

THE CITIZENS' INSURANCE COMPANY (OF CANADA.)

Subscribed Capital..... 1,000,000.

Especially empowered by Act of Parliament, and fully authorized by Government under the Insurance Bill.

HUGH ALLAN, - - - - - PRESIDENT.

Life Department.

THIS sound and reliable Canadian Company—formed by the association of nearly 100 of the wealthiest citizens of Montreal—issues policies on all the Modern Plans, including—Limited Payments, Endowments, Part Credit Premiums (without notes), Income Producing System; and several new and valuable plans.

A comparison of the very Low Rates, and of the liberal and unrestricted nature of this Company's Policies, with those of any other Company, British or American, is specially invited.

All Life Policies are absolutely Non-forfeitable.

Persons intending to assure their lives are particularly requested to first examine the Prospectus, List of Shareholders, and Policies of this Company, which, together with all information concerning the constitution of the Company, the working of the various plans, &c. may be obtained at the

Head Office, Montreal—No. 71 GREAT ST. JAMES ST. W. E.T.

EDWARD RAWLINGS, Mana et

Agent for Toronto:
W. T. MASON.

Agent for Hamilton:
R. BENNER.

THE CANADIAN MONETARY TIMES AND INSURANCE CHRONICLE is printed every Thursday evening and distributed to Subscribers on the following morning.

Publishing office, No. 60 Church-street, 3 doors north of Court-street.

Subscription price—

Canada \$2.00 per annum.

England, stg. 10s. per annum.

United States (U. S. Cy.) \$3.00 per annum.

Casual advertisements will be charged at the rate of ten cents per line, each insertion.

Address all letters to "THE MONETARY TIMES."

Cheques, money orders, &c. should be made payable to J. M. TROUT, Business Manager, who alone is authorized to issue receipts for money.

The Canadian Monetary Times.

FRIDAY, NOVEMBER 19, 1869.

CANADIAN PEAT—ITS VALUE AS FUEL.

In a climate like ours, anything that would cheapen the price of fuel would be a blessing without alloy. There are large peat beds in the Province, and the experiment of utilizing one or two of them is now beginning to be made. Some deliveries of peat are reported at Hamilton; and the daily papers are jubilant over the fact. The price reported is \$4.50 per ton, and much is said of the good qualities of the new fuel; that it burns well and occupies less space, regard being had to its heating power, we must presume, than coal. It is not probable that these comparisons rest on any positive data; but are more likely to be mere conjectures. It is presumable that the peat is compressed, or its bulk would not be less than wood; for to obtain from ordinary air-dried peat an equal degree of calorific power, four times the bulk and twice the weight are requisite. But

air-dried peat contains one-fourth its weight in water, and is not, on that account, of the same relative value as peat that has had the water pressed out of it. Compressed peat sells in the French capital, at \$3.75 the ton of 2,200 lbs., while fire wood sells for more than double that amount per cord. Peat, in Hamilton, sells for \$4.50 a ton, and wood, we presume, can be had for \$6. These proportions will, we fear, prove that peat is quite as dear as wood, if not dearer.

But coal is perhaps better known as a measure of the heating value of peat. Dr. B. H. Paul, communicated to the Society of Arts, London, in 1862, a paper giving the results of his experiments, to test their relative value. He found that peat was economical as a generator of steam, when with half the heating power of coal it could be produced for two-fifths the price. When coal was ten shillings a ton, peat should only be four. It was found at one place, that when peat was six shillings a ton, delivered, coal was more economical at eighteen shillings. There are instances of peat being sold, in England, as low as two shillings a ton.

But it is certain that these relative prices by no means uniformly obtain in other countries. In Geneva, compressed peat, brought from the Canton of Berne, sells for forty-three francs (\$6.80) a ton, being within forty cents the price of an equal weight of coal, which comes from France by railway. These relative prices would seem to rest entirely on the supposed heating value of the substances, or if there be any preference it would probably be given in favor of coal, for the peat exudes a disagreeable odor and is, on that account, ruled out by the Swiss for culinary purposes. Experiments on the Grand Trunk railway, with peat from the Province of Quebec, are said to have proved that a ton of peat is equal in heating power to a cord of hard wood.

But we apprehend that the qualities of peat are far more various than those of coal. Some are mixed with sand, and are to that extent impure. Then much depends on the age and thickness of a bog. Bogs in course of formation or of little thickness are valueless, or, at best, inferior. The older and deeper, the more valuable they are. Formed of aquatic plants, which grow where waters are pent up, the plants being preserved from putrefaction by falling into the water, bogs are mere masses of vegetable fibres, light and bulky, till they mellow and solidify by time, and the superincumbent weight which centuries of accumulations produce. The bottom of the bog is always the densest, and most compressed; and this natural pressure, at a depth of thirty-five feet, produces a consistency nearly as great as that of coal. From this

brief description of the process of bog-growing, it will easily be understood that all bogs are very far from being of equal value, and there is no difficulty in the supposition that a ton of one kind of peat may be worth much more than a ton of another kind. It may be true, as asserted, that the three different kinds of bogs, in Denmark—wood bogs, pool bogs, and heath bogs—produce turf of about equal value, without invalidating this conclusion. It is certain that the turf of the wood bogs is generally heavier and better than that of the heath bogs.

Denmark furnishes an instance of a country deriving its chief fuel from peat bogs; and in Ireland, where there is less cold to be overcome, that species of fuel is used to an enormous extent. But because the conditions of one country favor the use of peat as fuel, to a large extent, we would not be justified in concluding that this will be the case in another country differently circumstanced. The wood of our forests will, at best, furnish but a few generations with fuel: soon we shall have to find a substitute, whether coal or peat; perhaps both. The use of peat is yet almost wholly untried, in this country. We have no coal beds in Ontario; but we are near the coal fields of Pennsylvania and Ohio; and to popularize peat as a fuel, those who bring it into the market will have to show that it has the advantage in cheapness, if nothing else, over coal. We hope this may be the case; but it has yet to be proved that it will be. There is one great difficulty in the cost of carriage, which, in many cases, would have to be land carriage: if nearly two tons of peat be required to supply as much heat as is obtainable from a ton of coal.

One thing is certain: a peat bed is of very little value, before it is worked, and should be acquired by persons intending to utilize it at a nominal price. Extravagant prices for unworked peat beds cannot be given with any regard to the safety of the enterprise; and whenever such a thing happens, it will probably end as disastrously as the recent gold mining speculations, where untested lands were occasionally sold at grotesquely high figures. There are many peat beds in different parts, both of Ontario and Quebec; but their value is, in most cases, very uncertain. It may be possible to lay down a few rules, which will serve as some criterion of their value. To be of any value, a peat bed must be capable of being drained; it ought to be of considerable depth, and it will be all the better if it be situated within easy reach of some navigable water, by means of which it can be taken to market. Peat beds which combine all these conditions may possibly be worked to profit; but this is not yet certain;