

# The Canadian Engineer

WEEKLY

ESTABLISHED 1893

VOL. 15.

TORONTO, CANADA, SEPTEMBER 25th, 1908.

No. 39

## 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	\$2.00	One Year	\$2.50
Six Months	1.25	Six Months	1.50
Three Months	0.75	Three Months	1.00

### 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, Editorial  
Representative. Phone M 2797.

Winnipeg Office: Room 315, Nanton Building. Phone 8142. G. W. Goodall,  
Business and Editorial Representative.

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, SEPTEMBER 25th, 1908.

### CONTENTS OF THIS ISSUE.

Editorial:	Page.
Dominion Railway Commission	671
British Patent Laws	672
Editorial Notes	672
Measurement of Induction in Iron	682
Leading Articles:	
Proposed Regulations for Canadian Railways	672
Maintenance of Roads	673
Report on Streets and Sidewalks	674
Specifications for Concrete Floors	675
Evolution of the Theory of Heat Engines	676
Mechanical Defects in Rails	678
As Seen By Others	677
Society Notes	679
Engineering Societies	679
Orders of Railway Commission	680
Construction News	683
Market Conditions	685

### DOMINION RAILWAY COMMISSION.

For some time the public have been awaiting a definite announcement as to the men to be added to the Dominion Railway Board.

Almost since its organization the Board have been flooded with applications, and it has been only by heroic work that they have been able to keep their heads above water.

Not only is the Board enlarged, but they have power to arrange for simultaneous sittings, so that now innumerable questions that have been delayed will, no doubt, shortly be disposed of. In the past the policy of the Board appears to have been "never to take the initiative." Whether under new conditions this will continue to be their policy remains to be seen, but we hope it will not. The offices of the Board have been to relieve injustices, and with scarce an exception the press and people have united in acknowledging the justness of orders issued. With enlarged powers and increased facilities the Board should be soon in a position, through its officials, to take the initiative and cause the correction of those regulations or conditions that are apparently unjust.

Railway Boards, like other organizations, depend as much on the men as the methods. Their knowledge of conditions, their sympathies and their power to recognize the real question under consideration will be sorely tried by the many pleaders that will appear before them. The men selected will prove equal to the task of regulating our transportation companies.

Mayor Darcy Scott, K.C., of Ottawa, has been appointed Assistant Chief Commissioner. A successful railway lawyer, for years solicitor for one of the large Canadian railways, he will be familiar with many railway questions from the railway side. Were Mr. Scott simply a railway lawyer, his usefulness on the Commission would be doubtful, but he is more. A man experienced in municipal government and an officer of the Union of Canadian Municipalities, he has repeatedly given evidence of his ability to maintain even-handed justice.

The Hon. Thomas Greenway will be familiar with the transportation problems. A resident for years of the Middle West, he has had an experience reconciling conflicting interests.

Prof. S. J. McLean's appointment will be a most acceptable one throughout the Dominion, as he is a man of eminent qualifications for the position. It was largely through the investigations which were made by him into railway commissions of the United States that this institution was introduced into Canada. In that respect Prof. McLean is entitled to recognition as the father of the Railway Commission idea in Canada. Prof. McLean had a most brilliant career at Toronto University, from which he took the Mackenzie Fellowship in 1894-5, afterwards holding fellowships in Columbia University, New York, and in Chicago University. In 1897 he was appointed to the chair of history and economics in the University of Arkansas, from which he later removed to the professorship which he now holds in the University of Toronto.

Prof. McLean brings to the duties of his position on the Railway Board a mind trained in economics, and will be a most valuable addition to the personnel of the Board.