

Supply—Mines and Technical Surveys

have heard many experiments suggested in the House of Commons as to what one might do about the coal industry. At the same time this seems to be giving satisfaction to those who think in terms of experimental work, and for that reason we consider the progress has been sufficient to justify its continuation in the hope that it will bring results which will be beneficial to the coal industry in both the east and the west.

Mr. Johnston (Bow River): The minister has indicated that when they were considering this estimate, those in authority gave him the advice that they considered it to be a worth-while project. They advised him that substantial progress had been made. I imagine in the course of this discussion when the government was considering granting this \$50,000 some indication must have been given of the rate of progress, and some indication as to how much longer it would be necessary to continue this assistance.

I think the minister is sufficiently acquainted with business tactics and is himself a sufficiently good businessman that he would have said, "Now look, we are not going to give you \$50,000 every year for as long as you want. We gave you assistance last year and the year before that and the year before that. How long is it to go on?" It seems to me the minister should be able to give us some indication. I would not expect that he could tell us within one year or even within three years, but he should be able to tell us when the machine will have advanced to the point where it will be a commercial proposition and of some assistance to the needy coal miners.

Mr. Gillis: Mr. Chairman, I do not expect that the Minister of Finance can possibly answer in the house for all departments, and I think this is one department where he does not have the details.

I was glancing at this item myself, and it brought to mind the fact that I had the privilege on two occasions within the last four years, the most recent being two years ago, of going down to Montreal with the Minister of Mines and Technical Surveys and other hon. members of the house, and also press representatives, to take a look at this experiment.

The idea is that of Professor Mordell of McGill University. Of course a gas turbine engine is not a new idea; in fact it is a rather old experiment, but we have never been able to develop a cooling system to which the blades of the engine would stand up. The only new idea in regard to the turbine engine is that Professor Mordell feels he has discovered a cooling system which

will make that engine work. I think the original intention in developing this engine was to use it in locomotives. They think it would be a better device than the diesel engine, and would be cheaper and so forth, if they could establish it. But the last time I looked at it and saw it in operation my conclusion was that it was at least five years away from the blueprint stage and at least ten years away from the stage of being of any commercial value. That is on the assumption that it will work, and there is no assurance that it will do so.

I do not think that that engine would be used in any locomotive in this country for a good many years. When you consider the amount of money that has been spent by the C.N.R. and the C.P.R. in the dieselization of the roads, you may rest assured that they are not just going to write off that capital expenditure for the purpose of swinging over to new engines. That sort of suggestion is just ridiculous. The last time I was down there I asked Professor Mordell if, in his opinion, these engines were interchangeable with the diesel engines being used at the present time. He said no, that before these can go into a locomotive, they would have to get the co-operation of the Canadian National Railways, that their people would have to come in with him as well as others and that they would have to build a locomotive into which might be placed this engine. As for its doing anything for the coal industry, in my judgment it will never do so. When you consider the factors I have just mentioned, the only place where it would be able to help the coal industry would be by the burning of coal on the railways; and that is out, in my opinion. It may have some value, if they can make it work, in generating power in small power plants; that is, assuming that it will work. It may be a good marine engine. I talked to some people—I am not going to name them—and I was led to believe two years ago that those in the Department of Mines and Technical Surveys who have been watching the experiment were of the opinion that there was not much value in continuing to make that expenditure. However, I notice that it is here again. I am not going to ask the minister to take it out. Perhaps there are possibilities for the engine but I want to say definitely that, in my judgment, it will never be of any value to the Canadian coal industry.

Mr. Harris: What my hon. friend has said is, of course, said by one who knows a good deal about the coal business, and I am sure it will receive the careful attention of the Minister of Mines and Technical Surveys.

To answer my friend the hon. member for Bow River, let me just say that once again