

The use of peat for fuel is older than history. In the coalless provinces of Canada, peat, like everything else that can be burned, is of importance. The Mines Branch at Ottawa has set up a Swedish peat-making plant on a bog at Alfred, Ontario. If press despatches are to be trusted, the results obtained at Alfred go far to imperil the supremacy of Pennsylvanian coal. Indeed, Dr. Haanel is reported as saying that peat, ready to be used as fuel, can be produced at the Alfred works at a cost of \$1.70 per ton. He is also credited with the statement that as much heat can be produced from a ton of peat as from a ton of coal. Both statements are fantastically inaccurate, and we shall not believe without further evidence that Dr. Haanel is responsible for them.

Much effort and a vast amount of ingenuity have been expended in the past in the attempts to make use of the extensive peat deposits of Ontario and Quebec. According to the Hon. Mr. Sifton, the failure of these endeavours has been due largely to the unscientific methods and uneconomic processes employed.

Calm consideration indicates that it is scarcely likely that all previous workers in peat have been lacking in scientific knowledge, or in their grasp of the commercial aspects of the question. Nor is it probable that the installation at Alfred of a Swedish plant of a well-known type will dispel all the difficulties that hitherto have beset the manufacture of peat fuel.

The crux of peat fuel manufacture is the removal of the moisture, of which peat is singularly tenacious. The sun and the wind are the cheapest agents, but obviously a nation's supply cannot with safety be permitted to depend upon the weather. On the other hand, if artificial heat be resorted to for driving off the water, experience has shown that the cost is increased to a point at which peat cannot command a market where coal or wood is obtainable.

It may be possible, though we doubt it, that the bare manufacture of air-dried peat can be carried on at a cost of \$1.70 per ton; but it is safe to say that no peat fuel will ever be put on the market in a commercial way at any such figure. Manufacturers' profits, freight charges, cost of distribution, and middlemen's commission would bring the price up to two and a half or three times the original cost. Nor is peat a substance that bears transportation well. It crumbles and breaks, and there would be an appreciable loss on arrival at distant markets. Its fuel value, also, as compared with coal is overstated. Air-dried peat contains 12 to 15 per cent. of water at least, and its calorific power is little more than one-half that of anthracite coal. Peat fuel delivered to the consumer at, say, \$4.50 per ton, would be much dearer than anthracite at \$6.50 or \$7.00 per ton. As long as hard coal can be obtained at present prices, there is little hope of its being displaced by peat, for the consumption of which special stoves, fireplaces and furnaces are required.

Nevertheless, the carbon that nature has stored in the peat bogs of Canada, aggregating thousands of square

miles in extent, may some day be required to warm the bodies and cook the victuals of Canadians. Any real advances in the preparation of peat for fuel will be welcomed. There is nothing to lead us to believe that the Mines Branch has thrown light upon the question. Meanwhile our major point is the fact that other work has an immediate and imperious call upon the Mines Branch.

### ENGINEERS AS CITIZENS.

Not long ago we were asked why the mining engineer is so indifferent to his duties and privileges as a citizen. We found that the assumption and the answer demanded a deal of excogitation.

Mining engineers, like their civil brothers, are nomadic. They live on the fringe of civilization. They work. Their work demands continuous attention. They do not touch politics. Rarely do they court the muses. When they gather in convention they talk mining. In all their spare moments they talk mining. To them the rest of life is shadowy and unsubstantial.

How many mining engineers are in the House of Commons, or in our provincial legislatures? How many are prominent in the business world, or in letters, or in sports, or in anything but mining? How often do we see the mining engineer rising to high administrative positions?

We can see two handicaps under which the mining engineer labours. The more definite of these is his ignorance of office methods and of business training. For example, an operator informed us recently that he had employed a second-year student of mining as time-keeper. Here we cannot quote our informant verbatim. He was not quotable. But it appears that the second-year student was incapable alike of making his extensions correctly, and of adding up his totals. It took thirty-six hours of hard labour to correct that young man's mistakes. Yet in all probability the youth was possessed of ordinary ability. Who is to blame?

The second handicap is less definite, but none the less serious. The mental development of the mere specialist is not symmetrical. His mind is like a hammer with a broken handle. It works, but its range is sadly limited. The mining engineer, who is merely the mining engineer, is far from reaching the full development of his mentality. His vision is narrow, and, in matters not pertaining to his profession, blurred and oblique. The very nature of his work demands that he cultivate the humanities.

Of all enlightening influences good books are the best. Good books are not hard to get. They take a man out of himself. They quicken and broaden and refresh the reader. They are not luxuries, they are absolute necessities . . . .

Later we hope to have more to say on this topic. Our immediate object is to point out that the lack of roundness in the mining engineer's education is the main cause of his obscure position as a citizen. Mining en-