

that in from somewhere on the west coast of the United States, we are hoping to be able to use Alberta coke as the oil fields and refineries develop in Alberta or in British Columbia—we have already made contracts for a certain amount of coke there, and right now we are moving it to Arvida; but as soon as these fields develop, we will undoubtedly be shipping petroleum coke from the Edmonton area through and over this rail connection into Kitimat. Then there are materials such as fluoride and cryolite which will probably be shipped direct from the Saguenay by rail, right through to the smelters at Kitimat. The tonnage is relatively small compared with the tonnage of coke.

We use in addition to petroleum coke, either anthracite coke or bituminous coke with which we line our pots or aluminum cells. The tonnage is, of course, much less than that which is used for electrodes; but the probabilities are that we will develop a source of anthracite coal either in British Columbia area or somewhere near the Edmonton area, or near the Banff area that will be moved in by rail. That essentially covers the raw materials, for the process. As to the shipment of metal, that is the actual production from our smelter, it will be aluminum, in ingot form; and these ingots will be shipped we do not know just where. We think that a good part of it will go to the United States, and of that, much will go to the central part of the United States. Probably most of it will go there. Such shipments would normally be shipped by rail because I think it would be easy to see that if you shipped it by boat from Kitimat, let us say, to Seattle or to Portland, and then you had to re-ship and handle it onto rail, and then ship it across the Rockies into the central part of the United States, it would be more costly than a direct movement right from Kitimat by rail. So we anticipate a substantial part of our production will be shipped by rail. Some of the production may be shipped to the Far East; and that would naturally have to go by water. And as Mr. Fairweather pointed out, the boats which carry alumina into Kitimat will have capacity to carry twice the tonnage of metal that is produced at Kitimat; so there will be definitely an incentive there to ship a certain amount by water, and some metal may be shipped even, let us say, to the United Kingdom, although I doubt if there would be too much going that way because we have our smelters in the east which could probably ship more cheaply to the markets of Europe.

*By Mr. Rooney:*

Q. Would it not be possible to use Alberta coal, which is good coking coal, and to put up a coking plant for the purpose?—A. As long as petroleum coke is available at a reasonable price, coke from bituminous coal is not pure enough. We have determined by experiment and research that we can purify such coke up to the point, but it is going to be more costly to do that than to buy pure petroleum coke, as long as it is available. But if we are looking to the future, and if the oil industry should produce less coke, or if the price gets too high, then we have got an ace up our sleeve, in realizing that we can make suitable material; but it would be more costly. It is just a question of economics.

Q. Could you not use Pocahontas coal for coking out there? Would it be of a quality you need?—A. It is still too impure; we have to get the iron and silica content of that coke down to the low hundreds of a per cent; most of those coals will probably run several per cent in impurities.

*By Mr. Pouliot:*

Q. In order to summarize what has been said: there are already four ocean harbours in British Columbia, Vancouver, New Westminster, Victoria, and Prince Rupert. And Kitimat would be a fifth one. Is that right? And you are now going to build your plant for aluminum, and also a power plant. Is that right?—A. That is right.