The Canadian Engineer

ESTABLISHED 1893

Vol. 18.

TORONTO, CANADA, APRIL 8th, 1910.

No. 14

The Canadian Engineer

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:

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

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 depart-

ments.

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.

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, APRIL 8, 1910.

CONTENTS OF THIS ISSUE.

Editorials:

April 8th Issue	313
Applied Science (March)	
Oiling Roads	
City Planning	314
Garbage and Refuse Collection	314
American Society of Engineering-Contractors	314
Editorial Notes	315

Leading Articles:

Dominion Observatory	32
Elementary Electrical Engineering	3
Relative Costs of Municipal Work	3:
Montreal Low-Level Pumping Station Equipment.	3:

Sanitary Review:

Disinfection of Toronto's	Water Supply
Sewage Disposal Ideals	

THE ISSUE OF APRIL EIGHTH:

Since The Canadian Engineer has been made a weekly publication we have found it difficult to secure space in which to place before our subscribers the various technical articles which we feel would be of benefit to the profession. With the growth of the paper's circulation the demand upon our advertising space has increased to such an extent that we find it necessary in justice to our subscribers to again enlarge the paper. This is the second time during 1910 that we have found it necessary to add additional pages. For the present, at least, the journal will contain sixty-eight pages, and it will not be long until we will have to again increase the size of the paper. Not only are we attempting to give a larger paper, but a better paper editorially. From the reception the paper is receiving among subscribers and advertisers we feel that we are doing this.

APPLIED SCIENCE FOR MARCH.

The March issue of "Applied Science," an engineering magazine published by the graduates and undergraduates of the Faculty of Applied Science of Toronto University, is an interesting and unusual issue, both because of several very interesting and valuable articles it contains and the peculiar interest which centres around a special number.

The managing editor, Mr. K. A. McKenzie, B.A.Sc., evidently had in mind the preparing of a number in which all the articles would be contributed by graduates of the Faculty of Applied Science of Toronto University who are now engaged in journalistic work. The section of the issue devoted to our contributors emphasizes the fact that there is a large field in journalism for the technical graduate. For many years graduates have found an interesting field in journalism, but with the great growth of technical papers and the large amount of interesting and suitable material available for technical publications, a demand has risen in journalism for men technically trained and, if possible, men of practical experience.

The managing editor of "Applied Science" is to be congratulated upon this issue, not only because of the character of the articles contained therein, but because of the object lesson which such an issue must be.

OILING ROADS.

In many municipalities in Canada the season of 1909 saw extensive experiments carried on as to the preserving of macadam roads by the use of asphaltic oil and crude oil. Generally, the experiments were satisfactory, and as a method of preserving macadam roads crude oil 317 and asphaltic oil will be used more extensively during 318 1910 than heretofore. It was found that roads which,