

# The Canadian Engineer

WEEKLY

ESTABLISHED 1893.

VOL. 19.

TORONTO, CANADA, AUGUST 4th, 1910.

No. 5.

## The Canadian Engineer

ESTABLISHED 1893.

Issued Weekly in the interests of the

CIVIL, MECHANICAL, STRUCTURAL, ELECTRICAL, MARINE AND  
MINING ENGINEER, THE SURVEYOR, THE  
MANUFACTURER, AND THE  
CONTRACTOR.

Editor.—E. A. James, B.A.Sc.

Business Manager.—James J. Salmond.

Advertising Manager.—A. E. Jennings.

Present Terms of Subscription, payable in advance:

Canada and Great Britain:	United States and other Countries:
One Year . . . \$3.00	One Year . . . \$3.50
Six Months . . . 1.75	Six Months . . . 2.00
Three Months . . . 1.00	Three Months . . . 1.25

Copies Antedating This Issue by Two Months or More, 25 Cents.

ADVERTISEMENT RATES ON APPLICATION.

HEAD OFFICE: 62 Church Street, and Court Street, Toronto, Ont.  
Telephone, Main 7404 and 7405, branch exchange connecting all departments.

Montreal Office: B33, Board of Trade Building. T. C. Allum, Editorial Representative, Phone M. 1001.

Winnipeg Office: Room 404, Builders' Exchange Building. Phone M. 7550.  
G. W. Goodall, Business and Editorial Representative.

London Office: 225 Outer Temple, Strand, T. R. Clougher, Business and Editorial Representative. Telephone 527 Central.

Germany and Austria-Hungary: Friedrich Lehfeldt, 2 Lindenstrasse, Berlin, S.W., 68. Telephone IV, 3198, Telegrams Advertise, Berlin.

Address all communications to the Company and not to individuals.  
Everything affecting the editorial department should be directed to the Editor.

### NOTICE TO ADVERTISERS.

Changes of advertisement copy should reach the Head Office by 10 a.m. Friday preceding the date of publication, except in cases where proofs are to be mailed to distant points, for which due time should be allowed.

Printed at the Office of The Monetary Times Printing Company, Limited, Toronto, Canada.

## INDEX

Editorial Matter	Page 144
Advertisers' Index	10
Buyers' Guide	6

### THE CANADIAN PEAT ASSOCIATION.

The direct results of the Convention of the American Peat Association in Ottawa has been the organization of the Canadian Peat Association.

Those interested in the developments of the industry in Canada, whether as a source of power or domestic fuel, will be interested in this new organization and the work there is to do to-day in bringing before the country the value of our peat deposits and the possibilities of the peat industry.

Two main factors have been instrumental in bringing about the revival of interest of the Canadian peat deposits. One, the increase in price of fuel, particularly of hard coal. The other has been the great improvements made in the developments of gas producers and gas engines and in their use of low-grade fuels.

Peat gas-producers have proven a success in Europe. Ontario and Quebec buy twenty-five millions worth of coal annually. Ontario is dotted with peat bogs. Along the line of the National Transcontinental Railway large deposits are found. Four bogs within a few miles of Ottawa are by Government engineers estimated to contain 25,000,000 tons of fuel.

The coal deposits of Canada are not general in their distribution. The extreme east and west are supplied, but the great middle country—which at the present is the manufacturing section—is but poorly supplied with fuel. Close to many of the peat bogs there is to be found marl, shale, rock, the raw products of cement and concrete and building material. Our large peat bogs when properly developed will be a factor in the cheap working of other of our natural wealth.

The Canadian Peat Association will have a large membership from the commencement. The industry which it will represent is growing in importance. It is to be hoped the Government will for a few years at least lend what aid they can to this new organization, which has for its purpose the perfecting of methods that will lead to the development of a new industry.

### THE CONTRACT SYSTEM ON GOVERNMENT LAND SURVEYS.

Recent newspaper reports state that the Federal Government of the United States has decided to abandon the contract system of surveying Government lands.

The Surveys Branch of the Department of Interior for Canada have during the last few years been doing more and more of their surveys by "day work."

Unquestionably the contract system enabled the Canadian Government to secure the subdivision of main lands into ranges, townships and sections at a minimum of cost. It is questionable whether this method has saved money. The contractor has rushed his work and completed his survey with as little expense as possible, and sometimes at the expense of accuracy. Re-survey and subsequent troubles and litigations have cost the property-owner and the Government much more than the cheap surveys saved.

The Government inspectors who have had to report on contracts do their work carefully, but their inspection, if complete, would be unreasonably costly. It has been shown time and again that the required observations and closing check, although they have the appearance of accuracy, have been "fudged."

Modified forms of the contract system in which to the salary of the surveyor there was added a bonus for doing certain work under given conditions would perhaps bring better results to the department and cause considerably less worry to the surveyors.

It may be a departure for the Government to offer bonuses to their salaried employees, but if it is good