has not been the case, perhaps a little criticism might be expected. It seems to me that a process which is fraught with such tremendous importance to the northern part of Manitoba and to Canada as a whole should be followed carefully by this department. Personally I am not much concerned about geological exploration; I think perhaps that has gone almost as far as

it can go with any practical benefit at present in any of these areas. I quite realize its importance, but I also realize that the scientific efforts of our geologists are complementary to the work of our prospectors and that emphasis should be laid upon the metallurgical problems involved in some of the finds already made and blocked out, which are understood to be of immense importance. I do not know what eventual success this American firm will have, but I would like to know just what is the attitude of the Department of Mines towards this important process, which if successful will be of such immense economic importance to western Canada. I am not introducing this matter in a critical mood at all, because I know that the parsimonious attitude of this parliament towards these things has cramped the efforts of that department, and that under the circumstances the department has done good work. I would like to know, however, just what has been done, and I would ask the minister to address his mind to that aspect of the question for a few moments.

Mr. STEWART (Edmonton): I am very glad to be able to inform my hon. friend that this particular difficulty, the separation of these ores, has been under review and test in about a dozen different laboratories, but the process to be tried out by the company now, and the one which they feel has the greatest chance of success, is the discovery of our own officers made in our own laboratories here. Of course we cannot say that it will be successful, because it has only been tested, but it will be tried out this year.

Mr. FRASER: The minister has given a good deal of interesting information to-night but I would like to know how he explains the fact that in 1925, according to the public accounts, we spent \$237,000 under this vote; last year only \$200,000 was provided, and now we are only asked for \$192,000. What is the reason for the decrease in this very important item? Will it continue to decrease as the production of minerals in this country increases? Three years ago the mineral products of Canada amounted to \$214,000,000; last year they amounted to \$228,000,000 and the figure for this year is \$242,000,000, so it will be seen that though the production is increasing, the amount of money set aside for this very important work is decreasing. Having brought these facts to the attention of the minister, is it too much to expect that he will provide some supplementary amount to increase the vote asked for at present?

Mr. STEWART (Edmonton): I might explain that by the fact that we were using a