

further failure from this cause, in the manufacture of peat fuel, an investigation was made by our Department three years ago, and a report issued on the manufacture of peat for fuel and other purposes in the peat-using countries of Europe. This investigation has demonstrated:—

(1) That for the economic production of fuel from peat, machinery driven by power must be substituted as far as possible for manual labour.

(2) That processes, so far invented, for removing the water content of the peat by pressure and artificial heat, have not led to commercial results, and after trial have been abandoned.

At any rate the existence of plants in any country furnishing regularly and at reasonable prices artificially dried and briquetted peat, are not known at our office. The recent reports received by us regarding two very promising processes employing artificial heat in the production of peat-fuel, are very disappointing: namely, the process of the Electropeat Syndicate, with the head office at Newcastle-on-Tyne, England; and the somewhat famous Ekenburg process.

The Electropeat Syndicate erected an extensive plant at Kilberg, in the county of Kildare, Ireland, for the production of peat fuel as a substitute for coal, which they expected to sell at six shillings per ton. No money was spared in trying to make the experiments a success, and very expensive machinery was put down. Experts were brought from Germany to look after the work, under the superintendence of Captain Verey, R.E. Large shipping companies, on the strength of samples submitted, and representations made to them, promised some very large contracts for fuel; but the Company, at the end of over one year's experimentation, found that their process was a failure. The peat made by them looked like coal and burned well, but was hygroscopic, and after a short time crumbled to powder. All efforts to overcome this defect failed, and, in June last, the project was permanently abandoned.

The Ekenburg process of the wet carbonization of peat is exceedingly ingenious, and has aroused great expectations, but is still in the experimental stage—after the expenditure of 200,000 kronor in Sweden, to place it upon a commercial basis.

The endeavour to accomplish *economically*, by artificial means, and 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 possibilities 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 proved successful, and are now in actual commercial operation in Europe. We may safely leave experimentation and the development of new ideas to the future, when our peat industry is on a secure basis, and peat-fuel in abundance on the market. We will then have gained in the manufacture of peat-fuel along lines which are at