

The Canadian Engineer

WEEKLY

ESTABLISHED 1893

VOL. 18.

TORONTO, CANADA, JANUARY 28th, 1910.

No. 4

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

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: 32 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 315, Nanton Building. Phone 8142. G. W. Goodall, Business and Editorial Representative.

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

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. Monday preceding the date of publication, except the first issue of the month for which changes of copy should be received at least two weeks prior to publication date.

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

TORONTO, CANADA, JANUARY 28th, 1910.

CONTENTS OF THIS ISSUE.

Editorials:

What Should an Engineer Know of Law?.....	69
The New Hydraulic and Thermo-Dynamic Laboratories, Toronto University	69

Sanitary Review:

The Problems of Saskatchewan and Public Health Problems	71
---	----

Page of Costs:

Concrete Boundary Monuments	74
Costs of Concrete Sidewalk	74
Cleaning Land	74

Leading Articles:

Problems in Applied Statics	75
Report of Annual Meeting of Canadian Society of Civil Engineers	77
The Tate Bifunctional Accumulator Plate	87
Construction News	91
Market Conditions	94

WHAT SHOULD AN ENGINEER KNOW OF LAW?

It is expected of all engineers that they know a little of everything and some one thing well. How much should the engineer know of law?

In this day of specialization, a little knowledge is a dangerous thing, but the engineer ignorant of procedure, the rights of vested interest, or the principle of contracts, is very apt to cause himself and his clients much trouble.

An engineer, himself a specialist, will not attempt to be his own lawyer. But he will know something of common and civil law.

Common law is the crystallization by statutes and court decisions of the customs that relate to the dealing of man with man, and represents the experience of the ages. It establishes the basis for determination of the rights and duties in regard to ownership and contracts.

In addition to a knowledge of these fundamentals the engineer requires specific information as to the legal limits of his authority, duties, liabilities, rights and privileges. Usually, he is an agent, and he should know how far his actions will bind his principals.

In dealing with labor the engineer frequently has to face the problems of conspiracy, injunctions and property protection. In such cases he will not often have an opportunity to consult a lawyer, but must act quickly, and to be accurate he must have knowledge. His university curriculum was too crowded to pay much attention to legal matters. But during the first few years after leaving college he will have an opportunity for reading, and should then improve his knowledge of law. We should not be afraid of growing too learned.

THE NEW HYDRAULIC AND THERMO-DYNAMIC LABORATORIES, TORONTO UNIVERSITY.

The opening of a new building at Toronto University on January 20th was a successful function, but it is very unfortunate that the Board of Governors could not see their way clear to make a grant so that the Faculty of Applied Science and Professor Robert W. Angus might make known to the manufacturers and engineers the kind of instruction they were prepared to give in the departments of Hydraulics and Thermo-dynamics, the extent of their equipment, the opportunities for practical tests and practical instruction, and the endeavor that is being made to give a course for students in engineering such as the engineer and not the schoolmaster would approve.

A university that for the year ending June, 1909, can spend over six thousand dollars on items that are fairly chargeable to advertising account could surely spare a few hundred for the opening of a large new building. More especially might co-operation be expected