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THE EXPLOITATION OF OUR PEAT BOGS.

—By D Hannel—

(Condensed)

In a country, such as ours, where independently of the continually increasing amount of fuel required for industrial purposes, we are during the long winters dependent upon artificial heat in our homes, the item of cheap fuel becomes one of the most important factors in the prosperity of the nation.—Our coal deposits are situated in the far east and west, and the long hauls to bring this fuel to the central provinces render the price of our own coal prohibitive, and leave us dependent on outside sources for the necessary supply of fuel in these provinces,

The rapid industrial development of Canada and increase of our population render therefore the intelligent exploitation of our abundant andexcellent peat deposits for fuel purposes of supreme importance.

We can at present form no estimate of the enormous extent of our Peat Bogs. The 37,000 square miles already known form probably but a small fraction of the amount of this valuable fuel asset in existence in Canada.

The necessity of utilizing the peat deposits scattered throughtout the provinces in the more settled portions of them, has within recent times been appreciated, and efforts have been made by some of our enterprising citizens to establish a Peat Industry. Much money, thought and energy have been spent on this problem. Many plants have been erected, but unfortunately so far without reaching commercial results

. . . . The endeavor to accomplish economically by artificial means in a short time, what has been accomplished by nature in exceedingly long periods of time, namely the change of peat into a substance similar to coal, has so far apparently not been attended with success I would not like to say that it cannot be done, since it is unsafe to make any statements regarding the possibilties of future achievement but at present the outlook in this direction is certainly not encouraging.

In view of these facts, the only proper course for us in Canada to follow, if we desire to establish a peat industry and render ourselves at least to some extent independent of outside sources for our fuel, is to introduce such processes and such machinery as have proven successful and are now in actual commercial operation in Europe.

To re-establish the confidence of the people of Canada in the value of peat as a domestic and industrial fuel, and to stimulate renewed activity in the development of our peat resources, the Government has acquired 300 acres of peat bog, with an average depth of 9 feet. for the purpose af manufactoring peat-fuel on a commercial scale, and by a method which has proven successful in European practice. At this plant interested parties will have an opportunity of ascertaining for themselves the working of the bog as well as the suitability of the peat-fuel produced. The capacity of our plant is a production of 30 tons per day. For a large commercial plant, mechanical excavators shall replace the manual labour employed at our plant, if the bog to be exploited is suitable for this class of labour-saving machinery.

The plant at Alfred is to serve as a model of a successful process, and not for the production of peat-fuel on an extension scale. We expect, however, to manufacture during this season, about 2,000 tons of peat-fuel, part of which is to be used in our peat-gas producer at Ottawa.

There is nothing artistic about the appearance of the fuel produced at our bog It has not the regular geometric form of briquettes nor their smooth exterior, but it serves the purpose for which fuel is intended as well as briquetts and has the advantage ofbeing low in cost of manufacture.

Allowing 14 days for a session's operation, the cost per ton of air-dried machine peat, including interest on capital invested, amortization, oil and repairs is as follows:—

Cost of fuel on the field	$1.40
Cost of fuel stored in shed.....	1.65
Cost of fuel loaded on car	1.65
Cost of fuel in stack..	1.70

By the employment of mechanical excavators and the manufactnre of peat on a large scale, the cost of production per ton should be considerably less than the figures here given.

The objection to the air-drying process, practised at at our plant, is that it is not a continuous process, that it can be worked only during the summer months, and that the amount of fuel which can be produced during one season is dependent upon weather conditions.

These statements are quite true, and yet Sweden, Finland, Denmark, Germany, Holland, Austria and Russia, depend for a large part of their fuel supply on the simple process of pulping the peat, forming it into bricks upon the field and harvesting it as air-dried fuel. The weather conditions in Canada are as favourable, if not more so, for the production of air-dried machine peat as in the countries mentioned. To prevent shortage of peat-fuel on account of unfavourable weather conditions during a season's work, a year's supply of peat-fuel should always be kept in storage.

Russia is the largest producer of peat-fuel in the world In 1902, the production was 4,000,000 tons of peat-fuel, and the annual increase of production has since then amounted to nearly 200,000 tons. Many private plants exist in Russia in connection with cotton mills for the production for their own use of 200,000