

The Canadian Engineer

VOL. X.—No. 10.

TORONTO AND MONTREAL, OCTOBER, 1903.

PRICE 10 CENTS
\$1.00 PER YEAR.

The Canadian Engineer.

ISSUED MONTHLY IN THE INTERESTS OF THE

CIVIL, MECHANICAL, ELECTRICAL, LOCOMOTIVE, STATIONARY,
MARINE, MINING AND SANITARY ENGINEER, THE SURVEYOR,
THE MANUFACTURER, THE CONTRACTOR AND THE
MERCHANT IN THE METAL TRADES.

SUBSCRIPTION—Canada, Great Britain and the United States, \$1.00 per year;
foreign, 6s. Advertising rates on application.

OFFICES—18 Court Sts. Toronto; and Fraser Building, Montreal.
Toronto Telephone, Main 4310. Montreal Telephone, Main 2589.

BIGGAR-SAMUEL, LIMITED, Publishers,

All business correspondence should be addressed to our Montreal office. Editorial matter, cuts, electros and drawings should be addressed to the Toronto Office, and should be sent whenever possible, by mail, not by express. The publishers do not undertake to pay duty on cuts from abroad. Changes of advertisements should be in our hands not later than the 15th of the preceding month or if proof is desired, 4 days earlier.

CONTENTS OF THIS NUMBER :

Atlas Steel Works, Sheffield, John Brown & Co.	277	Marine News.....	287
British Iron and Steel Institute	275	Municipal Convention.....	263
Canadian Manufacturers Association	265	Mining Matters.....	291
Concrete Bridges and their Advantages	269	New Companies.....	267
Canal across Scotland	273	New Catalogues.....	265
Dominion Exhibition, The.....	267	Personal	284
Dodge Exhibit in Machinery Hall	277	Planer, Type Milling Machine.....	271
Drummond, Geo. E.....	264	Pratt Return Steam Trap	270
Engineers Club of Toronto	267	Railway Matters.....	285
Factory Inspectors, Convention of.....	290	Science and Invention.....	283
Hydraulics, New Force in.....	269	Storing Coal beneath Water.....	269
Industrial Notes	279	Sounding in a Rapid	289
Rogers, The Late Samuel.....	266	Transformers, Self-Cooling.....	271
Light, Heat, Power, etc.....	281	Telephone Act, Need of a General.....	277
Literary Notes.....	266	Temiskaming and Northern Ontario Railway	265
Metal Imports from Great Britain.....	273	Waterworks Improvements at St. John's, Newfoundland.....	270
Montreal Waterworks.....	273	Waterworks Convention.....	288
Municipal Works, etc.....	280	Wholesale Hardware Association.....	265

THE MUNICIPAL CONVENTION.

The Union of Canadian Municipalities, which held its third annual convention in Ottawa last month, has already justified its existence, by its work during the past year in opposing the encroachments on the rights of municipalities by private corporations. By wise and conservative management, and by the provision of a fund for collecting statistics in the future, regarding the departmental work of all the cities and towns of Canada, such an institution will be of immense value to the growing numbers of Canadians who are making a study of municipal problems. The town or village is the primary unit in the public life of the country at large, and those who successfully solve a new problem in the life of their own municipality will prove themselves best qualified to deal with the larger questions of province and commonwealth. In other words, the town, village and township councils are the best schools of training for our future representatives in the Provincial and Dominion Parliaments. Although the subject does not appear to have been broached at the Ottawa convention, one of the first moves it should make is the formation of a statistical committee with machinery for the collection and annual publication of statistics of the

various departments of work carried out under the municipal authorities. The Ontario Government is the only Provincial Government publishing a report on its municipalities, and this does not touch on the questions of most concrete and practical importance to the alderman or councillor who is called on to decide the best methods of carrying out local works and the suitability or otherwise of new appliances and new inventions that are brought to his notice. It is not to be expected that the average town councillor will become an expert by this means, but he will gain such a general knowledge as will enable him to give a more intelligent support or criticism of the plans and recommendations of engineers—for after all it is ignorance more than corruption in a council which is the despair of an engineer.

The suggestion of Mayor Urquhart, of Toronto, that each province should evolve its own union of municipalities, and that these groups of unions should form a sort of federal municipal parliament, is a good one, for the reason that each province has its own local difficulties brought about by unwise provincial legislation in the past, and by invasions of local rights in current legislation, which invasions only those immediately affected can deal with. The federal and provincial conventions could be held at one meeting, each province forming a "section," as at the meetings of the British Association; and all joining when questions common to all were discussed.

The recommendation of a committee at the Ottawa convention that the municipalities combine to seek legislation under which they could borrow on united credit, would be found to be a great mistake if ever carried out—which it is not likely to be. Even if such legislation were obtained it would end in the rupture of the union if ever carried out. Some of our cities are intelligently and economically governed; but the finances of other cities are administered with shameful extravagance and recklessness, if not with dishonesty. Will a town governed by clean hands and managed by clear heads desire to become responsible for the Turkish misrule of another town over whose doings it could have no control? To do so would only give a looser rein to the riotous rule of men who are already a calamity to their kind. No well governed municipality would voluntarily lower its financial credit by putting its head into such a noose; and if the union values its own character for discretion it will quietly drop this proposal. Let each municipality reap the reward of its own wisdom or folly, as the case may be.

For the rest the union of Canadian municipalities has before it a wide field of future usefulness, and it is encouraging to learn that already there are 106 municipalities in the union, of which 26 are cities, 59 towns, and 21 other municipalities; this being a considerable increase over last year.