# The Canadian Engineer

#### WEEKLY

ESTABLISHED 1893

Vol. 15.

TORONTO, CANADA, MAY 15th, 1908.

No. 20

# 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.

Present Terms of Subscription, payable in advance:

Canada and Great Britain: United States and other Countries: One Year Six Months Three Months One Year Six Months Three Months 1.25 0.75

#### ADVERTISEMENT RATES ON APPLICATION.

HEAD OFFICE: 62 Church Street, and Court Street, Toronto
TELEPHONE MAIN 7404.

Montreal Office: B 32 Board of Trade Building. T. C. Allum, Business and Editorial Representative. Phone M 2797.

Winnipeg Office: 330 Smith Street. G. W. Goodall, Business and Editorial

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

#### NOTICE TO ADVERTISERS:

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, MAY 15th, 1908.

Have you a copy of the Canadian Engineer for February 21st, 1908, to spare? There's a month's extension of subscription in it for you.

#### CONTENTS OF THIS ISSUE.

Editorial:	
College Tost: I	Page.
College Testing Laboratories	343
Foundrymen's Convention	343
Boiler Feed PumpLa Salette Landslide	7
La Salette Landslide Practical Advice	344
Practical Advice Handling of Ashes	344
Handling of Ashes Correspondence:	345
Correspondence:	373
Dynamite Explosions	210
Reforestation and Runoff A Portagonard Orders	349
Railway Board Orders A Page of Costs Society N	349
A Page of Costs Society Notes Construction	347
Society Notes Construction News	348
Construction News Market Conditions	351
	353

Any reader not wishing to bind their copy of the Canadian Engineer of May 1st, 1908, would confer a favour on us by returning same to this office, as the issue is completely

# COLLEGE TESTING LABORATORIES.

A week ago we published a paper on "Reinforced Concrete Columns," prepared jointly by Mr. P. Gillespie, Lecturer in Theory of Construction, Faculty of Applied Science, Toronto University, and W. G. Swan, Demonstruction, Faculty of Applied Science, Toronto University, and W. G. Swan, Demonstruction, and W. G. Swan, a strator in Strength of Materials in the same Faculty. We do not call particular attention to the article because of the material it contains, or because of the subject treated, the interest taken in the paper and in the method of treatment of the subject of concrete reinforcing is abundant evidence of the value of the contribution, but because of the position we think college testing laboratories should fill in carrying on investigations in the field of engineering.

College testing laboratories should carry on systematically series of tests and experiments dealing with those questions of public interest which come naturally within their field. Their students would be more interested in experiments, the practical application of which they may see, than conducting day after day experiments which go to prove the correctness of well-known laws. The published results of such tests would do much to impress upon the public the value of such work and

the necessity of more liberal financial support.

Sometimes we hear it said that public opinion is not fully alive to the needs of our colleges and universities. If that be true it is also true that many of our universities and colleges are not alive to present-day problems, or if they are, they do not offer to aid in their solution. College testing laboratories can be made very useful in awakening interest in higher education and of practical service to the engineer. There are many questions that engineers are anxious to investigate, but which they cannot approach without the aid of wellequipped laboratories—laboratories much larger and more fully equipped than are usually found in connection with engineers' offices. The engineering societies and clubs would be acting wisely if they would appoint committees to report on the possibilities of carrying on investigations into the steel rail question, waterproofing of cement, consumption of smoke, strength of concrete pipe. These and many other subjects require to be more fully studied, and in no way can this be done better than by associating the practical engineer and the college professor, supported by public funds.

## AMERICAN FOUNDRYMEN'S CONVENTION.

Toronto has been long known as the Convention City. In 1908 she is not going to misrepresent the name. Already this year the city has been the meeting place of National as well as Provincial gatherings, and early in June an association of international influence will foregather.

The coming Convention of the American Foundrymen's Association, June 8th to 12th, promises an unusually instructive meeting-not only instructive, but also enjoyable, for every preparation has been made to entertain the visiting foundrymen and their friends.

The object of the exhibition is to conduct an exhibit of foundry supplies and equipment which shall be educational in its character; and it is undoubtedly true that these exhibits bear as much fruit as do the papers which