By the Chairman:

Q. Of course, from the national standpoint there would be a large increase in employment through the production and transportation of the coal turned

into coke?—A. Yes.

Q. And the process of turning it into coke, which is now done in a foreign country, would be done in our country.—A. The great advantage to Nova Scotia would be—anthracite or hard coal, or any smokeless coal, seems to be a necessity in modern Canadian cities; the flues in furnaces have been made to burn anthracite. It has been the custom. You practically cannot throw out that equipment; it must remain; but it can be modified in houses, and in building new hotels and factories you can put in flues big enough. But the better way, if you can do it, is to use a non-volatile equivalent to anthracite—and coke is such a one. So, hard coal or coke is a necessity; it must be had year after year—there is a steady market for it. If Nova Scotia could supply say the island of Montreal with coke, it would mean that there would be an outlet for say a million tons of Nova Scotia coal a year, on which the operators down there could depend, without any trouble. They would know they were going to get that just as a baker knows he is going to sell so much bread.

## By Hon. Mr. Laird:

Q. Would that reduce the cost of production?—A. It would have a steadying effect; it would provide a stable market. That is one thing Nova Scotia has always lacked. The large railways of Canada have been quite unfair to the Nova Scotia operators. They pin them up against American competition every year. Every spring they want to make new contracts for coal, and the Nova Scotia operator never knows what he is going to get for coal, and the railways quite ruthlessly—they make no bones about it—say: "If you can produce and give us coal as cheap as the United States, we will take it."

Q. Do you think they would be justified in paying higher prices?—A. Not excessively higher prices, but I think they would be justified in paying somewhat more for it. To elaborate that, it has made for an unsteady condition of labour and investment in Nova Scotia, because we never know whether we are going to get the railway contracts or not. If we could get the anthracite market that is now going to the States, we would have a steady back log

every year.

Q. You could get that by means of coke?—A. That would be one way. I think as people realize that this country is full of soft coal or bituminous coal, and that anthracite is a disappearing commodity, they will come to burning bituminous coal, as they do in Europe and Nova Scotia and British Columbia.

Q. As they do over 90 per cent of the world where coal is used at all. But, Mr. Gray, is not the method of using coke distinctly the most economical for the

country?—A. Absolutely.

Q. A ton and a quarter of bituminous coal, say, will make a ton of coke, which is the equal, let us say, of a ton of anthracite?—A. Yes.

Q. And beyond that you have two or three gallons of benzol, you have

creosote, and all these other things?—A. Yes.

Q. So that if the money could be found to establish plants of that kind at various places, it would be a great deal better than burning an equivalent number of tons of raw coal?—A. Yes, much better. As a matter of fact the by-products are worth more than the coal, particularly in regard to Nova Scotia coal, because Nova Scotia coal has, I think, probably the highest yield of by-products.

Q. It is very high in certain by-products?—A. Very high in ammonia and

sulphate.

Q. And is not the tar peculiarly rich?—A. Yes. I saw a letter the other day from the head of one of the big firms in Boston—Captain McKay of the [Mr. F. W. Gray.]