Mr. MacNICOL: I asked the member for Bow River and he told me he had not been there. If he has been there since then, well and good; he will be able to follow what I am going to say. I do not speak from what I read but from observation.

At the outset I wish to assure the minister that there is nothing personal in any criticism that I offer. I hope he will not take anything personal out of the remarks I make. I think a good deal of the minister and I realize that he has had much to do as Minister of Mines and Resources. If he has not been at Fort McMurray he could not be expected to devote his time to this particular item, out of the thousands of matters to which he has to attend. I know that he has been terrifically busy, and so has the Minister of Munitions and Supply (Mr. Howe).

Mr. CRERAR: I have been at Fort Mc-Murray twice.

Mr. MacNICOL: Was the minister at the plant?

Mr. CRERAR: Yes, once-the original plant?

Mr. MacNICOL: Since 1941?

Mr. CRERAR: No; that was in 1938.

Mr. MacNICOL: They were not in operation in 1938; the plant started in 1941. In any event, I am not rising in any critical spirit. I feel it is my duty to do what I can to bring about the production of oil at Fort McMurray from the Alberta tar sands. If a quantity large enough can be produced to be piped down to Edmonton, as I hope it will be, I am satisfied that that fine city will grow to a quarter of a million within ten or fifteen years. I believe that will be possible if the refineries are built there. Edmonton by pipeline to Fort McMurray would be distant about 250 miles; it is 305 by rail.

This is my objective; my purpose is not to criticize but to offer something constructive. As I say, I am going to support this vote, and I will support any other votes intended to promote the development of the Alberta tar But I ask myself just how many sands. millions have already been expended on the tar sands in one way or another. This is not a matter that affects only the present Minister of Mines and Resources. All the ministers who have gone before him, back to 1913, have been interested in the matter, and the same is true of all parties that have governed the country back to that time. It is not a party question, and what I say is not by way of criticism of the minister or of any of the ministers that have preceded him. Nevertheless, I ask myself how many millions have war Appropriation—Mines and Resources

been spent in one way or another to produce oil at Fort McMurray. I was there on a number of different occasions and I surveyed the situation up and down in every direction. I saw the ruins of one plant on the Christine river and one on the Clearwater river, and the plant, or what it is hoped will be a plant, on the Horse river, and the other plant about forty miles down the river built by the International Bitumen company. All these companies must have spent a great deal of money. How did they come to go there? They went there in consequence of reports sent out for the most part by the Department of Mines and Resources. It was through their engineers that these reports and pamphlets were sent out. I myself became interested through reading a pamphlet written by Doctor S. C. Ells. As far back as 1913, Doctor Ells, who is a capable geologist, was in that part of Alberta, and I presume he went up and down, if not every year, at any rate every other year. He has been in that part of the country for the department and has written many articles which have inspired producers everywhere and encouraged engineers from the remotest parts of the world to visit that area. I am not going to thresh old straw to-day; I am not going to repeat what I have said on former occasions; I wish to put something new on the record. Engineers whose names I have mentioned in previous addresses, men eminent in their profession, agreed with the report sent out by the Department of Mines and Resources, or, as it was formerly known, the Department of the Interior, indicating that there is a very large deposit of oil in these sands.

The American Bureau of Resources at Washington, through their engineers, state that there is five times as much oil contained in the tar sands as that to be found in the whole world. Whether that is so I am not going to argue, but I do know that various reports were sent out on this subject, and looking up some of these reports to-day I came across an article not referred to on a former occasion, written by a gentleman named C. Bruder in the *Nor'West Farmer* in January, 1942. Mr. Bruder heads his article "Oil in the Bank", and he writes:

There's ten thousand square miles of that up here.

That is, the oil sands.

Those tar sands contain enough oil to lick Hitler, Japan, and Italy. Enough oil to put diesel power on every western farm and to asphalt all the highways from Halifax to Vancouver.

He says that there is more oil there than in all the proven oil fields of the world,