

It is the purpose of this paper merely to indicate how the foregoing problems may be solved:—

(1) The following solutions of the domestic fuel problem in central Canada are suggested: (a) The installation of by-product coke ovens at certain points on the St. Lawrence and Great Lakes system, the coke being used for domestic purposes in place of anthracite coal. (b) The development of a peat industry. (c) Eventually, no doubt, electric energy will, to a certain extent, replace coal for heating purposes in this area.

(2) In central Canada the electrification of some of our railways may, later, be found to be economically possible. The railway fuel problem in certain portions of Western Canada may be solved by the use of powdered coal (using western lignites or sub-bituminous coal); by the use of a suitable briquetted fuel made from lignites or bituminous coal, and by the further use of our own bituminous coal.

(3) and (4). Two questions of great importance in the Prairie Provinces to-day, the solution of which will become a matter of even greater moment in the future, are the problems of securing cheap power and an assured domestic fuel supply. In western Manitoba, in Saskatchewan, and in eastern Alberta water-power development costs are, in most instances, high. These districts are within reach of great deposits of lignite. It is, therefore, essential that something be done to utilize the low-grade fuels which underlie the greater portion of Alberta and part of Saskatchewan and Manitoba. To make the coal transportable and suitable for domestic and power purposes, it is necessary:

1. That it be of sufficient value to bear the cost of transportation.
2. That it withstand handling and a certain amount of weathering.
3. That it be a suitable fuel for domestic and power purposes.

The above conditions are fulfilled by coal briquettes and carbonized lignite briquettes. The Mines Branch and the Conservation Commission, in co-operation with the Advisory Council on Industrial and Scientific Research, are working on these problems and indications point toward an economic solution.

#### INDUSTRIAL ALCOHOL

The imports of petroleum and petroleum products into Canada have been rapidly increasing, while the domestic production has been decreasing. The imports of petroleum, crude and refined, during the calendar year 1916 totalled over 292 million gallons, valued at over