

An engineer in charge of a Sawyer-Massey portable engine at the Toronto Exhibition tried Dickson's compressed peat and had this to say of it: "For quick steaming I never used fuel to equal peat. It is quite as economical as coal, and in many respects greatly superior. It is smokeless, cleanly to handle, very little ash, and no sulphurous gas, consequently makes no soot to gather on the tubes. I find the stoking much easier than with coal. I banked the fire at 5.30 p.m., closing off the drafts, and found plenty of fire next morning at 7 a.m., with 60 lbs. of steam up. When the fire has burned out I find the grate bars perfectly clean."

As a Locomotive Fuel

In early days, on the Grand Trunk, an effort was made to utilize peat for fuel in its crude state. The attempt, while otherwise satisfactory, was given up because the fuel, in its unpressed state, was bulky, dusty, and readily broke down from exposure.

A recent test on the Central Ontario Railway, and referred to below shews that the improved compressed peat turned out by the Dickson presses, fulfils the requirements of a locomotive fuel. On November 22, 1898, a run was made from Trenton to Glen Ross (thirteen miles) with twenty-two empty freight cars, over a portion of the road with very heavy grades. The brakes were applied to the train at different times during the test, which was a severe one, as the locomotive was worked up to her full power. The cost of peat burned, so the engineer reported, was not greater than coal in proportion to the work done.

Locomotive engineers have testified to the increased life of fire boxes and of flues by the use of peat, the absence of sulphur being a great point.

As a Steamboat Fuel

A trial was made of the new fuel from Welland bog, on August 17, 1898, on the steamer Primrose, of the Toronto Ferry Company. Chief Engineer Brownley gave it as his opinion that for quick steaming it was superior to coal, the quantity consumed not being greater, the ash very much less and there being an entire absence of smoke.

FOR SMELTING

In a report made to an English company, Mr. Sanderson, of Sheffield, said: "All iron metallurgists have agreed in one opinion, that if peat by any means could be produced of sufficient density to enable it when charred to stand the blast necessary for the production of iron, the iron so produced would be of very superior quality."

UTILIZATION OF IRON SAND

It is well known that Canada has large deposits of what is called magnetic iron sand, which has hitherto been unworkable, because it has not been found possible to hold the sand while being smelted. Mr. Dickson expects to attain the desired end by compressing the sand and powdered peat together into blocks, coking and subsequently smelting, the peat charcoal furnishing the fuel.

GAS

The large yielding of gas from the Welland peat indicated in a report made by Mr. Thos. Heys, Consulting Chemist, confirms the statements made by many other authorities in the United States, Great Britain and Europe, and shows that the production of an illuminating gas of a superior brilliancy and power is within the direct sphere of operations in peat. Its manufacture, judging from the many experiments made in different parts of the world, is much more simple than the production of gas from coal, and the absence of sulphur from the peat allows the purification of this gas to be much more easily accomplished. As far back as 1862 communications were made to the British Society of Art to the effect that large establishments had been lit by peat gas, and that as much as ten thousand cubic feet of gas had been obtained from a ton of peat, although some difficulties were experienced in the separation of the inherent carbonic acid. Later the