

The mineral supplies in any country being indestructible by fire or pestilence are an asset depending solely on immutable geological facts plus the application of labour and capital.

The mineral yielding areas of Canada may be broadly classified as three, the Northern Appalachian, the Laurentian and Cordilleran.

Coal is confined to the far foothill region of the Appalachians in Nova Scotia and New Brunswick, and to the Cordilleran system, including the lignites extending east, but forming part of the Rocky Mountains slope.

At the present time the Laurentian system produces most of the gold and silver, and all of the nickel and cobalt; the Cordilleran produces most of the copper, lead and zinc; the Appalachian yields eighty-five per cent. of the world's asbestos. The balance of output may and does shift, however, from one geological system to another, as the prospected area widens, now one province and now another comes to the fore.

Looking to world economics, it is wise for Canada to produce as much gold and silver as she can, these metals being the only definite medium of exchange by which balances of foreign exchange of commodities can be settled regardless of currency inflation. It is also the best business to develop the "key" metals of Canada, nickel, asbestos and coal, the possession of which whether in large quantities or as practical monopolies has great effect in the negotiation of commercial treaties with foreign nations.

It may seem strange that with a bituminous supply estimated in Alberta alone at a double-figure fraction of the world's supply of coal, to say nothing of the long-time prosperous coal mines of Nova Scotia and Vancouver Island and in the other partially developed districts of British Columbia, Canada imports more than seventeen million tons and pro-

duces only thirteen millions; but economic laws of freights and distances always speak loud when tariffs are low.

The lignite utilization Board has now demonstrated its ability to properly carbonize the prairie lignites and produce a satisfactory binder; the briquetting plant now in course of erection at Bienfait, Saskatchewan, will have a yearly capacity of 30,000 tons of a fuel equal to anthracite. This pioneer work of a great industry has been done by the Council for Industrial Research, and the time is nearly ripe for private enterprise, as was intended, to come upon the scene, and avail itself of the knowledge acquired.

Peat fuel also from the very large and widely separate bogs of Canada will be on the market as a result of continued experiment by the department of mines. Already the 50,000 tons produced scientifically at the Alfred (Ontario) plant finds a ready sale at \$4.00 a ton f.o.b. Alfred.

Beyond experiments showing that the billion ton oil shale deposits of New Brunswick and Nova Scotia would yield from twenty to 110 gallons of crude oil to the ton and thirty to ninety pounds of sulphate of ammonia, nothing has yet been done to utilize them nor the less known deposits at Gaspé. The probable life of existing oil fields, the commercial demand for the by-products, and the trend in the cost of refining plants are some of the factors on which hangs the development of this reserve of fuel and fertilizer. On the interpretation of a tariff clause on "sundry articles of metal, when for use exclusively in mining or metallurgical operations" and on similar clauses referring to "machinery not made in Canada" the future of a great industry may depend. A duty of fifteen per cent. to twenty-seven per cent. ad valorem would probably add a million dollars to the cost of a five-million-dollar plant.