

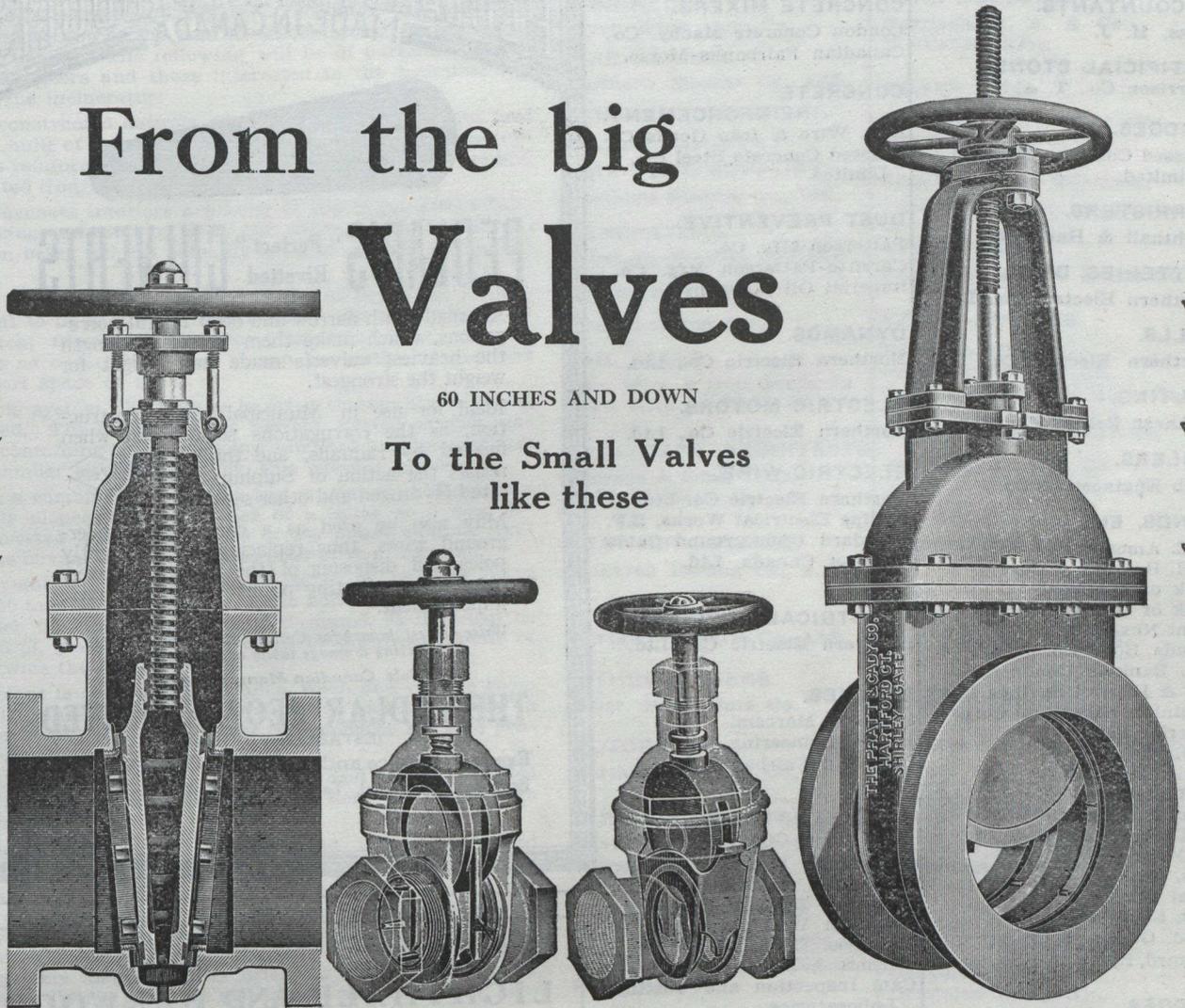
PAGES

MISSING

From the big Valves

60 INCHES AND DOWN

To the Small Valves
like these



Pratt & Cady Valves

Meet Every Waterworks Need

with dependable products, specified by leading engineers—now in use in leading waterworks plants—and each valve embodying some improvement over other makes. That slight difference between a PRATT & CADY product and the others makes the Triangle Trade Mark stand for what it does, in the minds of “experienced” users of waterworks valves. The P. & C. series of booklets, form one of the handiest, most useful and complete index of good waterworks specialties obtainable. Send for the set today.

Let us Quote on your Valve Specification

The Canadian Fairbanks-Morse Co., Limited

St. John, Montreal, Quebec, Ottawa, Toronto, Hamilton, Winnipeg,
Saskatoon, Calgary, Edmonton, Vancouver, Victoria.

Canada's Departmental House for Mechanical Goods

BUYERS' DIRECTORY

ACCOUNTANTS.

Ross, H. J.

ARTIFICIAL STONE.

Morrison Co., T. A.

BRIDGES.

Trussed Concrete Steel Co., Limited.

BARRISTERS.

Lighthall & Harwood.

BATTERIES, DRY.

Northern Electric Co., Ltd.

BELLS.

Northern Electric Co., Ltd.

BELTING.

McLaren Belting Co., J. C.

BOILERS.

Robb Engineering Co.

BONDS, Etc.

A. E. Ames & Co.
C. H. Burgess & Co.
Bank of Montreal.
Bank of Ottawa.
Brent Noxon & Co.
Canada Bond Co.
Can. Bank of Commerce.
City & District Savings Bank.
Dominion Securities Corp.
Imperial Bank.
A. Jarvis & Co.
Mackenzie & Co.
A. H. Martens & Co.
Merchants Bank.
W. L. McKinnon & Co.
H. O'Hara & Co.
Ross, H. J.
Royal Bank.
N. B. Stark & Co.
Wood, Gundy & Co.
Bongard, Ryerson & Co.

BRIDGES.

Canadian Bridge Co.
Dominion Bridge Co.,

CABLES.

Northern Electric Co., Ltd.
Phillips Elec. Works, E. F.
Standard Underground Cable Co. of Canada, Ltd.

CAST IRON PIPES.

Can. Iron Corporation.

CONCRETE MIXERS.

London Concrete Machy. Co.
Canadian Fairbanks-Morse,

CONCRETE REINFORCEMENT.

Can. Wire & Iron Goods Co.
Trussed Concrete Steel Co., Limited.

DUST PREVENTIVE.

Patterson Mfg. Co.
Carritte-Patterson Mfg. Co.
Imperial Oil Company.

DYNAMOS.

Northern Electric Co., Ltd.

ELECTRIC MOTORS.

Northern Electric Co., Ltd.

ELECTRIC WIRE.

Northern Electric Co. Ltd.
Phillips Electrical Works, E.F.
Standard Underground Cable Co. of Canada, Ltd.

ELECTRICAL SUPPLIES.

Northern Electric Co., Ltd.

ENGINES.

Bellis & Morcom.
Robb Engineering Co.
Canadian Fairbanks-Morse,

ENGINEERS & CONTRACTORS.

Aqueducts, Limited.
Bayfield & Archibald.
Beaubien De Gaspe.
Thomson W. Chase.
Brandels, Charles.
Burnett & McGugan.
Can. Inspection and Testing Laboratories.
Cartwright, Mathieson & Co.
Chipman & Power.
Fairchild, Jones & Taylor.
Francis, Walter J. & Co.
Galt Eng. Co., The John
Jacobs & Davies, Incp.
Laurie & Lamb.
R. S. & W. S. Lea.
McCulloch, A. L.
Murphy & Underwood.
Murray, T. Aird.
Ross & Co., R. A.

PEDLAR'S PERFECT PRODUCTS
MADE IN CANADA



PEDLAR'S "Perfect" RIVETTED CULVERTS

Are made with narrow and deep lateral corrugations, which make them length for length the heaviest culverts made and weight for weight the strongest.

Ideal for use in Municipal sewer construction, as the corrugations scour clean when flushed by rainfalls, and the resists the action of Sulphur- etted Hydrogen and other sewer gases.

May also be used as a conduit for underground wires, thus replacing the unsightly poles and disposing of the dangerous overhead wires, effecting public safety and civic improvement.

Write nearest branch for Culvert Reference Book No. 4, M.J., giving drainage tables and valuable data.

Sole Canadian Manufacturers:

THE PEDLAR PEOPLE LIMITED

(ESTABLISHED 1861)

Executive Office and Factories: OSHAWA, Ont.
Branches: Montreal, Toronto, Ottawa, London, Winnipeg
85.p

W. D. Lighthall, K.C., M.A., F.R.S.L., &c. C. A. Harwood, B.C.L.
Cable Address - - "LIGHTHALL"

LIGHTHALL AND HARWOOD

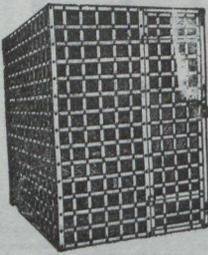
BARRISTERS, SOLICITORS, ADVOCATES, &c.
Chambers - QUEBEC BANK BUILDING
Place d'Armes - - - - MONTREAL

A VENDRE

"TAMCO" Pierre Concassée, de toutes dimensions. Gravier pour couvertures. Pierre artificielle "Roman." Brique pressée "Milton." Concasseurs de pierre. Pompes à incendies, etc.
T. A. MORRISON & CIE,
204 Rue St-Jacques,
Tél. Main 4532. Montréal.



Jail Cells



We are Headquarters for all Classes of
PRISON WORK

Our Village and Town cells are all equipped with our Patented Automatic Locking Device No Padlock to bother with.

Inquiries Solicited

Canada Wire & Iron Goods Co.

HAMILTON, Ont.

H. J. ROSS

ACCOUNTANT TRUSTEE

(Member, Special Committee of the U.C.M. on Uniform Municipal Accounting)

Municipal Audits a Specialty
Municipal Bonds Negotiated
Estates Managed

180 St. James St., Montreal

THE IDEAL INCINERATOR.

The City of Berlin, Ont., has just opened a new incinerator plant which was designed and built by the Ideal Incinerator and Contracting Company of Toronto. The plant has proven to be one of the best in efficiency and smallness of cost in running. The following will be of particular interest to engineers and those interested in the technical details of the incinerator:

It is constructed entirely of fireproof material. The first story is built of concrete; the dumping floor above the furnaces is reinforced concrete; the second floor is of steel and corrugated iron, and the smokestack is of brick.

The furnaces interiors are built of fire brick with asbestos packing and common brick and concrete, the whole construction being held in place by a series of rods and buckstays.

Each furnace working independently of the other, enables the plant to be in operation constantly. This feature is an economical factor of no mean importance. Again, the plant is so constructed that it can be easily cleaned and in a short space of time.

By this system all garbage is dried thoroughly before it is burned. The combustion is perfect, heated oxygen water gas containing hydrogen being admitted into the combustion chamber at all times by this special process.

Being a combined incinerator and crematory, animals can be easily disposed of, a carcass of a horse or a cow being converted into ashes inside of 2½ hours without having to be cut up or slacking the speed of the furnaces.

The plant will take care of 15 tons in about 10 to 12 hours, 30 tons in 24 hours, but if the additional cell is built, for which the building is already designed, 45 tons can be disposed of, which capacity is equal to the requirements of a city twice the size of Berlin.

The plant is complete with office, wash and clothes room and toilet, and electrically lighted inside and arc lamps on the approaches, water and sewer conveniences are also provided for.

The Dumping Platform—All garbage and refuse is hauled to the approaches and then dumped here to be fed into the furnace.

Charging Holes — All garbage and refuse deposited through the manholes, falls into the drying hearth below.

Drying Hearths—This drying hearth slopes towards the grates, and is in a direct line with the heat and flames on their way to the combustion chamber. At this point all combustible material is rapidly destroyed and the wet matter is quickly and efficiently dried by heat penetrating through it. When dry, this material is raked over the fire-grate.

Fire Grate—The fire-grates are fed from the drying hearth above where all refuse is reduced to ashes and incombustible clinkers.

Pull Down and Clinker Door—The pull-down is situated in the centre of the clinker door and is used for stoking the fire. The big clinker door gives easy access to the entire grate area, which is very necessary when employing forced draft and it is opened by counterbalance weights.

Draughts and Air Ducts—The motor driver suction fan draws through the ducts all foul air, smoke and dust arising from the charging floor and furnaces below. Thus not allowing any odors to arise from the plant.

This air is then carried to the generator where it is heated by waste gases, then conducted to the ash pits under the grate burned in the combustion chamber.

This hot forced draught is a most essential feature in burning large quantities of manure, night soil, etc., and it saves additional fuel, and adds to the rapidity and efficiency of its destruction.

Combustion Chamber and Flue—They are so constructed to burn all gases; collect all dust and carry the smoke off in an unoffensive condition.

Second Combustion Chamber and Preheater—The second combustion chamber is designed to burn all gases that emanate from the cremating of animals; also insuring perfect combustion of all gases that escapes from the First Combustion Chamber in damp days, or when the fires are low in the furnaces.

The Preheater is constructed inside the flue and heats all the air for the furnaces.

Dust Pockets, Paper Screens and Dampers—The dust pocket catches all the dust and prevents any going up the stack. The paper screen catches all the loose burning paper from out of the stack. The damper is to regulate the draft of the chimneys.

BUYERS' DIRECTORY—Continued**ENGRAVERS.**

Amer. Bank Note Co.

FIRE ALARMS.

Northern Electric Co., Ltd.

FIRE BRICK MASONRY.

Ideal Incinerator Co.

FIRE DEPT. SUPPLIES.

Northern Electric Co., Ltd.

GENERATORS.

Northern Electric Co., Ltd.

INCINERATORS.

Ideal Incinerator Co.

JAIL CELLS.Can. Wire & Iron Goods Co.
Page Wire & Fence Co.**LANDSCAPE ARCHITECTS**Mawson & Sons, Thos.
Todd, Frederic G.**LEATHER BELTING.**

McLaren Belting Co., J. C.

LIGHTING.

Northern Electric Co., Ltd.

LITHOGRAPHERS.

Amer. Bank Note Co.

MOTORS.

Northern Electric Co., Ltd.

STREET NUMBERS.Davidson Mfg. Co., Thos.
Warminton, J. N.**ORNAMENTAL IRON.**

Can. Wire & Iron Goods Co.

PAVEMENTS.Carritte-Paterson Mfg. Co.
Paterson Mfg. Co.
Trussed Concrete Steel Co.,
Limited.**POLES.**

Northern Electric Co., Ltd.

POLICE SIGNAL SYSTEMS

Northern Electric Co., Ltd.

PUBLIC ACCOUNTANTS.Ross, H. J.
Abbott, Stein & Co.**PUBLICATIONS.**

Imperial Year Book.

RAILINGS.Can. Wire & Iron Goods Co.
Page Wire & Fence Co.**ROAD MACHINERY.**Morrison, T. A. & Co.
Canadian Fairbanks Morse Co.**ROAD PRESERVATIVE.**Asphalt and Supply Co.
Carritte-Paterson Mfg. Co.
Patterson Mfg. Co.
Trussed Concrete Steel Co.,
Limited.
American Oil Company,**ROAD ROLLERS.**Morrison, T. A. & Co.
Wettlaufer Bros.**SEWER PIPE.**Dominion Sewer Pipe Co.
Morrison, T. A. & Co.**SEWER PIPE MOULDS.**

London Concrete Machy. Co.

STAIRCASES.

Can. Wire & Iron Goods Co.

STEAM ENGINES.Belliss & Morcom.
Robb Engineering Co.
Canadian Fairbanks Morse Co.**STEAM FIRE ENGINES.**

Morrison, T. A. & Co.

STONE.

Roman Stone Co.

SHEET METAL.

Pedler People, Ltd., The

STONE CRUSHERS,

Canadian Fairbanks Morse Co.

STREET NAMES.Davidson Mfg. Co., Thos.
Warmington, J. N.**STRUCTURAL STEEL.**Canadian Bridge Co.
Dominion Bridge Co.
Belliss and Morcom.
Pedler People, Ltd., The**SUPPLIES & MACHINERY.**

Morrison, T. A. & Co.

TELEPHONES.

Northern Electric Co., Ltd.

TURBINES.Belliss & Morcom.
Robb Engineering Co.**WATER WORKS SUPPLIES**

Dom. Wood Pipe Co.

WIRE, ELECTRIC.Northern Electric Co., Ltd.
Phillips Electric Works, E.F.
Standard Underground Cable
Co. of Canada, Ltd.**WINDOW GUARDS.**

Dom. Wood Pipe Co.

WOOD STAVE PIPE.Can. Wire & Iron Goods.
Dom. Wood Pipe Co.

**SENTINELS OF
THE REAL HOME GUARD**

Thugs shun the City protected by the
Newly Improved *Northern Electric*

**==GAMEWELL==
POLICE SYSTEM**

Give a criminal an hour's lee-way and he'll take a chance on a clean get-away. This new system cuts out the hour's delay and throws the police net out over the whole city in a few seconds. It provides not only for patrol men calling the station, but also for the station calling the patrol men.

Your Police Department can make new records of efficiency with this new system

Write our nearest office for full particulars

Northern Electric Company
LIMITED

Montreal Halifax Toronto Winnipeg Regina
Calgary Edmonton Vancouver Victoria

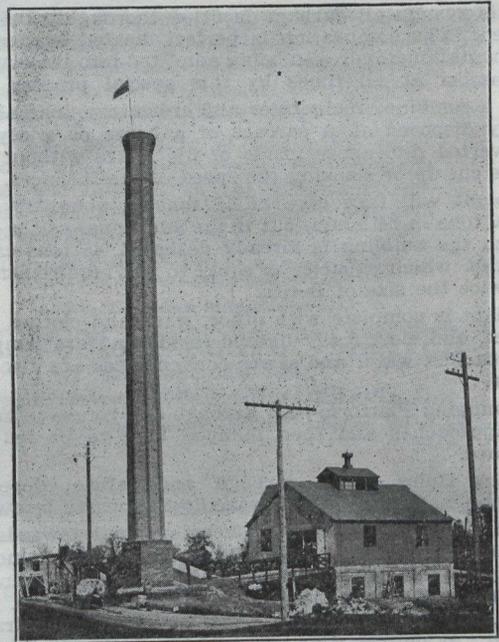


"IDEAL"

MADE IN CANADA

MUNICIPAL INCINERATOR

Was officially opened at
BERLIN, Ontario,
.. May 28th, 1915 ..



This Ideal High Temperature Destructor during the Demonstration Test consumed 15 tons of garbage in 8 hours, and one horse weight, 1385 lbs., in 20 minutes.

The Ideal Incinerator and Contracting Co., Limited, designed and built the whole plant including Building, Furnaces, Flues and Chimney by their own expert men.

Plant was commenced on Feb. 28th, 1915, and was completed April 28, 1915, in record time. This was accomplished during zero weather, not deducting bad weather.

Capacity of Plant 30 tons per day.

This plant is fireproof throughout.



WRITE FOR FULL INFORMATION



**No. 2 Manning Arcade Annex
TORONTO**

ALPHABETICAL INDEX OF ADVERTISERS

	PAGE		PAGE		PAGE
Asphalt and Supply Co.	260	Fairchild, Jones & Taylor.....	259	Northern Electric Company....	228-229
American Bank Note Co.....	Cover 4	Francis, Walter J. & Company....	259	O'Hara & Co., H.....	253
Ames, A. E. & Co.....	249	Galt Engineering Company, The		Pedlar People, Ltd., The	226
Bongard Ryerson & Co.....	254	John.....	258	Paterson Manufacturing Company.	
Bank of Montreal.....	256	Ideal Incinerators	Cover 2	Limited.....	230
Bank of Ottawa.....	255	Imperial Bank of Canada.....	255	Phillips Electrical Works, Eug. F..	Cov. 1
Bayfield & Archibald.....	258	Imperial Year Book.....	Cover 2	Page Wire Fence Company, Limited	
Brandies, Charles.....	258	Jacob & Davis.....	259	.....	Cover Page 3
Burnett & McGugan.....	258	Jarvis and Co. A.....	250	Robb Engineering Company.....	
Belliss & Morcom.....	Cover Page 2	Kahn Concrete Steel Company		.....	Cover Page 4
Burgess, C. H. & Co.....	251	.....	Cover Page 2	Ross, H. J.....	227
Brent Noxen & Co.....	251	Lighthall & Harwood.....	227	Ross & Company, R. A.....	259
Canadian Fairbanks.....	225	Laurie & Lamb.....	Cover Page 2	Royal Bank of Canada.....	256
Canadian Bank of Commerce.....	256	Lea, R. S. & W. S.....	259	Standard Underground Cable	
Canadian Bridge Co., Limited C'r	Page 3	Lesperance, A. P.....	254	Company of Canada.....	Cover 2
Canadian Inspection and Testing		London Concrete Machinery		Stark & Company, N. B.....	255
Laboratory.....	259	Company.....	Cover Page 4	Tarvia.....	230
Carritte-Paterson Manufacturing		Mawson & Sons, Thos. H.....	258	Trussed Steel Concrete Company...	
Company.....	238	McLaren Belting Company.....	Cover Page 4	.....	Cover Page 2
City & District Savings Bank.....	254	McCulloch, A. L.....	258	Thomson, Chase.....	259
Clement, E. C.....	258	Merchants Bank of Canada.....	256	Todd, Fred. R.....	259
Canada Bond Corporation.....	253	Morrison & Company, T A.....	227	Warminton, J. N.....	Cover Page 2
Canada Wire and Iron Goods Co. .	227	Marten & Co., A. H.....	254	Wood, Gundy & Company.....	49
Davidson Manufacturing Company,		McKinnon, W. L. & Co.....	250		
Limited.....	Cover Page 3	Mackenzie & Co., W. A.....	253		
Dominion Bridge Company		Murray, Aird & Lowes	258		
Limited.....	Cover Page 4	Matthews & Co., R. C.	250		
Dominion Securities Corporation....	250				
Dominion Sewer Pipe Company					
.....	Cover Page 3				



Measure Fire-fighting Efficiency by Minutes—
Not by Number of Men and Miles of Hose.

Northern Electric Company
LIMITED

MONTREAL HALIFAX TORONTO WINNIPEG REGINA
CALGARY EDMONTON VANCOUVER VICTORIA

Sole Manufacturers in Canada of

NORTHERN ELECTRIC GAMEWELL FIRE ALARM SYSTEM

“FOR MINUTE-SAVING EFFICIENCY.”

This
Like every fire—
started small

CHICAGO's great fire started in a cow-stable. Baltimore's started with a little flicker in a factory. A building never "bursts into flames"—until minutes after it has started. Save those minutes and you prevent big fires!

The Greatest of Minute-Savers is
an EFFICIENT Alarm System

["Made in Canada"]



Better Roads and Lower Taxes——

*Beaconsfield Station Road
Beaconsfield, P. Q.*

The automobile has radically changed the problem of the road builder. What is required now is a form of road construction which will not only give a good surface the whole year round, but which will be able to withstand motor traffic.

Tarvia furnishes the solution.

Tarvia is a dense, viscid coal tar preparation. It is made in several grades to meet varying road conditions. Used in road construction it forms a matrix about the stone, making a tarvia-concrete which is

waterproof and automobile-proof. As it is slightly plastic it is not abraded by automobile driving wheels, but is simply rolled down smooth allowing no dust or mud to form.

The cost of maintenance is so greatly reduced by the Tarvia treatment that its use is a real economy.

Suburban streets should be treated with Tarvia to secure a handsome, cleanly, mudless pavement at low cost. County and state thoroughfares and highways should be treated with Tarvia to keep down maintenance expense.

Special Service Department

This Company has a corps of trained engineers and chemists who have given years of study to modern road problems. The advice of these men may be had for the asking by anyone interested.

If you will write to the nearest office regarding road problems and conditions in your vicinity the matter will have prompt attention.

THE PATERSON MANUFACTURING COMPANY, LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER

THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

THE CANADIAN MUNICIPAL JOURNAL

AND REVIEW OF CIVIC IMPROVEMENT

SUBSCRIPTION RATES

City of Montreal and
United States - \$1.25
Canada, Great Brit-
ain and Countries
in Postal Union - \$1.00

Published Monthly by

The Canadian Municipal Journal Co., Limited

HARRY BRAGG President
FREDERICK WRIGHT Editor
H. WISELY BRAGG Business Manager

All communications to be made to Canadian Municipal
Journal

CORISTINE BUILDING, MONTREAL
Telephone Main 4362

Any article appearing in
these pages may be re-
produced provided full
credit is given to the
Journal.

Although the Canadian Municipal Journal is the Official Organ of the Union of Canadian Municipalities and other bodies named below, yet these are not responsible for any other matter published in it than what in each article or itself is stated to be authorized by either of these bodies

Official Organ of the Union of Canadian Municipalities

"Municipal from cover to cover"

Circulates in every city, town and village

Vol. XI

JULY, 1915

No 7

CONTENTS.

The Unemployed	232	Canada's Fire Losses	241
Reconstruction (Sir John Willison)	234	Mayor Waugh of Winnipeg	242
Unemployment Conference	235	Municipal Taxation (Adam Shortt)	242
Develop the People (Dr. C. C. James)	235	Pan. American Road Congress	245
The Road Drag	237	Past and Present Government of Montreal	246
Public Works in Smaller Towns (R. Dawe)	238	How Capital Expenditures are Paid For	248
The Ideal City (Late Canon Barnett)	239	Municipal Finance (James Murray)	249
British Columbia (Councillor Loutet)	240	Municipal Borrowing (J. J. Gallaway)	251
Water Supply (S. M. Swabb)	241	Saskatchewan Bonds	253

BONUSING INDUSTRIES.

In the May issue of this Journal we had occasion to condemn the indiscriminate bonusing of industries by municipalities. Probably some of them are advanced under the impression that such methods would meet the approbation of manufacturers as a whole. That is not so is best exemplified in the following editorial taken from the June issue of Industrial Canada, which is published by the Canadian Manufacturers Association.

That Canadian municipalities are getting tired of a system of bonusing industries is the statement made by the "Canadian Municipal Journal," the official organ of the Union of Canadian Municipalities.

"With one or two exceptions the only result has been an increased burden on taxpayers," it says, "and one dares venture to state that if a consensus of opinion could be got from all the municipalities of Canada, which have been in the habit of giving bonuses as an inducement to build up an industrial life, it would be found that they have been heavy losers. Bonusing means the paying of good money, which could be better spent in local improvements, as an inducement to responsible manufacturers to locate in a given place."

With the above statements "Industrial Canada" on the whole agrees. There are undoubtedly some instances where a city or town has been repaid for the bonus given to a deserving manufacturing company. Individual cases give rise to special considerations and must be dealt with as the circumstances warrant; but, as a general rule, a manufacturer in looking for a site considers the proposed location only in regard to its suitability for industrial purposes, realizing that a bonus may be lost many times over if it ties him to a poor site amid unfavorable conditions. Moreover, the practice of bidding against one another for industries, which is indulged in by some municipalities, leaves them open to exploitation by unscrupulous promoters. Unless special considerations apply, modern conditions demand that a manufacturing site must stand on its own merits without the support of a bonus.

We are glad of the opportunity to reproduce this editorial for another reason than just the vindication of our criticism. It is to lay down and emphasize this proposition: that no municipal council, in the

face of this deliberate statement of the Canadian Manufacturers Association, should make bonusing a feature of its publicity literature. It has no attraction for the responsible manufacturer, and no other is worth considering.

PURCHASING SUPPLIES

Since the Imperial government is about to utilize the purchasing department of the Canadian Pacific Railway, because of the completeness of its system, in the placing and carrying out of war orders in this country, it is worth while noting that the C. P. R. method of purchasing supplies has just been adopted by the City of New York, on the report of a special commissioner who had been sent throughout the continent to study the methods of large purchasing concerns; both public and private. The report said of the C. P. R. system that it was "the best for efficiency and saving." It is certain that brains had been used to work out such a system, and when it is realized that it was Sir Thomas Shaughnessy, when he was purchasing agent for the big railway company, who established the present department, the evidence is conclusive. How far Canadian cities have adopted the C. P. R. method we don't know but they could not do better than investigate, for when a city like New York, (and we understand at least a dozen more American cities), with its municipal purchasing of supplies to the amount of \$22,000,000 annually has adopted the system as the best and most saving, and the Imperial government is using it as the best means of purchasing in Canada, the department of the C. P. R. for that purpose must be perfect with its centralized system of buying—no duplicating, and no waste.

To enable our readers to know something about the C. P. R. way of buying supplies we hope next month to publish an article on the subject.

The Unemployed

On July 20th, a special meeting of the Union of Canadian Municipalities will be held at Niagara Falls to consider municipal problems that have arisen through the war; the principal one being that of unemployment, which is now having a serious effect on the progress of our cities. Last month, as a consequence of a meeting of Mayors at Ottawa, who presented a memorial to the Government urging that a commission be appointed, we gave an analysis of the situation as we understood it. We have since been given to understand that the Government is desirous of knowing the exact number of unemployed in the cities, with their classification, for it appears that the statistics of unemployed at the Department of Labor—showing approximately 57,000—do not corroborate the figures of the municipal delegation, which claimed over 33,000 in the prairie provinces alone. How the Department of Labor gathers its statistics we do not know, but if 57,000 represent all the unemployed in Canada, something must be wrong, as the figures we have in this office—as the result of inquiries sent out in November last by the U. C. M.—appear to show that the department is very much out of it. In thirty cities over 100,000 were out of work then, and the number has increased considerably since, in spite of the war orders. Perhaps the opening of the navigation and other summer occupations may alleviate the situation for a short time. But to get fairly accurate figures at the present moment, the U. C. M. has again sent out a form of enquiry, which we urge the municipalities to fill up and return as soon as possible, so that a working basis can be formed on which to build up a better system of employment.

The unemployment problem may be divided for practical purposes into two classes—agricultural and industrial. At the congress of mayors, principally Western, the agricultural problem, as it affects the cities, was more or less thrashed out, and the conclusions embodied in the government memorial. The industrial problem has yet to be worked out. This will be the more difficult of the two, for there will be no question of harvest to act even as a temporary relief. Even this industrial aspect can be solved if commonsense measures are used. In the memorial, a commission is suggested. It is possible that the Government before appointing one may select a commissioner to bring together responsible representatives of the federal and provincial governments, of the principal cities, and of the captains of industry, and the leaders of labor, for a round table conference. It must not be forgotten, as constantly pointed out by the Ottawa authorities that the Provincial governments are the sponsors for the municipalities, and it is very evident that the Cabinet, before they make a move will want to know exactly where the Federal Government stands, and how far it will be backed up in thus creating a precedent. This is quite right, though, as pointed out in our statement of last month the federal government has a direct responsibility in some of the causes of unemployment. We understand that the Minister of Labor, at the instigation of the leaders of labor, tried to bring about such a conference last October, but his overtures failed, probably because the seriousness of the situation had not been brought home to those responsible. Be that as it may be, the burden

that the municipalities now have to bear, is largely because of this shifting of responsibility. This must be ended, for there is a grave responsibility on each of the three groups of authorities concerned, and they must immediately come together and apportion the burden. Not even the North America Act is going to save either the Federal or provincial governments from the moral responsibility of their share in taking care of the tens of thousands now walking the streets, have nothing to do.

The unemployed problem in Canada is a serious one, and must be handled without gloves if a solution is to be attained. The municipalities, without being the cause, bear the effects of it. Part only of the responsibility is theirs, which they have not only taken up, have also had to carry that of the provincial and federal authorities. Systematization and concord would make each of these shares a comparatively light one and attain permanent advantages.

TRADE EXPANSION.

At the coming meeting of the U.C.M. the executive will take up a subject under the title of "Policy towards Germany and Austria," which at first sight would seem outside the province of the municipalities, but as the idea is to discuss ways and means of creating more trade in Canada, as a means of relieving the unemployment strain now on the Councils, by finding a market for the labor on their hands, we cannot help but congratulate the executive on their courage in taking up the subject. We firmly believe that a frank discussion will do much to show our municipal executives that within their respective cities is the potentiality of a prosperity they did not know, and which they ought not to leave entirely to the Boards of Trade.

THE LATE MAYOR RATHWELL OF LACHINE, P. Q.

It is with deep regret that we publish the sudden death of the Mayor of Lachine, P.Q. which took place June 12 while he was walking in his garden. The cause of death was heart failure. Those who had the opportunity of meeting Mr. Rathwell at the Sherbrooke convention of the U. C. M. when he represented his city, found in the Mayor one of the most courteous of men and one who took a keen interest in the proceedings. Elected eight years ago as an alderman, in 1911 the citizens promoted him to the mayoralty of his native municipality—where he was born fifty years ago. His work both as alderman and mayor took up all his spare time; he taking advantage of every opportunity for the betterment of the community. A splendid business man—he was manager of Dawes' brewery, a position he had risen to from office boy—the late Mr. Rathwell introduced business methods into the proceedings of the Council, and his successor will have a hard task to keep up the standard of efficiency he set his colleagues. Our sympathy goes out to the city council of Lachine in the loss of a valuable colleague, and to his family in the loss of one of the best of men and fathers, and to his city which is deprived of a faithful friend and protector.

The successor to the late Mayor Rathwell is Alderman L. A. Amos.

AN APPRECIATION FROM SENATOR DAVID.

City Hall, Montreal, June 11th, 1915.

Dear Sir,—I have read with interest your editorial on the "Municipalities and the Unemployed. Your views are entirely in accord with the resolution which I moved in the Senate at the end of last session, and which was adopted unanimously, and with the views which I have so often expressed in the last forty years. Yes, forty years ago I commenced to ask that some aid should be given to the prospective poor settlers, especially in wooded districts where the clearing of the land is so difficult. Thousands of people would be happy to establish themselves on our land if they had the means of doing it.

I have also read with interest the article written by Major Stephens. . . . Such writings do much good.

Yours truly,

(Signed) L. O. DAVID.

CIVIC GOVERNMENT MORE THAN BUSINESS.

To quote from an article in the "Public," one reason for "the unsatisfactory condition of municipal government in the United States is our practice of putting complicated business in inexperienced hands." The intimation is strong that the hands should be trained in commercial methods before they are intrusted with the operation of commercial enterprises. "The Canadian Municipal Journal," in commenting on this opinion, deprecates the notion that administrators should be trained in commercial methods, stating that the true civic spirit is fostered by concentration upon administrative qualities rather than through attempting to develop those which go to make success in the commercial world. Our municipal as well as our Federal government has matters of grave importance to claim the attention of public officials and their energies should not be diverted for the performance of purely commercial kinds of work. In other words, the function of government is to administer and regulate, but not to manufacture and trade.—Municipal Ownership.

PETITION TO GOVERNMENT FROM AUSTRIAN RESIDENTS.

Nine hundred Austrians resident in Port Arthur and Fort William, through the Mayors who had come to Ottawa to attend a meeting of the Union of Canadian Municipalities on the problem of unemployment, have petitioned the Prime Minister asking that steps be taken to secure employment for them. Because of their nationality they assert they are refused work. In return for it they pledge faithful labor. The petitioners say they left Austria because of conditions there, and came to Canada because of regarding it as a better country to live in. In its development they wish to assist. They want work to that end, and also to overcome the indignity of accepting charity.

THE SHIP OF BUSINESS.

A municipality is like a business ship ploughing through waters of competition. The rocks which threaten wreck are carelessness, laxity and waste. The ship sinks—the concern fails—not through the big holes staved in the sides. Those are apparent. All hands rush to them, and danger can be met and averted. It is the little leaks, the scarcely perceptible cracks, which mean sure wreck. Those are overlooked. In time they cause the whole ship to be submerged. They sink it. Stop the little leaks. Watch for them. Keep the machinery well oiled, and make all hands work in harmony. Let the man in the pilot house have absolute power. Then steer a straight course for the port of efficiency—which is the harbor of success.

ENGLISH MUNICIPALITIES RUN RACE MEETINGS.

In England at least two of the municipalities derive considerable income from racing. In Doncaster where the race meetings are run directly by the Council, the profits are usually sufficient to pay for all local improvements. In Chester the city derives one eighth of the gross receipts, which this year, on account of the war, was considerably less than previous years, amounting to \$6,625.

TORONTO'S RESTAURANTS.**Marked Improvement—They Are Now a Credit to Any Great City.**

Within the last two years the restaurants of Toronto have improved to such a great extent, that one scarcely recognizes them as the same places they formerly were.

The improvement is especially noticeable in the cleanliness and order of kitchens, the improved quality of foods and the cleanliness of employees and utensils. These advances have been gradually brought about since the fall of 1913, when special regulations were passed compelling restaurant proprietors to provide certain equipment and maintain a permanent standard of cleanliness; and since the passing of these regulations many large concerns have opened spacious and sanitary restaurants which are a credit to the city and the country.

In these places cleanliness of premises, employees and food is maintained at the very highest standard and leaves very little to be desired.

The improvement is even more noteworthy among the foreign element who come here from other countries where cleanliness and sanitation seem to be unknown—judging by what the inspectors used to find in their restaurants. In the past chaos and filth abounded, but at the present time they are gradually learning the value of cleanliness and are daily improving in every way.

The progress made in these places will be more readily seen by a comparison of the following figures. In 1913, 133 prosecutions were entered for dirty premises and unsound food; in 1914 there were only 38. In 1913 the Restaurant Inspectors condemned 3,000 lbs. of meat and fish, 7 gals. milk, and 2,959 tins of canned goods; but in 1914 they only had to condemn 1,700 lbs. of meat, fish and poultry and 500 tins of canned goods.

This shows that the aggressive inspections and educational campaign carried on by the Department of Public Health have had their effects in these two most important phases of restaurant work.

One other thing worth mentioning is: that where the Department and inspectors were formerly regarded as enemies, they are now welcomed as friends, and the proprietors have found out that cleanliness in all respects means increased cash receipts.

PREPARE NOW FOR BUSY TIMES.

Owing to the phenomenally rapid growth of Canadian cities and towns there are many details which by virtue of the development they have experienced, have been necessarily overlooked. We refer to works that may hardly be called urgent, and yet that cannot be considered unimportant. Now is a more suitable time than any period in recent years for the cleaning up of odds and ends, and the proper recording of completed and projected work in a municipality.

One feature that has been sadly overlooked by our cities and towns is that of underground survey. Very little attention has been paid to recording the underground location of water and gas mains, etc. It has resulted in numerous financial losses throughout Canada, many of which may be accounted for in the following way: A city decides to undertake, for example, the redistribution of water mains. Very properly, a consulting engineer is called in to advise the municipal authorities on the scheme. One of the first requisites is a partial underground survey of existing mains. The information is needed in a hurry, and such a survey is frequently such a hasty one as to be so inaccurate that it is not only misleading, and a cause of delay, but a cause of considerable expense. If proper records had been on file a saving of considerable time would have been effected and the cost of the project reduced.

Owing to the small amount of construction work, many municipalities have discharged their engineers during the past few months. The casualties are pretty well distributed over the entire Dominion, but are so frequent, and the procedure so epidemic in nature, that it is becoming no disgrace for a municipal engineer to entertain thoughts of engaging in some other field of work. A most regrettable feature of the situation is that there is plenty of work for the municipal engineer to do, but it is unlike that upon which he has been for years engaged, in that it does not involve the expenditure of large sums of money. City councils have formed the habit of basing the value to them of their engineering department upon the annual expenditures incurred by that department upon new undertakings, such as waterworks, sewerage systems, paving, etc. Now that there is a lull, existing works are expected to run themselves in many instances.—Canadian Engineer.

Reconstruction

By SIR JOHN WILLISON.

Sir John Willison, who represented the Government of Ontario at the recent congress of Mayors, is chairman of a Provincial Commission on "Unemployment." His views on the delegation to the Federal Government, as given below, appeared in the Daily News, of which he is editor.

We note that in the personnel of the commission suggested by Sir John, that no municipal man is given. We could mention a few good men.

Representatives of various municipalities are in consultation with the Dominion Government over unemployment. As yet there has been no adequate recognition of the gravity and magnitude of this problem. As a result of the industrial depression, consequent upon a long era of spending and plunging, there would have been unemployment without the war. By the war the situation was greatly aggravated. There are two chief reasons why the problem has been neglected: (1) Because it is not clear whether the responsibility lies upon the Federal Government, the Provincial Governments, or the municipalities, and (2) because it has been a common expectation that the war would be of short duration. Generally on this continent unemployment has been a municipal problem. Whether this should be so or not may be open to argument. The fact, however, can hardly be disputed. At least there has been conflict between the various authorities, with the result that the question has not been handled strongly or effectively. It is now doubtful if the war will be ended before the winter. Even with good crops, therefore, more vigorous action will be required. Moreover, other grave problems will arise when the war is over, and to these energetic attention should be directed.

A National Conference Suggested.

We have land, and this will be the great need of multitudes when peace is restored. Why should there not be a conference between Dominion Ministers and the Provincial Premiers with a few authoritative representatives of Industry, Transportation and Labor, to consider the whole situation. This is a subject on which we could well afford to have a coalition of the best Brain and Energy in the country. If necessary let the delegates sit behind closed doors and report their conclusions after full inquiry and discussion. Such a conference could devote itself exclusively to unemployment, agriculture and immigration. The object should be to put those out of work on the land and to increase greatly the inflow of agricultural settlers. In order to get the best results there would need to be active and loyal co-operation between the Dominion and the Provinces, and it might also be necessary to interest the municipalities. In Ontario and Quebec there are large unoccupied areas. There are many farms on which a laborer and his family could be employed all the year round if a house were provided. There are new districts in which assistance could be afforded to establish settlers. There are unoccupied or partly occupied lands in the Eastern Provinces where many families could be placed. In the West there are great vacant stretches ready for settlement. There are lands held by absentee owners, by companies or by railway corporations, which could be recovered on equitable terms, and thrown open for occupation. And since population is the great requirement, the terms offered to settlers could not be made too generous.

Twenty Millions for Production.

It should be the object to increase the population in a few years by three, four or five millions. We have an industrial and railway equipment for 15,000,000 or 20,000,000 people, and there should be a supreme effort to make equipment and population balance. It would not be going too far if, in the next three years, \$20,000,000 were raised on the credit of the Dominion and the Provinces and devoted to this purpose. By such an increase of population the war debt would be greatly lightened, the unemployed would be put on the land, to the relief of the municipalities, and every interest would be stimulated. Canada should set itself to Construction while Europe is engaged in the desperate problem of Reconstruction. Necessary conditions of any such National Policy would be cheaper credits for farmers and better access to domestic and foreign markets. Naturally and properly, the farmers would have to see advantages for themselves in the project, or their support could not be secured. The farmers most need more labor, cheaper money and better markets. All these can be provided. In any

event we will have an influx of immigrants when the war is over, and we should ensure that they will be adapted to the country, that they will go upon and remain upon the land, and that they will be established under conditions which will give fair prospect of success. There should be better supervision of immigrants at Old World ports, and organized attention to their needs and interests after they come to Canada.

A Non-Partisan Royal Commission.

There may be objections to these proposals which we have overlooked. It may be difficult to get common action by the Provinces. But from a conference only good can result. Probably Imperial co-operation would not be difficult to secure. When the war ends there will be thousands of returning Canadian soldiers to be established among us, and Great Britain will face a mighty problem of reconstruction. We may, therefore, do an Imperial service when the war ends only less great than that which we will do while it continues. In any event, the Dominion Ministers, overwhelmed with heavy duties and obligations, may claim the right to call the Provinces and the leaders of Agriculture and Industry into consultation and require their active and energetic assistance in carrying out the proposals to which such a conference would agree. Moreover, if there could be agreement upon some such heroic policy as we have suggested, what better could be done than to commit the whole undertaking to a non-partisan commission, embracing such men as Hon. W. J. Hanna, Sir Thomas Shaughnessy, Mr. C. A. Magrath, Mr. G. F. Beer, Dr. George C. Creelman, Mr. R. B. Bennett, M.P., and Mr. George H. Gooderham. This probably would not be a satisfactory geographical or political distribution of members, but we desire only to indicate the type of men who could be chosen to carry out a great project of reconstruction by which any evil consequences of the war could be quickly overcome, employment provided, patriot soldiers re-established, great areas of land made productive, and the national burdens materially lessened through a substantial increase of the tax-paying population.

UNEMPLOYED CONVENTION AND GOVERNMENT WORKS.

During the recent convention in Ottawa of the mayors of Canadian cities the Federal Government was approached in the matter of unemployment. By way of reply, the delegation representing the convention was assured that the Government would continue the construction of all its public works under contract. This means a good deal to engineers. Estimated outlays for the current year includes expenditures upon public works of over \$25,000,000 on railways and canals, of \$27,000,000 on capital account alone, and on works of harbor commissioners of over \$3,500,000. The total expenditure of the Dominion for the year, apart from the war, will reach \$200,000,000, while the war expenditure will add another \$100,000,000. The Federal Government is therefore raising about \$1,000,000 per day, exclusive of Sundays, to maintain its existing programme and carry on the war. To do this, the Government has its revenues under the recent taxation measures and such funds as it can borrow in London, the latter being strictly limited by the British treasury to expenditures upon works under contract, the Imperial Government desiring to conserve the money market for its own issues for war purposes.

The works toward the continuance of which particular effort is being put forth include the Intercolonial Railway terminals at Halifax, Welland Ship Canal, Quebec bridge, N.T.R. and Hudson Bay Railways, terminal elevators and harbors at Halifax, St. John, Quebec, Montreal, Toronto, Hamilton, Port Arthur and Fort William, Vancouver and Victoria.—Canadian Engineer.

A REMARKABLE TRIPLE ALLIANCE.

There is a very remarkable triple alliance in Western Canada just now. The three components are: (1) Millions of acres of unused land; (2) a frantic appeal by the Dominion Government for the production of all possible farm produce; (3) parades of ten to fifteen thousand unemployed men idly gaping at each other in a single city during the middle of the seeding season. It is easy to see that our colonization system is badly out of joint.—"Nor" West Farmer."

UNEMPLOYMENT CONFERENCE.

It is to be hoped that the unemployment conference of Canadian mayors at Ottawa will at least result in the forming of some commission or other central co-ordinating body. The premier and members of his cabinet in receiving the civic delegates, pointed out that the government was already doing considerable to relieve unemployment by going on with public works already arranged for when war began. Any general plan for land settlement of 40-acre farms on a large scale, backed by government loans to settlers, he contended was beyond the possibility of government financing in a fiscal year when commitments would approximate \$300,000,000, and when borrowings in London had practically to be limited to loans for war purposes. Both the premier and the finance minister pointed out that already about \$12,000,000 had been advanced for seed grain loans and other relief to the farming community.

As to any extended scheme for construction of highways, Sir Robert stated that it too was now out of the question—and incidentally hinted that past offers of assistance along that line had been blocked by the Senate. Altogether, it was made pretty clear to the visitors that the financial onus of taking care of the unemployed would continue to rest mainly upon municipalities, with whatever assistance they could procure from the provincial governments.

According to the Labor Department's estimate, there are 75,000 unemployed in the larger towns and cities of Canada. The estimate made by the delegation of mayors is that there are over 30,000 in the Middle West alone—of whom about 25,000 are immigrants from the agricultural countries of Europe. Instead, however, of going on the land when they reached Canada during boom days, they quickly took employment in the cities or on railroad construction. With the falling off in these lines of activity, they are now without work. It is estimated that not more than 35 per cent of the immigrants brought from Overseas to Western Canada in the past three years have gone on the land.

It is with this class of unskilled labor on the one hand and with skilled workers in the building trades on the other that the immediate problem is most acute. Owing to war orders, operatives in many lines of manufacturing are able to find employment; also, a commission from Overseas will shortly tour Canada to secure skilled mechanics for employment on war orders in Great Britain.

Provincial departments of agriculture are urging upon Western farmers the desirability of engaging at once some of the help that they will need for harvesting. It is pointed out that few, if any, Eastern harvest hands are likely to be available this year and that, with the unprecedented area to be harvested, there is likelihood of last-minute difficulty in getting an even distribution of seasonal labor—despite the present glut. It is also contended that the hiring of a man now for several months would cost but little more than the paying of high short-term wages in the autumn. By careful planning, summer work could be made in many cases for men thus employed, in a way that would work out to the future profit of the long-sighted employer.

To deny that the unemployment problem is multi-form and serious at the present is to blink the facts. Cut-and-dried remedies are more easy in theory than feasible in practice. Mistakes in our immigration policy we can now all see. The best energy and thought of those in authority—and those under authority—is called for in seeking ways and means whereby, so far as may be, the effects of these mistakes can be minimized. The flood of immigration that has reached us in the past decade would be a permanent asset if directed to agricultural production; but dammed up in stagnation in towns and cities it is, like Mr. Perlmutter's auto, a liability instead.

Despite financial difficulties, a plan calling for careful consideration is the one whereby small holdings—say of 40 acres—might be settled in districts suitable for mixed farming. In Manitoba itself there are still large areas of just such land to which homesteaders are going in increasing numbers. Granted that the present is no easy time for financing by provincial or federal governments, the need for some action is insistent. Continual doles of unemployment relief must involve a current expenditure probably as great as the interest charges on the capital involved in rational land settlement. As already said in these columns, the sum saved by postponing any general Dominion election until after the war would go a considerable way. And, in the long run, the expenditure would be repaid—directly only in part, but indirectly many times over in terms of agricultural production and citizen-making. — Canadian Finance.

DEVELOP THE PEOPLE.

Dr. C. C. JAMES, C. M. G., in the Toronto Daily News.

You have asked my opinion as to "the chief thing to do for Canada when the war is over." At first this question came somewhat as a shock, seeing that Canada, as a country, is just coming into the war—and who can definitely tell what we shall be like or what we shall need most when we have come through this war?

It is well to be optimistic, but it is not well to be overconfident to the extent of becoming indifferent, and this, to my mind, is apt to be a weakness on our part. We should understand that this may be a most serious struggle and a tremendous strain upon our resources.

To my mind the attitude should be, not that we shall win, but that we must win. If that could be instilled into the people of Canada, we would now be breathing a different atmosphere, and very many things that might be mentioned would be speedily changed.

You put the question as to what should be done "after the war," implying that Canada will then be a different Canada from what she was before the war—probably a large number of her soldiers gone, a big war debt to pay, and the ties of Imperial citizenship made stronger. The younger generation will face a new situation. What then should we do? My answer first is that we should begin to take action along certain lines before the war is done.

The thing most needed in this country is to get the people to sit down and do some serious thinking, and if this war forces us to that we shall get some good out of it.

What we need is a new viewpoint. For twenty years or more we have lived and worked as though material resources made a people, and when we did give consideration to our people, it was more or less merely a counting of heads. What we need is to understand that the real Canada is the people and not the country, and that our national energy and our national expenditures should be used first and foremost for our people. We have talked so much about developing the material assets of this country, that we have largely overlooked the fact that the greatest good, mental, moral and financial, will result from the right development of Canadians. Money intelligently invested in the education, betterment and direction of the people gives the best returns.

For twenty years and more we have been increasing our foreign borrowings to build more railroads than we can feed, to construct more canals than we can use, more wharves than we have ships, more public buildings than our people require, more western city improvements than we could afford, and to launch more speculative undertakings than any sane country should tolerate. And now the war has come and Canada faces a foreign indebtedness of nearly three billion dollars.

And what of the people? Have we as yet developed educational systems as efficient as those of other countries? Have we model factory legislation and inspection? Have we perfected any system for caring for the widows and the aged who are left unprovided for? Is it not a fact that we have moved much more rapidly in the direct development of material resources than in the development of our greatest and only really important asset, our people?

We are too closely watching the immigration statistics. We do not need more people to be brought to our country so much as we need to improve the manhood and increase the producing ability of those who are here. We have a campaign on now for increased production, and the key to it is, or should be, to make work more effective. What we need now is national stock-taking. We have largely overlooked that, but the war has brought us to a standstill, and we are face to face with the greatest problem that we have ever known. My answer to your question then is that we should sit down and reason together and prepare plans looking to the care of our people and increasing the efficiency of all classes. If we do that the future Canada is assured. For a generation the Legislatures and most of the press have shied at direct taxation, and now see where we are. Every Province in Canada is unable to carry on its work efficiently for lack of money. The education and care of the people are entrusted to the Provincial Legislatures, and many of the most important lines of national development are either uncared for entirely or are cramped for lack of money.

Either the British North America Act should be revised or the Provinces should be courageous enough to raise money by direct taxation. Ontario, for instance, could, without any hardship, raise over \$5,000,000 annually for making the people of this Province more efficient. We have organization and promotion bodies for nearly everything in Canada, except the one thing most needed—the careful study of national growth and development.

ALL AROUND THE WORLD

NEW TELEPHONE EXCHANGES IN JAPAN.

New telephone exchanges are being established by the Japanese post and telegraph departments in the towns of Kitaku, Osaka, Rosokucho, Kanda and Tokio.

USE OF THE TELEPHONE IN DEFENCE FROM AERIAL RAIDERS.

It seems that the telephones are expected to play an important part in the defense of Paris from aerial raiders, says a London correspondent. Recently when Zeppelins bombarded the French capital the bomb throwers were enabled to get over the city owing to the clever work of the German spies, who cut all telephone wires. When General Joffre heard that Count Zeppelin's aircraft had visited Paris it is said he was "very angry." He had made all arrangements for the Paris Air Patrol to successfully cope with any Zeppelins that might show up, with the aid of an elaborate system of telephoning. The night the Zeppelins arrived the members of the Paris Air Patrol were giving a farewell dinner to comrades who were off for aerial duty in Turkey the next day. The Paris watchers strove desperately to get word to the banqueters by telephone, but the German wire cutters had done their work well.—Telephony.

TELEPHONE SERVICE IN PERSIA.

In Ghilan and Mazanderan, Persia, the telephone lines belong to the Hadji Mehdi Agha Co., whereas in the remaining provinces they are the property of the Societe Anonyme des Telephones Persans. There is telephone service in the towns of Teheran, Tabriz, Meshed, Urumia, Maragha, Hamadan, Kermanshah, Kasvin, Ispahan, Shiraz, Resht, and Bushire.

The company holding the road concessions from Julfa to Tabriz and from Enzeli to Teheran has built a telephone line along these roads for its exclusive use. The Societe des Pecheries Lyanazoff has installed a telephone line along the shore between Bender-Gez and Gomouch-Tepe on the Caspian Sea. The Anglo-Persian Oil Co. has built a private line from the oil wells at Hadji Soleiman, Abaden, to the company's refineries on the banks of the Chat-el-Arab. A private line, joining Urumia with the lake of that name, has been recently built, and has been placed at the disposition of the public on the payment of 16 cents per message.

THE TOWN OF YPRES.

An old town is Ypres, whose name is figuring largely in the news. Its origin dates from away back in the ninth century, and in its day it has been subjected to many sieges, all of which it has survived. For Ypres is in the cockpit of Europe and all the world knows what that means to a town. Possibly never in its history has this ancient place been subjected to such bombardment as it has suffered of late. Landmarks that have survived the centuries have been badly broken up or destroyed by the cannonading. The famous cloth hall, known as Les Halles, is in ruins, if reports are to be believed. This structure was begun in 1230 and building continued until 1342. In 1730 another big section was added to the eastern end. When war broke out last August one of the wings was being used as the City Hall, other parts being occupied by various public establishments and used as concert rooms. Another fine building was the Cathedral of St. Martin, and almost as noteworthy were the churches of St. Peter, St. James and St. Nicholas. These have all suffered like the great cloth hall which was at the height of its glory in the fourteenth century when Ypres had 200,000 inhabitants and was one of the chief manufacturing cities of Flanders. The population of Ypres gradually dwindled until it got down below the 20,000 mark. Now it is probably smaller than ever. But if the ancient town is almost in ruins, the spirit of its people is still strong—stronger even than the fortifications—and that means that it will in time rise from the ashes of its present distress and be a solid community once more.—Montreal Gazette.

CHANGING THE NAME.

The Municipal Council of Rome, evidently anticipating that Italy would enter into the great European fight, has re-named Frederick William Bridge to Albert Bridge in honor of the King of the Belgians.

MUNICIPAL PLANTS IN SOUTH AFRICA.

The Boksburg Town Council, South Africa, at a special meeting last month decided to erect a municipal electric power plant subject to the approval of the Administrator, tenders to be invited, and the Works Committee to be empowered to accept the most advantageous offer at a cost not exceeding £10,750. Councillor Melman in supporting the scheme, said that not only would they effect a saving by a municipal plant, but they had to consider the future. They would be able indirectly to obtain local industries if they could supply power. They had to look ahead and make a future for Boksburg.

EXTENSION OF SUFFRAGE IN DENMARK.

The Danish Parliament on the 5th, the anniversary of the signing of the first constitution by Frederick VII., in 1849, passed unanimously the new constitution, which confers the suffrage on women, and abolishes the electoral privileges enjoyed by the wealthier classes under the former constitution. The king signed the new constitution the same day.

KEEPING THE PLAYGROUND SAND COURT SANITARY.

The question of sanitation in playground sand courts has recently been discussed by Edward B. DeGroot, for eight years superintendent of the famous South Park playgrounds in Chicago.

He says: "I had several bacteriological tests made of the sand, and on every occasion was advised that it was free of harmful bacteria. I went into the question of sanitation of the sand bin very thoroughly. While there was some danger of contamination, the entire difficulty could be obviated by having the attendant rake the sand over thoroughly each morning, taking out every scrap of paper, wood and other foreign matter. The sand was thus turned over and exposed to the air and sun. During the very hot weather it was sprinkled frequently so that the children might mold it better. Fresh sand was put into the bins at the beginning of the season and changed at mid-season, or after a period of three months.

"The sand bins are of large dimensions, usually eight to ten feet wide, and ten to thirty feet long. I believe that there is safety in a great volume of sand just as there is greater purity in a great, rather than a small, body of water."

COLLOIDAL BITUMINOUS PAVEMENT.

During the last three years the municipality of Iola, Kansas, has been experimenting on twenty-eight of its blocks with a bituminous pavement composed of a mixture of asphalt cement, and pulverized clay or loam. Of this particular pavement, which is called the "National pavement," Mr. A. W. Dow, chemical engineer, has this to say:—

The "National Pavement" is composed of asphalt cement mixed with pulverized clay or loam which may contain more or less sand or fine stone. Owing to the strong affinity for bituminous materials like asphalt cement possessed by the colloidal silica and silicates contained in clay and clayey soils, and also to the fine state of division of the pulverized clay, a very soft asphalt cement may be used in the mixture without danger of producing a pavement too soft for traffic. In this respect it has a distinct advantage over other types of bituminous pavements, for it is a well known fact that the softer the asphalt cement used the longer the life of the pavement, provided it is not so soft as to roll under traffic. As to the wearing qualities of this paving material no one can say from a practical experience, but, judging from its characteristics, it is hard to appreciate how it can be worn away. The wearing can not take place in a manner similar to the other types of bituminous pavements constructed with sand and coarse mineral aggregate. In these materials the coarse mineral matter slowly pulverizes under traffic and grinds away, but in the case of the National Pavement the clay is already pulverized to as fine a condition as possible, and there can not be any further grinding of the particles. One great advantage which this paving material possesses over that of other bituminous pavements is that it is made of finely pulverized clay with little or no gritty particles contained in it. It will not have the same wearing effect on rubber tired vehicles which are now so much in use on our public highways.

The Road Drag in Maintaining Earth Roads

It does not matter how well drained and graded an earth road may be, if the maintenance is neglected, a large amount of the money expended on construction will be lost, and the benefit will not be derived by the taxpayers for the amount invested. The earth road is by far the most common type of highway in this country. Its cheapness in comparison with other types of construction, and the absence in many sections of our country of stone, gravel and other hard materials for road building will render its use necessary for many years to come.

The split-log drag is of great service on roads of this class. It is now coming into general use in Manitoba, and its adoption in most localities where there are earth roads will doubtless increase the construction and use of the drag. Two mistakes are commonly made in constructing the drag. The first lies in making it too heavy; it should be so light that one man can easily lift it, besides a light drag responds more easily to various methods of pitching and to the shifting and weight of the operator, both of which are essential considerations. A drag can be made heavier at any time by proper weighting.

The other mistake is the use of square timbers instead of those with sharp edges, whereby the cutting effect of the sharp edges is lost, and the drag will glide over instead of levelling the irregularities on the surface of the road. These mistakes are made because of badly constructed drags and also the wrong idea that a large amount of dirt must be moved at one time.

To construct a drag is almost more simple than to describe it, for the implement is simplicity itself. A log from 5 to 8 feet long and 8 to 12 inches in diameter is split in half. The halves are placed parallel to one another, the edges down and the flat face to the front. They are firmly braced together with three cross bars wedged into holes bored through the logs. A chain hitch is attached in such a manner as to incline the drag to the desired angle—about 45 degrees, the forward corner being at the outer edge of the road and the rear corner at the centre. By dragging this implement up one side of the road and down the other, making a number of circuits and using two horses, the edges of the log plane off the top of ridges and rough places, drawing the material sideways and forward to fill hollows and ruts. This drag used a few times during the season on an earth road while the earth is in a moist condition after a rain, will keep an earth road in the best condition that an earth road can be made to reach.

Drags are often constructed of planks instead of logs. There is nothing in the construction of a plank drag that calls for special mention except the strengthening of the planks along their middle by a 2 by 6-inch strip and a strip of iron about four feet long and four inches wide; quarter-inch thick may be used for the blade. This should be attached to the front slab or plank so that it will be one-half inch below the lower edge of the plank at the ditch end, while the end of the iron toward the middle of the road should be flush with the edge of the plank. The bolts holding the blade in place should have flat heads, and the holes to receive them should be counter-sunk. Many construct them with the blade full length of the plank. A platform of inch-boards held together by three cleats should be placed on the bars between the slabs.

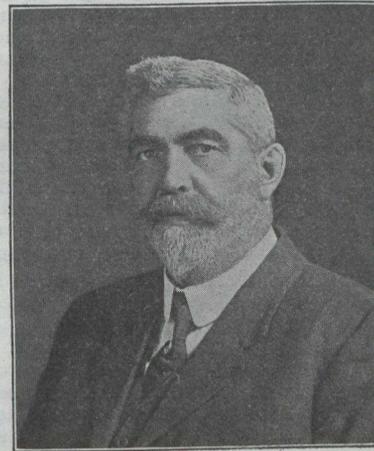
The successful operation of a drag involves two principles which, when thoroughly understood and intelligently applied, makes road maintenance with this implement very simple. The first concerns the length and position of the hitch, while the second deals with the position of the driver on the drag. Each influences the other to a large extent, and a successful use of the drag is dependent upon an understanding of both of them. The distance from the drag at which the team is hitched affects the depth of the cutting. If your roadway is very badly rutted and full of holes it may be well to use the drag when the ground is slushy. Clay, when mixed with water and thoroughly worked, becomes remarkably tough and impervious to water. If compacted in this condition it becomes remarkably hard.

Another valuable result of dragging is the reduction of dust. If the surface is smoothed after each rain and the road dries hard and even, no edges are exposed to crushing, and the only dust which forms is that due to actual wear of the road surface. Conditions are so varied in different localities that it is quite impossible to lay down a general rule for the number of treatments needed to keep a road in good condition. For instance, a tough clay will resist the action of traffic for a longer period than a loam. Certain sections of a roadway will require more attention than

others, because of steep grades or flat grades. The best guide for meeting these conditions is the knowledge and experience gained while dragging the roadway. There is one condition in which special treatment should be given—grades with persistent dragging becomes too high in the centre. To correct this it may be advisable to drag the earth away from the centre occasionally. Some of the advantages to be gained from the persistent use of the road drag are as follows: The maintenance of serviceable earth roads free from ruts and obtaining these conditions with expenditure of very little money, in comparison with money and labor required for other methods, and the reduction of mud in wet weather and of dust in dry weather. No municipality should be without a number of drags, so that they may be applied to their work on the roads whenever they are needed. It requires a little study of the nature of the ground and a little experience to determine the best time to use a drag after a rain storm. The shoulders along the side of the road should not be permitted to project above the general surface of the road, for they will prevent the water getting into the side drain, so that they should be cut down and made to conform to the road surface.

The berms, if any, between the grade and side ditches, should be kept smooth and free from weeds, brush or litter of any kind, so as not to interrupt the flow of water in the side ditches, water being the great enemy and destroyer of the earth road and good drainage the only remedy for it; that is to see that all water escapes from the foundation of the road through side ditches, culverts and outlets.

The split-log drag has come to stay; it will come more quickly if the men who actually work on the roads will investigate the claims of the split-log drags, and use them instead of graders for the maintenance of our roads. They will find that the drag and two horses will do more work, better work and so much cheaper work than the grader with four to eight horses and two to four men.



CITY CLERK J. W. McCREEDY, Fredericton, N.B.
Provincial Vice-Pres. of U. C. M.

VACANT LOTS.

So popular has the vacant lot gardening scheme in Regina become that it is now proposed to operate a co-operative canning industry in Regina, to take care of the surplus vegetables raised by the vacant lot gardeners and in private gardens. The scheme is the outcome of a conference between a manufacturer and the executive of the vacant lot garden committee, and will be outlined at the next general meeting of the association. It is said that there are two thousand more gardens under cultivation in Regina this year than in any previous year in the city's history, and as a result it is expected that vegetables will be plentiful in the fall. Under the proposal which is being advanced by the manager of a large plant in the city, the gardeners will be assured of a market for all the vegetables they may raise. The proposal, which is on the co-operative basis, is to adopt the latest and most scientific method of canning by which a thoroughly sanitary and high-class product may be guaranteed. This will prevent any glut on the market in green stuffs, and may be regarded as one of the most important announcements made by the vacant lot garden committee this year.

Engineering Considerations in Public Works of Small Towns

By R. G. DAWE.

All our large cities were, one day, villages with their meagre populations, and even at that early stage of development the nucleus of some important municipal undertaking was being evolved and how important it is that the proper foundation for future development should be wisely considered and schemes of improvements adopted which will with the minimum of expense admit of enlargement.

Beginning at the birthday of a village or town which some day may develop into a modern city, we picture the intersection of two country roads, oft-times referred to as "Four Corners," decorated with buildings of varying character; then comes the subdivision period and the time for expansion. At this stage is determined to a large extent the future development along economical lines. Until quite recently and during the period of the great real estate boom in Western Canada the Government took no concern whatever as to the topographical features of the land to be used for subdivision purposes, as a result of this indifference most of our young towns have roads laid along most unsuitable locations, the making passable of which is involving annually the expenditure of thousands of dollars needlessly, whereas by abandoning some set, antiquated, rectangular plan of subdivision, unlimited expense and trouble could have been avoided and more natural beauty could have been embodied in the general layout. Fortunately this evil has at last been partially remedied by the adoption of a set of rules of the Department of Public Works requiring a proper topographical survey of the district to be subdivided showing the layout of adjoining subdivisions and indicating by levels the practicability of streets supposed to be made. I might suggest that the department should go further and require profiles showing proposed grades of future streets and have some knowledge as to the cost of future construction, thereby protecting municipalities, when enlarging their area, from undertaking unnecessary expense in the building and maintaining of its thoroughfares. With this determined beforehand towns and villages would not be going along, year after year, aimlessly making excavations and embankments which, ten chances to one, will have to be reconstructed in the near future. This sort of work is generally carried on by a foreman who possibly may have no more knowledge of what a proper town street should eventually look like than the average school boy—and cares less. If, as I suggest, in the early stages proper profiles of what work done would be towards a definite and logical end and would ultimately be required could have been obtained all good streets would be made at the minimum of expense.

The considerations determining the proper layout of a town street are, first, drainage (no street should be laid out on a dead level); next in importance to drainage is the relative height to sidewalk and adjoining lots; in no place is it wise to make an excessive fill in front of a lot, thereby destroying the natural drainage. If possible, streets should be so constructed that the water from lots will find its way into the street gutter, and not the reverse condition, which is often the case.

In connection with the laying of sidewalks, a criticism might be made on the usual method adopted in doing this class of work. After the old foot-path along the street line has been abandoned and the time for the laying of a walk of a more or less permanent character arrives, the wooden sidewalk is probably adopted; good material is obtained, such as will last from seven to ten years, the planks are cut into from four to six foot lengths and nailed onto stringers which have no pretense whatever to being laid to any uniform alignment or grade. This misleads the building-up of a street more than anything else for when once a wooden walk is laid people get used to it, as being the established grade of the street; permanent buildings are put up to conform to same, and when the time comes for the proper grading of the street, the laying of curb and gutter and concrete sidewalk, much dissatisfaction is usually expressed at the necessity for raising or lowering a new walk, possibly several feet, and owners consider their property damaged considerably as a result. Now at the beginning it would have cost but a trifle more to have had determined, definitely, the permanent line and street grade, and the wooden walk might just as well have been placed in the position that the concrete one is now being constructed in. The walk would be useful for a longer period and be a great deal less of an eyesore.

The next item of engineering importance to a town or

village is its water supply. The very lives of the inhabitants are dependent upon its purity and quantity. Purity is of first importance, and it is now generally recognized that such diseases as cholera and typhoid fever are transmitted by polluted water. The principal public use of a water supply is in furnishing proper fire protection, and its economic value is directly felt in the reduction of insurance rates. In a public way water is also used for sprinkling of streets and supplying of fountains. The quantity of water used per day in towns and cities varies greatly in extent—Venice uses only eleven gallons per head per day; Washington uses two hundred; London, England, uses forty-two gallons per day; Toronto one hundred. For ordinary domestic use twenty to thirty gallons per day could be allowed; commercial uses will consume possibly from ten to forty gallons per day; public use from three to ten, and about fifteen gallons per day should be allowed for waste.

Water is derived from two principal sources; surface waters and ground waters. Surface waters would include rain water, water from rivers, from natural lakes and those collected in impounding reservoirs. Ground waters would consist of water from springs, shallow and deep wells and artesian wells. The most satisfactory source of supply for any village or town is where it can be obtained from the naturally elevated lake. This is a positive and dependable method, when properly installed, of obtaining a supply. Towns and villages which are so fortunately situated as to be near such a lake should lose no time in taking the necessary steps to conserve for their future use such source of supply and take all steps to guard against possible contamination.

Where towns and villages are situated on banks of streams, careful selection for the site of the intake should be made. It is preferable to take the supply from the centre of the channel, where there is less suspended matter and there is not the same danger of pollution by surface drainage from the townsite. When a pumping-plant is used it should be of the most reliable type, and would be of great advantage to be installed in duplicate; this would minimize the chances of a breakdown during fire, which might mean disaster. The suction line and force mains should be of ample dimensions. I believe cast iron is the most satisfactory material for this purpose. Wooden pipes have a cheaper first cost, but leaky joints are difficult to repair. The distributing mains might better be laid along lanes than streets, thereby avoiding the necessity of later on cutting pavements and obstructing traffic. If they are laid along streets they should be laid as nearly along the gutter line as possible, so as to give short connection to hydrants and cause the minimum of obstruction to traffic while doing repairs.

Side by side with water supply the sewerage system should be introduced. This is the most complex and difficult problem with which the town or village has to deal. Some prediction as to future growth and population has to be made and future occupied acreage has to be obtained. These items can only be estimated with a great deal of uncertainty. The actual quantity of sewage to be disposed of is not important, as it represents, comparatively speaking, a very small percentage of the work that will be required of the sewers. Extreme rainfalls determine really the size of the sewer, and these sizes should all be based upon the acreage drained, and whatever allowance is adopted as the rainfall per acre should be adhered to in the complete design of the system so that uniformity of flow will be going on in all sewers at the same time. If for any reason the town, after once having adopted a system, afterwards finds it too small, it might be possible to resort to the separate system of sewers, the original pipes carrying only the sewage and additional larger pipes installed for storm water. Of course, if this system is to be adopted it might have been more economically done from the beginning, but considerable expense might yet possibly be saved.

There are a great many other utilities in which towns and villages are interested, but I shall not attempt to discuss them in this paper. Advice given in this manner is of very great value, and can only pretend to offer suggestions which might serve as a general guide in the building of towns and villages on substantial bases. I would suggest that nothing be done in a haphazard sort of way, but as problems arise proper professional advice be obtained which can be depended upon to safeguard your interests.

PROTECTION OF BRIDGES.

In discussing protection, Frederic H. Fay, formerly Division Engineer in charge of Bridges and Ferries, city of Boston, in a paper before the Engineers' Society of Western Pennsylvania, considers particularly the subject of metal corrosion. He outlines the conditions under which metal structures decay, and against which protection is necessary. Iron will not corrode in air unless moisture is present. The agents present in the air which accelerate rusting, especially in or near cities where much fuel is consumed, are numerous. Sulphur dioxide and soot are probably the most destructive, because together in the presence of moisture they produce sulphuric acid. The action of these two agents is most marked in railway tunnels and bridges.

Experience in Boston has shown that the corrosion of metal bridges has been due principally to one or more of the following causes: Exposure to locomotive gases; exposure to sea water; exposure to surface water leaking through bridge floors; overstress of the metal by which corrosion has been hastened.

While many paints have given satisfactory results on metal structures under ordinary conditions, they have not proved an effectual protection of metal work under extreme conditions, such as exist in bridges over railroads. The use of wooden ceiling protection confines locomotive gases and makes corrosion more rapid than in the open. Sheet lead has in some cases been worn away by locomotive blasts until it began to fall upon the trains beneath. Asphalt coating after six years service has been found in good condition.

But concrete or mortar has proved by far the most satisfactory protection for metal structures over railroads. It should be properly reinforced with steel. The best results and the greatest degree of safety will be obtained when the steel reinforcement is thoroughly attached to the metal member.

1915 EDITION OF McKIM'S "CANADIAN NEWSPAPER DIRECTORY" NOW ISSUED.

It is now nearly a quarter of a century since Mr. A. McKim, who established the first independent Advertising Agency in this country, completed the rather ambitious task of publishing the first Directory of Canadian publications. The nine successive editions of this valuable work provide the most complete and detailed record available of the growth of Canadian periodicals.

The 1915 Edition, of which we have just received a copy, shows that the great war has not seriously affected the newspapers of Canada. While the birth-rate of new publications has received a check, and the death-rate of the weak ones has perhaps increased a trifle, most of the leading papers, particularly the dailies, show very healthy increases in circulation. Three metropolitan dailies have reached or passed the hundred thousand mark.

A census of the papers listed and described in the 1915 Directory shows nearly 150 dailies, 7 tri-weeklies, 45 semi-weeklies, over 1,065 weeklies, about 40 bi-weeklies or semi-monthlies, 250 monthlies, 3 bi-monthlies, and 18 quarterlies—a total of over 1,575 publications.

This means approximately one daily to every 10,000 families, and one weekly to every 1,500 families. From this one would infer that for a comparatively new country, Canada is well-read.

A. McKim Limited report the usual keen demand for the Canadian Newspaper Directory, which sells at \$2.00. Its red-banded, gold-stamped green cover has become a familiar sight on the desks of advertisers, publishers and business men everywhere who are interested in Canada.

Many incomes may be augmented by cultivating the back yard. A penny saved is a penny earned.

Vegetables fresh from the garden are a luxury only appreciated by those who cultivate their own back yard or the vacant lot.

its use of the gift; to render every house and street as healthy as the healthiest hillside in the world; to provide the best doctor and the most comfortable hospital for everyone who is sick; and to have at hand a friend for everyone in trouble.

In our Ideal City art will grow out of common life, undisturbed by contrasts of wealth and poverty. The people will have pleasure in their work and leisure to admire what is beautiful.—From "Worship and Work," from the writings of the late Canon Barnett in "Garden Cities."

THE IDEAL CITY.

Cities increase, and the country becomes more and more empty. Observers shake their heads as they walk through the long, dull streets and breathe the close air, and see the pale faces of the people. "God," they repeat, "made the country, man made the town." Their hearts sink at the thought of the future, and they find themselves saying that "cities will crowd in a blacker, incessanter line"; that "the din will be more," "the trade denser," and that they will "never see an ennobling sight, or drink of the feeling of quiet again."

They forget that the highest possible life for men may be a city life; and that the prophets foresaw, not a paradise or a garden, but a city with its streets and its markets, its manifold interests and its hum of life. A man often does well, as David, to leave the sheep folds to come down to see the battle.

The activities of the street, of the shop, and of the town meeting, are for many characters the best preparation for life in the City of God.

We have as our neighbors in a city, not the trees and the beasts, but fellow human beings. We can from them learn greater lessons, and with them do greater deeds. We can become more human.

The country may still be best for some people; it is probably at some periods of their lives best for all—there is an ideal village as there is an ideal city—but the movement of men is obviously from country to city; we must, as a consequence, fashion our cities after the highest pattern. We must make them good for the health as for the wealth of the citizens.

* * *

The Ideal City will be large, with a quarter or half a million citizens. There will thus be room for a great variety of life and pursuits. The citizens will find at their own doors the interest that comes from the clash of many thoughts and many experiences. Because, too, the city will be large, every citizen will have a greater sense of responsibility. He will feel himself a citizen of no mean city, and as such he will act, and as such expect to be treated.

The Ideal City will be old, the growth of centuries, bearing on its face the mark of many storms and triumphs. There will be the very marks left by men of old time, as they hammered out their rough thoughts. Some of their buildings will tell of times of luxury and victory; and in out-of-the-way places there will be remnants of castles and forts where the men of old fought and died for the city's liberties. The citizen, as he walks the streets of the Ideal City, notes the odd names, turns by some strange twist, or catches sight of some tower, will feel himself encompassed by a "cloud of witnesses," and will hear a voice telling him that the ground he treads is made holy by the toil of the city's fathers. He will be both humbled and inspired; two conditions necessary to satisfaction.

The Ideal City will be a new city. Its streets will be broad and lighted with electric lights. Its houses will be good, fitted with water and warmth for the comfort and the health of its inhabitants. Its spaces will be many; great open spaces for games; small open spaces, within the reach of every house, for the rest of the weak. Its public buildings will be of many styles, expressive of the character of their uses.

There will be the Cathedral brooding over the city, gathering together, as it were its various interests, its manifold activities, to lift them up to higher issues, to God's uses. There will be the churches and the chapels, with open doors, offering the chance of quiet, and provoking thought by pictures and music. There will be the schools, with classrooms and playgrounds; technical schools, commercial schools, high schools. There will be the University College, with its laboratories, its great hall, and its classrooms. There will be the Municipal Offices, with its Town Hall, on the walls of which an artist will have painted scenes from the city's history, and where the citizens will throng in their thousands to hear great speeches or to listen to great music.

A visitor to the Ideal City would be charmed by its first aspect; its variety of a architecture, its beauty of color, its freshness and purity. He would miss little of what he had left in the country. He would breathe easily, enjoy the play of change, and taste the quiet which comes of deeper feeling. And he would know none of the depression caused by great wealth or great poverty.

* * *

In the Ideal City none will be very rich, and none will be very poor. Knowledge and goodwill will join together to give to every child the best education, and to secure

Municipal Affairs in British Columbia

By COUNCILLOR LOUTET.

South Vancouver, the "Mexico" of British Columbia municipal politics continues its internecine strife to the detriment of the municipality and the discredit of the Province.

The latest development is the suspension by the Reeve of the clerk, Mr. Springford, on a general charge of inefficiency.

The clerk's office was taken over by Reeve Gold and his campaign manager Mr. Seymour, the latter now being secretary to the Reeve.

Apparently no accounting was made with the clerk, yet the combination of the safe was changed, and the clerk's duties assumed by the Reeve. Without entering into the merits of the case, it can be said that such action is without precedent, and is a distinct danger to the municipality.

The legal powers of the Reeve may allow of this action but there should undoubtedly be a provision in the act that in cases of this kind a special meeting of the council should be immediately called to consider the matter.

In suspending the clerk, the Reeve overlooked the fact that a note to the bank had not been signed though pay cheques had been issued on the credit to be allowed and now these cheques, some of which had been cashed by tradesmen, remain unhonored, there being no clerk to sign the note and the bank refusing to advance money until the note is in order.

The council have refused to appoint a new clerk, and the Reeve refuses to re-instate Mr. Springford, a deadlock being the result. A movement has been started to have an enquiry by the municipal inspector under the recent amendment to the Municipal Act and as Mr. Baird has the confidence of the public, it is thought that he would soon put an end to the present unfortunate state of affairs.

Victoria and a General Election.

In Victoria a motion deprecating a Dominion election at the present time was introduced in the City Council, the mover providing that it should be unanimous or be thrown out.

Some heat was shown in the resulting discussion and eventually the motion was defeated mainly on the grounds that it was inadvisable to allow politics to get mixed up with municipal business.

Following on his paving report, mentioned in last month's issue, the engineer, Mr. Rust, stated that in past years about \$400,000 had been expended in water and sewer laterals, which may never be required. The council referred the report to a committee and will settle on a policy in the near future.

The Sooke Lake water system, which provides approximately twenty-three million gallons per day, was formally opened on May 28th and the old reproach of an inadequate water system need never again trouble the City of Victoria.

The total cost of the new system is in the neighborhood of two and a half million dollars. The lake is 655 feet above sea level and the area of 1,180 acres has a storage capacity of 5,555,000,000 gallons. Three times this capacity may be obtained when required by the construction of a dam forty-five feet high.

In Vancouver, by the casting vote of the Mayor, it was decided to submit by-laws to the amount of \$753,000.

About half of this is apparently for over-expenditures on works previously authorized. Several ratepayers' associations have expressed themselves as against any by-laws at present.

Municipalities and the Unemployed.

A conference of the heads of the municipalities on the Burrard peninsula was held last month, the attorney-general being present. The object was to settle on some course of action in regard to the unemployed. Since then the government has decided to build certain roads in Burnaby as a relief work. \$2.25 per day will be paid and a committee will certify deserving men for the work.

The Vancouver city market took on a new lease of life when it opened on June 5th under the new manager, Mr. Harry Edgett.

A strong effort is being made to get the farmers to bring in their produce and deal direct with the consumer. The successful opening augers well for the new policy, and it is to be hoped that the market will not again degenerate into a middleman's distributing centre for foreign produce and inferior grades of local fruit and vegetables. A more central situation should, however, be kept in mind, and the old hospital site would undoubtedly be more convenient to the consumer.

The City of Prince Rupert has failed to meet its last interest coupons, and up to the time of writing had not done so.—(The arrangements have now been satisfactory made.—Ed.)

Adverse Criticism of B.C. Financing Not Deserved.

A great deal of adverse criticism has already resulted of western municipal financing, much of which is not deserved.

Retrenchment in some quarters has not been considered as seriously as present day conditions warrant, but this is by no means applicable to a majority of the municipalities in British Columbia.

Tax collections are fairly good, and with the approach of tax sales, have increased in volume. Redemption of properties sold for taxes in 1914 is proceeding in fair volume, and only a small percentage is likely to be forfeited.

Many municipalities have decided to withdraw from the tax sale, properties held by men, now at the front and shown to be unable at present to make payment. Legislation may be necessary to legalize this and other war measures, but the times would seem to justify them. Several municipalities have recently combined to urge upon the Provincial Government the necessity of making clear in future agreements with railway companies that only properties actually in use for railway purposes shall be exempt from taxation. At present lands held by the companies for speculative purposes are declared to be exempt and the possibility of railways securing large tracts of land and leaving the balance of the townsite to bear all administration expenses is one which cannot be left to become an actuality.

The Pacific Great Eastern charter will require renewal this summer and this will be the first to be attacked along the lines indicated.

The Kettle Valley Railway has been formally opened, and is expected to aid considerably in the development of the Southern part of British Columbia.

AFTER CLEAN-UP DAY, WHAT?

In many cities and towns of Canada, the annual clean-up day has been observed. Refuse and litter have been removed. Yards have been tidied up and made presentable. This result has been secured through the active agitation of public bodies and private individuals interested in the sanitary and clean-up movement.

But why should this laudable effort be restricted to annual clean-up days?

In Canada, owing to the covering mantle of snow which hinders the complete removal of garbage and other refuse, there is some slight excuse for the untidy conditions found in the spring. As this excuse is not applicable, however during at least eight months of the year, there is no reason why, after the spring clean-up, the improved conditions should not be continued.

The cultivation of civic pride is a necessary factor in the

clean-city objective. The officers of municipalities, and especially the newspapers, have it in their power to create and foster this spirit of pride. With the incentive of respect for the home town, it becomes a duty of first importance on the part of its residents to see that its roads, sidewalks and open spaces are kept clean, to protect its trees, and in every way possible to preserve and beautify their homes.

Each householder can add a beauty spot to his town. True, this space may not be large, but there are very few homes without sufficient space for either a flower-bed or a piece of well-kept lawn. The illustration herewith shown what can be done in the way of improving the appearance of the home. This plot has been beautified almost entirely at the expense of labor, the monetary outlay being negligible. The cottage is that of a working-man, but the surroundings, the pride of ownership, have succeeded in creating that place of all places, "home."—Conservation.

Water Supply

By S. M. SWABB.

Water, which has been called the life blood of the organism named the city, must be secured in good and sufficient measure, of unimpeachable quality, and be dealt without stint to all, "if, when and as wanted."

City water supplies are usually taken from rivers, lakes, springs, and wells, and, where unusually large quantities of water are required, artificial lakes are sometimes created in the mountains by constructing dams across the valleys, whereby the rainfall of the drainage basin is gathered and stored and thence conducted to the city by means of open canals or tunnels, depending on the distance, the country to be traversed and the financial expenditure involved. River supplies, while generally furnishing water in quite large quantities, are subject to pollution, depending on the population inhabiting the water shed and to such casual or accidental pollution as may be occasioned by the discharge of sewage from vessels plying the waters.

Lake supplies are usually fundamentally of good quality, and where the drainage basin is only sparsely settled, generally furnish excellent supplies. The Great Lakes in this country are largely used for water supply purposes, but these supplies are no longer considered safe without artificial purification, due to the contamination by shipping, and also to the density of population on their borders.

Supplies from springs, or ground water supplies, as they are generally designated, as compared with river supplies, invariably possess a lower summer temperature and a higher winter temperature. The ground water is merely the rain which has fallen on the surface which has percolated the soil to the water table whence it flows to some outlet, either ocean, lake or some other water course. While on the European Continent ground water forms the principal basis of many water supplies, cities in this country could not depend on these supplies to furnish the immense quantities of water required.

Deep or artesian supplies generally furnish water of a superior character, and while they are ample for the uses of small communities, cannot be looked upon as a source of supply for a community of such size as is usually designated a city. These waters are generally bright and sparkling, full of life, so to speak, and of unusual purity. If stored on the surface, the reservoirs should be covered to present the growth of plant life.

Artificial lakes or storage reservoirs are usually constructed, in order to conserve stream flow. Holding back or ponding the floodwaters allows of a more equable and uniform discharge of the waters over a much longer period. In designing such storage basins, consideration is usually given to the conditions that may exist, of having to furnish a supply over a long period of drought.

The quantity of water required for all purposes may vary in this country from 60 gallons per capita in a small town to 150 gallons per capita in a large city, and all above the latter figure is waste, pure and simple, only part of which can be saved by metering. The latter figure is more than twice as large as is the quantity used in any of the large European cities.

When the tap is opened and the water flows freely from it, usually no thought is given to the energy displayed by those whose foresight and skill made this possible.

In the city of Maharek and in the city of Manahmeh, the capital town of the Bahrein or Aval Islands in the Persian Gulf, there is no drinking water available, that of the gulf being salt, and therefore unfit for use. The islands themselves are low, flat, sandy stretches, raised only slightly above the sea level, in the region known to be the hottest on the face of the earth. Water for drinking and culinary purposes is obtained from springs said to have been discovered by pearl divers, located a mile or so from the shore, which bubble up through the sands in the bottom of the harbor, and is procured by divers who go down to the bottom and place goat skin sacks over the gushing springs before they have a chance to mingle their waters with the brine of the gulf.

To the city of ancient Rome water was conducted through nine aqueducts of an aggregate length of 346 miles, built prior to the beginning of the Christian Era, some of which are still in service, and the city of ancient Jerusalem was supplied with water through a tunnel about one-third of a mile in length, conducting the water from

the Virgin's Pool in the Kedron Valley to the Pool of Siloam.

In England, many cities derive their water supplies from lakes situated at considerable distances from the cities themselves, the city of Liverpool having built an aqueduct seventy-seven miles in length to Vyrnwy in Wales to secure a suitable supply; and the city of Manchester has constructed an aqueduct ninety-six miles in length to Lake Thirlmere in Wales for a similar purpose.

The city of New York is now building an aqueduct one hundred and twenty miles in length from an artificial lake constructed in the Catskill Mountains for an additional supply.

CANADA'S FIRE LOSSES.

More Stringent Building Laws and Closer Inspection Required.

During 1914 Canada's total fire losses showed a considerable reduction over 1913; yet it was in excess of that of 1912.

From an analysis of the causes of fires for 1914 some encouragement may be obtained in the belief that progress is being made in education along fire prevention lines. Carelessness has always been a prolific cause of fire loss, and a reduction of fires attributable to this cause from 183 in 1913 to 127 in 1914 is appreciated. Attention must still be directed, however, to the 30 losses caused by cigarette smoking and cigar and cigarette stubs carelessly thrown away.

One feature of the year's fire record which requires immediate attention is the large increase in the number of apartment house fires. No doubt part of this increase may be attributed to the proportionate growth in the number of apartment blocks being erected, but there is a serious danger arising in our cities from the number of one-family houses or old buildings which are being converted into apartment blocks, without corresponding protection from fire or of the lives of the inmates from fire danger. Stringent building laws should be provided covering this transformation process, and thorough inspection should be insisted upon both during the progress of reconstruction and at least annually by both the municipality and the insurance companies interested.

Too little attention is paid to the matter of building inspection, with the result that overheated pipes and heating apparatus is a common cause of fires. With proper inspection this could not be, as legal power is given to prosecute for maintaining dangerous fire conditions and all insurance policies are based upon the safe condition of heating and lighting equipment. It is a question whether fire insurance companies are not making it too easy for applicants to obtain insurance, and whether, as in the case of life companies, thorough examination of the risk involved and the remedying of any dangerous or abnormal fire conditions should not be insisted upon before a fire insurance policy could be legally issued.

More attention should also be paid to the interior construction and heating of residential buildings. During 1914, no less than 750 dwellings were destroyed by fire, and of these a large proportion through forcing of the heating equipment.

During January 1915, no less than 66 fires were reported as caused by defective heating apparatus, 11 by defective wiring and 19 from carelessness with matches.

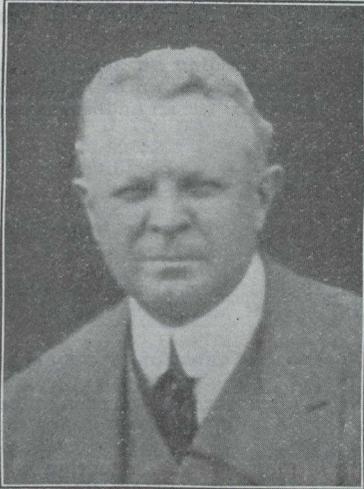
ESSENCE OF LABOR PROBLEM.

Here is the essence of the labor problem, the world over. Everywhere man is a land animal. Where he has access to his native element he is independent. Where he is arbitrarily shut out from his element he must make terms with those who shut him out. Has not this a lesson for our own labor people? If the free tribal lands in Africa make the Negroes independent, would not free land in this country do the same for all men? Unions, closed shops, minimum wage laws, an eight-hour day, and various other arbitrary enactments may protect labor a little; but it will be free, and will enjoy its natural rights only when it has free land to go upon. Out of Darkest Africa comes light.

SOME BIG MUNICIPAL MEN

(By AJAX.)

RICHARD D. WAUGH,
Mayor of Winnipeg.



When the delegation of Mayors from the West came down to Ottawa to interview the Federal Government on the grave problem of the unemployed, one man stood out because of the intensity of his purpose, and he naturally became the leader of the mission. That man was big in body and mind; he was a true type of Western virility, tinged with Scottish caution; a man who having taken up a

job would finish it to his own satisfaction. This man, Mayor Waugh of Winnipeg, impressed his eastern colleagues with his determination to know what the government intended to do in the matter he had so much at heart, for to Richard Waugh the unemployed problem was no mere economic study but a blight on the social fabric of the West, (and particularly of his city of Winnipeg), and a grave national question. To him these out-of-works and their families were not so many foreigners—alien enemies they might be—fitted only to receive the formal patronage of charity, but fellow human beings to which society owed a living. And he came down East to convince the Federal authorities of their part in the responsibility.

But Mayor Waugh had something more to convince the government of, than the temporary alleviation of the situation. He wanted a permanent solution, no less than the placing of the out-of-works on the land. It was a tall order, but quite workable; and Mr. Waugh was convinced of its practicability. The fact that 87 per cent of the unemployed in his city were agriculturists and that within 80 miles was idle land enough to give each family 40 acres, and that these men and their families, through no fault of their own, were drawing the life blood of the city without any return, were very tangible evidence that something was wrong, which must be set right if progress was to be made. His reasoning was of the practical kind. Why should not these men and women who had come from the land be sent back to the land. They were more than willing, but they had no money. The mayor consulted those who knew, as to the amount of money required and he found that in proportion to the needs and the potentiality of the scheme the amount wanted was small. But still money was required. His own city—the same with other cities—had spent all it could afford in keeping these families alive during the last nine months; the Provincial governments had been tapped to the last dollar, and now, in the mind of this progressive Western

Mayor it was up to the Federal government to take a hand.

To us of the East the unemployed problem is largely industrial and probably the scheme, as expressed by Mayor Waugh might be thought to be a dream of the optimistic West; and yet it has worked well wherever it has been tried, even in Canada in a small way, and why not on a large scale, and so the Western Mayors had the hearty support of the rest of Canada in their demand for a commission, and if one is appointed it should have Mayor Waugh as one of its members.

I have already spoken of Richard Waugh as being big, mentally and physically—and he is certainly both as is evidenced by all who come into contact with him, — and one would also be correct in terming the Mayor a civic patriot of the convincing type. An engineer by profession, he has given of his best for many years to the welfare of his adopted city. At one time chairman of the Public Parks Board, where he had his first public experience, and since 1908 Controller, he has fitted himself to occupy the principal office at the bestowal of the citizens of Winnipeg to which he succeeded last year.

Mayor Waugh is a Scotchman—and he looks it—having been borne in Melrose, Scotland, forty-seven years ago. He came to Canada in 1883 and married the daughter of a former mayor of Winnipeg (Alfred Logan) so that it might be said that the hereditary idea is not yet dead. As a good Scotsman the mayor is a good curler and he loses no opportunity to tackle the stones and the brush. Richard Waugh is a good example of the Scotchmen who have come to Canada to make good, but unlike many of his compatriots he has taken up the public responsibility of citizenship, and his fellows are the better for it.

VACANT LOTS.

What undoubtedly constitutes a menace to those farmers who are making an honest effort to keep their farms clean is the crop of weeds found growing on vacant lots and roadsides in and around our towns and cities. These vacant lots are often nothing more nor less than nurseries and breeding places for all kinds of weeds. This is especially true of towns where large areas adjoining have been subject to wildcat sub-divisioning and have had roadways ploughed, forming lodging places for weeds, which are allowed to grow unmolested. These produce countless numbers of seeds, to be blown and scattered by the winds over the farms. So far, bulletins, articles and advice pertaining to weed control have been directed at the farmer. A glance at the conditions found in most of our cities and towns will prove convincing that the farmer is not entirely to blame in the matter of weed seed production and distribution.

In the West the weed inspectors are being trained and instructed along lines that will enable them to assist the farmers in weed control, while at the same time provision by law is made to prevent any farmer from allowing his farm to become a breeding place for weeds and a menace to his neighbors. In most towns there are by-laws covering the weed problem, but too often they are not enforced. Those living in towns and cities should co-operate and do their bit in the war against weeds. This is an important matter, and should receive strict attention by every town council. Action should be taken at once and not deferred until the weeds ripen and scatter their seeds.—F. C. N.

Municipal Taxation in Relation to Speculative Land Values

By ADAM SHORTT,

Whatever may be said of the ultimate basis of national or state and provincial taxation, municipal taxation, at least, is essentially based upon the fact that where increasing numbers of people find it necessary to live together in a more or less limited area, it is essential for elementary safety and comfort that they should undertake to maintain certain services in common. These needs expand with the increasing size of the civic centre and the developing wants of the citizens. After providing for the primary and more indispensable needs, there naturally arises the desire to provide for secondary and higher needs. Organized society, as Aristotle put it, comes into existence to make life possible and continues and develops in order to make life good.

In any considerable centre of population it is plain that there must be co-operation in providing for the supply of those primary needs previously so easily satisfied, if felt at all, in the open freedom of the country. Chief of these are pure water, drainage and sanitation, suitable highways for constant traffic, equipment for the prevention of fires and for the general police protection of life and property. While these primary needs are in process of being met, various secondary needs emerge, such as the need for schools, libraries, parks, the regulation of buildings, and other measures to improve, on the one hand, the atmosphere of civic life and, on the other, its intellectual and artistic quality. In a modern community, making any claim to be ranked as civilized, its individual members cannot be left to make voluntary provision for the supply of these very essential needs, such provision must be placed at the service of every member of the community, whether he may or may not be able to make a proportionate contribution towards the necessary outlay. Thus the taxes which are levied to sustain the various civic departments cannot be regarded as payment for services rendered, on any basis of economic exchange, but as a necessary contribution towards a public charge which must be met as a civic duty. At the same time the levying of a civic tax should not be open to the charge of injustice or unfairness from the point of view of individuals having similar obligations and similar capacities to meet them.

On the other hand, well ascertained public opinion on the grounds of economic service may support the policy of providing citizens with a street car, or telephone service, or the supply of light, heat, or power, in such forms as electricity or gas. These services, however, cannot be supplied on the same basis as police, or fire protection, or general sanitation. However convenient or even essential when once established, such services must be supported by those who directly benefit by them, on the same principles of exchange as would apply to their provision by private individuals or corporations. The very different grounds on which contributions are made by the citizens to the support of a fire department and an electric light department indicate the essential distinction between municipal taxation and ordinary exchange payments for services rendered. An individual citizen may be given the option of walking to his place of business or riding in a civic tram, but cannot be given the option of leaving his house unprotected against fire while his neighbor is so protected. If, then, some citizens are unable to meet their full share of the cost of fire protection, other citizens must contribute more than their proportion of this cost. The question therefore arises, on what basis should compulsory taxes be levied, as contrasted with the voluntary exchange payments for civic services?

In all normal forms of taxation, whether based upon ability to pay or not, few practical distinctions can be made as between incomes acquired as the result of exceptional personal quality or close attention to business, and incomes derived from forms of investment which call for little exertion on the part of the owner of the capital.

An attempt to follow up this distinction to some extent and to make the relative value contributions of the individual and of the community determining factors in the levying of taxes, is manifested in the arguments for the so-called single tax on land values. It is not possible within our space to pass in review the curious medley of half-truths and more largely proportioned misconceptions in the sphere of economics, directed to the philanthropic object of a universal redemption of mankind, morally, socially and politically, but argued with a most misanthropic fervor against all who question the validity and claims of the system set forth. The fundamental principle maintained

is that the local community as a whole contributes to land its entire economic value, while other economic values are derived from human labor and enterprise. This, however, is contrary to obvious facts, it being evident that while no values can exist without reference to the needs of a community, to determine what proportion of human effort or enterprise must co-operate with these needs to furnish articles or services of different values is a very complex and variable problem, and it is as variable in the case of land as in the case of many other articles. Moreover, the community which contributes to the value of land, especially its speculative or exceptional value, is a community some of whose most influential elements reside far from the municipality or even the state or province, which would exclusively benefit by a tax levied upon land values alone.

But while the single land tax conspicuously fails to reach the pocket of the successful land speculator, there is no one whose gains may be more legitimately laid under heavy tribute for civic needs. As a matter of fact the real prices of land before and after a land boom plainly indicate that much the larger proportion of what the shrewd land speculator has dealt in, under the guise of land sales, are simply carefully dressed visions of sudden wealth to be obtained by the transfer of city lots. The lots themselves may have little permanent interest for either party to the speculation. Those, however, who have a permanent use for them can obtain them only at the speculative rates which they bear as counters in the game of land speculation.

One of the most disheartening features in the long period of stagnation and slow recovery, which follows the collapse of a land boom in an over-grown and over-built city, is the legacy of debt and heavy interest charges which is entailed upon the unfortunate citizens. Indeed, during the boom period, a great many expenses which should have been met from the annual taxes are paid out of the proceeds of loans. After the boom, however, not only have these charges to be met out of annual taxes, but also the full interest on the millions borrowed, as well as many repairs and minor replacements rendered necessary by imperfect work under inadequate supervision. Thus, after the boom, the annual taxation may be considerably greater than during the period of flush times and special expenditure. The interest charges alone in many of the best boomed cities in Canada amount to from one-fourth to one-third of the annual taxes. If provision is being made for a sinking fund, the proportion is of course considerably increased.

Now it is commonly found that these great burdens have to be borne in the largest measure, especially if any form of single tax is in operation, not by the successful speculators, who have disposed of the greater part of their land holdings, but by their unfortunate victims, many of whom are forced to purchase their lands for residence or other permanent uses and to pay for them the boom prices, which could not be subsequently recovered.

Obviously, what is required is some system of civic taxation which will be as rapid and effective in operation and as generous in its levies upon exceptional profits as are the operations and the gains of the successful land speculator. Clearly also this will not be the slow biennial system of taxation, which assesses the property one year and collects the taxes the following year. During this time, in cases of the really typical civic boom, such as we have had in numerous towns and cities in both the United States and Canada, the property may have changed hands scores of times; often, in single transfers, at an increase in value anywhere from 25 to 100 per cent, or more. Nor can effective taxation of the speculator have reference to any rental value of the properties dealt in, rental value being practically non-existent during a civic boom. It must be a system which provides for an automatic tax levy at every legal transfer of the property, and which collects the taxes from the purchaser as part of the price which he has agreed to pay for the land. Moreover, the levy must increase in percentage as the scale of profit increases, thus strictly following the central principle of taxing according to ability to pay.

A study of the various stages in the growth of a city boom reveals the interesting fact that once the future city is launched on an active period of expansion (a movement commonly arranged by a group of shrewd and courageous speculators who manage to attract considerable capital

(Continued on Page 245.)

The Union of Canadian Municipalities

Officers and Executive for the year 1914-1915

PRESIDENT:

T. L. CHURCH, Esq., K.C.,
Mayor of Toronto, Ont.

1ST VICE-PRESIDENT:

LESLIE H. BOYD, Esq., K.C.,
Alderman, Montreal

ONTARIO

VICE-PRESIDENTS:

1st **T. T. BEATTIE, Esq.,** Alderman, Ottawa
2nd **S. MORLEY, WICKETT Esq.,** Alderman, Toronto
3rd **A. E. BUCHANAN, Esq.,** Mayor of Galt
4th **J. I. DIXON, Esq., Sec.-Treas.,** New Liskeard
5th **C. E. HURLBUT, Esq.,** Mayor of Preston

BRITISH COLUMBIA

VICE-PRESIDENTS:

1st **ALEXANDER STEWART, Esq.,** Mayor of Victoria
2nd **L. D. TAYLOR, Esq.,** Mayor of Vancouver
3rd **M. F. CRAWFORD, Esq.,** Mayor of Kamloops
4th **A. W. GRAY, Esq.,** Mayor of New Westminster

NOVA SCOTIA

VICE-PRESIDENTS:

2st **F. W. W. DOANE, Esq.,** City Engineer, Halifax
1nd **P. F. MARTIN, Esq.,** Mayor of Halifax
3rd **A. ROBERTS, Esq.,** Town Solicitor, Bridgewater
4th **W. A. RICHARSON, Esq.,** Mayor of Sydney

Official Organ

"THE CANADIAN MUNICIPAL JOURNAL"
Coristine Bldg., Montreal.

HON. SECRETARY-TREASURER:

W. D. LIGHTHALL, K.C.,
Ex-Mayor of Westmount, Que.

3RD VICE-PRESIDENT:

R. D. WAUGH, Esq.,
Mayor of Winnipeg, Man

MANITOBA

VICE-PRESIDENTS:

1st **J. W. COCKBURN, Esq.,** Controller, Winnipeg
2nd **F. LACHANCE, Esq.,** Mayor of St. Boniface
3rd **R. FORKE, Esq.,** Reeve of Pipestone
4th **H. CATER, Esq.,** Mayor of Brandon
5th **C. E. IVENS, Esq.,** Reeve of Wallace

SASKATCHEWAN

VICE-PRESIDENTS:

1st **JAMES PASCOE, Esq.,** Mayor of Moose Jaw
2nd **F. E. HARRISON, Esq.,** Mayor of Saskatoon
3rd **F. E. WEST, Esq.,** Mayor of Swift Current
4th **C. H. DIXON, M.D., Esq.,** Mayor of Kerrobert

PRINCE EDWARD ISLAND

VICE-PRESIDENTS:

1st **R. H. STERNS, Esq.,** Mayor of Charlottetown
2nd **A. C. SAUNDERS, Esq.,** Mayor of Summerside
3rd **G. A. AITKEN, Esq.,** Mayor of Georgetown
4th **JAMES PATON, Esq.,** Ex-Mayor of Charlottetown

G. S. WILSON, Asst.-Secretary,

Bureau of Information,
Coristine Bldg., Montreal

OFFICIAL CIRCULAR

MONTREAL, June 17, 1915

His Worship the Mayor,
and Council,

Dear Sirs,

Owing to the war the ANNUAL CONVENTION of the Union of Canadian Municipalities, which was arranged to take place in the City of Victoria, B.C., is POSTPONED UNTIL NEXT YEAR, but as there are several new municipal problems, arising out of the war, which the Executive have been dealing with since last August, it is thought advisable to hold a SPECIAL EXECUTIVE CONFERENCE, at Niagara Falls, (Clifton House), on Tuesday and Wednesday, July 20th and 21st. And you are hereby cordially invited to send a representative to this meeting, to take an active part, and to present any resolution you think will help our municipalities as a whole.

Representatives from the principal cities are expected to be present.

The following are some of the questions that will be brought before the Meeting:

UNEMPLOYMENT NOW, AND AFTER THE WAR

- A.—Report of the Meeting of Mayors at Ottawa, May 25th, 26th and 27th.
- B.—Summary of Statistical Information by the Union.
- C.—The Unemployed.
- D.—Propositions of the Dominion Government.
- E.—Returned Soldiers.
- F.—Immigration.

MUNICIPAL FINANCE.

POLICY TOWARDS GERMANY AND AUSTRIA AS AFFECTING MUNICIPALITIES.

- A.—German Trade.
- B.—Austrian Trade.
- C.—Promotion of Trade among the Allies.
- D.—Expansion of Trade.
- E.—War Orders.

PERMANENT ATTITUDE OF MUNICIPALITIES TOWARD NATIONAL ORGANIZATION AGAINST ATTACKS.

GOOD AND WELFARE OF MUNICIPALITIES.

An early reply as to your municipality being represented will greatly oblige,

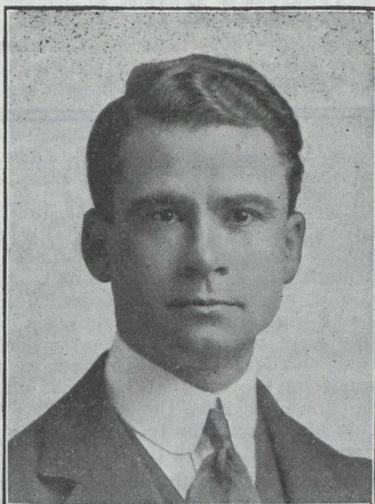
Yours truly,

W. D. LIGHTHALL,

Hon. Secy-Treas.,

Quebec Bank Building,

Montreal.



Lieut. T. M.
Papineau

of the Princess
Patricias

Who was recently decorated for conspicuous bravery in France. Lieut Papineau was the first Secretary of the Quebec Provincial Union of Municipalities.

from outside sources), the influx of population which is attracted soon creates more work for itself than for its employers. In other words, it requires more workmen in the building and allied trades to build houses to accommodate the workmen themselves than are required to erect buildings for their employers. Further, the incoming army of workmen provides customers for a large body of merchants and middlemen and their employees and dependents, who in turn must all be provided with houses and places of business, again augmenting the numbers to be employed in the building trades. Another class of citizens must provide material and implements for building, and for the equipment and furnishing of these buildings. So the circle continues to widen through agencies of every kind, including bankers, lawyers, doctors, clergymen, teachers, with all the buildings and equipment which they require to carry on their businesses and professions.

As experience indicates, a rapid expansion in civic debt goes hand in hand with a rapid expansion in city building, and the growth of population, while an active land speculation accompanies and stimulates both. Now all that is required to transfer a large proportion of these speculative gains from the rapidly expanding bank account of a successful land speculator to the coffers of the city treasury, is to provide, somewhat after the plan adopted in Britain, the necessary legal authority and comparatively simple administrative machinery. Provision ought to be made that the value of each piece of land shall be assessed, as early in its economic career as possible, at its actual market value. Thereafter at the period of each legal sale of the land, when the buyer pays more than its registered value or its value at the last transfer, a certain percentage of the increased value shall be first paid into the civic treasury, and the remainder to the seller as may be agreed upon. The percentage to be thus taken by the municipality shall be graded according to an appointed scale, increasing with an increase in the rate of profit and shortness of time since the previous sale. The price at which each sale takes place shall be registered with the title of the land and will thus be made known to the subsequent purchasers when looking up the title.

As already indicated, this form of taxation is intended, on the one hand, to provide for special capital expenditures and not for annual revenues; and, on the other, to secure a reasonable share of the special profits from exceptional increases in land values, especially during short periods. One of its chief virtues, from the point of view of ability to pay, is that it taxes high profits only while these profits are being obtained, and especially while they are being rapidly obtained. When, however, speculation ceases and values remain stationary or decline, this special tax automatically ceases also. It takes nothing from any purchaser who makes no profit on his sale or on his holdings. It is, however, during such periods of stagnation, when the various municipalities are not expanding, that their capital expenditure is certain to be correspondingly light. At the same time the annual needs will be met by the annual taxes on real estate and incomes, above a certain rate, from other sources of invested wealth or personal service.

Certain minor details would, of course, require to be con-

sidered in bringing such a scheme of taxation into general operation; but the simple and direct basis of the tax, the important purpose which it would serve, partly in checking extravagant speculation, and partly in furnishing an indispensable capital fund for civic equipment just at the time and in proportion to the need for capital outlay, ought to commend it to the practical consideration of state and provincial governments in both Canada and the United States.

PAN-AMERICAN ROAD CONGRESS.

The Executive Committee of the Pan-American Road Congress has received word from the officials of the Tri-State Good Roads Association that it has been decided to co-operate with the Pan-American Road Congress by changing the date of the Pacific Coast Good Roads Congress from the week of August 2nd to that of September 13th. This means the practical merging of the meeting of the Tri-State Association into that of the Pan-American Road Congress.

At the meeting of the Executive Committee, it was felt that the co-operation that will thus be secured through the action of the Tri-State Good Roads Association will be of very material assistance in making the Pan-American Road Congress, to be held in Oakland, Cal., September 13-17, the greatest gathering of its kind ever held in the world.

The Pan-American Road Congress, as already announced, will be held under the direct auspices of the two leading national good roads organizations, namely, the American Road Builders' Association and the American Highway Association. Plans for the meeting are in the hands of an Executive Committee, made up of Governor Charles W. Gates of Vermont, Chairman, and two members from each of the two organizations.

Progress reports of the various sub-committees were submitted at the meeting of the Executive Committee last week. It is apparent that great interest is being taken by the public in the forthcoming congress. Official invitations will soon be issued to all the several states of the United States, the Canadian provinces and the South American countries to send delegates.

While the topics have not as yet all been assigned to the speakers, the following subjects were decided upon at the last meeting of the Committee:

"The History and Future of Highway Improvement," "The Benefits and Burdens of Better Roads," "The Relation of the Road to Rail and Water Transportation," "The Responsibility for Road Conditions, and the Way to Secure the Improvement of Road Conditions," "Tree Planting and Roadside Aesthetics," "The Essentials of Proper Laws for Highway Work," "Highway Indebtedness; its Limitation and Regulation," "Organization and System in Highway Work," "The Educational Field for Highway Departments," "System in Highway Accounting," "Uniformity for Highway Statistics and Data," "Engineering Supervision for Highway Work," "The Merit System in Highway Work," "The Determination of the Justifiable Outlay for Specific Cases of Proposed Highway Improvement," "Proper Road Location; its Importance and Effects," "Road Drainage and Foundations," "Highway Bridges and Structures," "Roadway Surfacing," "Resurfacing Old Roads," "Street Pavements," "Convict Labor for Highway Work," "Equipment for Highway Work," "Motor Traffic; its developments, trend and effects," "Load and Tire Effect and Regulation," "Comparisons of Traffic and their Economic Value," "Maintenance, Materials and Methods," "Dust Suppression and Street Cleaning."

Announcement is made by the Executive Committee that the Tri-State Good Roads Association, the membership of which covers the states of California, Oregon and Washington, has definitely decided to change its date of meeting to that of September 13th, in order to co-operate in every way with the Pan-American Road Congress. The Tri-State Association had planned to hold the Pacific Coast Good Roads Congress in San Francisco during the week of August 2nd, and this change of date means most active assistance on the part of those identified with highway improvement on the Pacific Coast.

For the purpose of carrying on its work with the highest efficiency possible, the Executive Committee has decided to appoint local representatives or chairmen in all the principal cities throughout the United States and Canada. Each local representative will look after the interests of delegates from his section, give the Pan-American Road Congress as wide publicity as possible, and help to arouse interest in the Congress. It is believed that this will insure the widest possible publicity for the Congress.

REVIEW OF CIVIC IMPROVEMENT

Conducted by

W. H. ATHERTON, Ph. D. (Sec. City Improvement League of Montreal)

CITY IMPROVEMENT LEAGUE OF MONTREAL

President:

Hon. J. J. Guérin, M.D., LL.D.

Past President:

J. George Adami, M. D., D. Sc., F. R. S.

Hon. Vice-Presidents:

The President of the Board of Trade
Le Président de la Chambre la Commerce

Vice-Presidents:

Farquhar Robertson, Esq.; U. H. Dandurand, Esq.;
Victor Morin, N.P., LL.D.; Mrs. J. B. Learmont.

Hon. Treasurer:

J. F. Boulais, 90 St. James Street.

Hon. Secretaries:

C. H. Gould, B. A., and J. U. Emard, K. C.

Executive Secretary:

W. H. Atherton, Ph.D.

221 Coristine Building. Phone Main 4362.

The following are the rates of subscription:

- Patrons, donors of \$100;
- Honorary Members, \$25.00 yearly;
- Sustaining Members, \$10.00 yearly;
- Contributing Members, \$5.00 yearly;
- Ordinary Members, \$2.00 yearly.

All communications to be addressed to Dr. W. H. Atherton, Secretary of the City Improvement League, office of the "Canadian Municipal Journal," 221 Coristine Building, Montreal.

PAST AND PRESENT CIVIC GOVERNMENT OF MONTREAL.

The future form of the Civic Government of Montreal is now engaging the attention of city students of Municipal affairs. The problem is caused by the rapid growth of the city and its suburbs, and also by the failure of the traditional systems of municipal administration.

In order to interest those who will be called upon to take a hand in municipal reform, a sketch of the growth of the present civic system may help, by a knowledge of the past to provide for the future.

The earliest form of government in the primitive settlement of Ville Marie established in 1642 was patriarchal. The "Company of Montreal" acted through its agent, Paul de Chomedey de Maisonneuve, who was dignified as the local governor with the Chevalier Montmagny the agent at Quebec of the Company of One Hundred Associates, as the Governor-General.

Montreal had in the beginning a certain autonomy jealously eyed by Quebec, and guarded by Montreal. This continued with slight modifications, such as, in 1644, the year when Montreal was given an official semblance of a municipal corporation, which was the cause of an election of a syndic, a sort of tribune of the people who watched their interests. This was the first step in popular representation in the country, Quebec not having a syndic till 1663.

The autonomy of Montreal suffered a severe blow on the appointment of the Sovereign Council at Quebec, when Canada became a Royal Colony in 1663, on the suppression of the Company of One Hundred Associates. Since 1657 at the arrival of the Sulpicians Seigneurs of the Island, to whom as the Gentlemen of the Seminary the Company of Montreal had transferred its Charter, these latter had ruled

the destinies of the island, with Maisonneuve, still retained as their Executive arm.

Their power of appointing judges was, after 1663, limited, and Royal Courts were established in Ville Marie as the chief town on the Island of Montreal was still called. In other ways Quebec, through the Sovereign Council, now lorded it over Montreal, not only in lines of general policy, but in what we should call matters of village politics, and the parish church portals were hereafter frequently posted with proclamations from Quebec. Yet Maisonneuve resisted undue encroachment on the original Montreal charter several times confirmed, and in 1664, the year before his recall, he called a meeting of the citizens to elect five police judges to manage the police matters of the town.

However, with the new colonial government and the modified powers of the Seminary and the local governor of Montreal, the civic government of Montreal made adequate progress till the fall of Montreal to the English in 1760.

But the chief records of improvements and civic progress from about 1700 to 1760 are to be found in the edicts of the Several Intendants, who managed the police and finance, etc., of the Colony, and who seemed to have had control over the most minute local grievances, such as the regulation of the numbers of tradesmen, the cleansing of the streets, the exclusion of pigs from the dwelling houses—all points on which it might be thought local authority should have had sufficient control.

During the years of the interregum between 1760-1763 the Military government of Generals Gage and Burton, with the aid of the local captains of Militia—mostly Frenchmen left behind—carried on civic progress.

But on the declaration of peace in 1763 when it became definitely settled that Canada should be British, the Supreme Council then established at Quebec appointed Justices of the Peace or magistrates, who were to act for them, not only in judging minor affairs, but in the arranging for the civic improvements and the policing of the town of Montreal. These were the executive arm of the powers at Quebec. The military remained for a time, and there was recrimination between them and the new citizen rulers, some of whom had chafed under the military regime, so that the famous Walker incident occurred, when the ear of Thomas Walker, the magistrate, was alleged to have been cut off by the soldiers.

In 1769, several Justices of the Peace of Montreal abused notoriously their powers, and made their office an unlawful means of increasing their income, so that they were censured for what we now call "graft."

The report of the Council in condemnation refers to evils, which will probably always be the case when the office of the Justice of Peace is considered a lucrative one, and must infallibly be so, when it is his principal, if not, only dependence. The history of malpractice among the civic rulers of Montreal, when it has occurred, has always been due to adventurers entering civic life with the eye open to the main chance when Montreal has been governed, it has been during these periods when the most upright of the citizens were proud to serve their city, single-minded for their city's good. Fortunately the records of Montreal can point to many such names.

The regime of Justices of the Peace was, therefore, not altogether satisfactory, but although the citizens had had for long in view the introduction of a form of a responsible Home Rule in Municipal affairs, having in 1786 reported in favor of a charter of incorporation as a municipality, and in 1821 and 1828 held meetings for the same effect, in the latter case sending a petition. Still the system of Justices was continued.

But incorporation was nearer in 1830 as a partial remedy, the Harbor Commission under the title of the Trinity Board of Montreal was appointed to undertake work, which the Justices of the Peace could not adequately superintend. In 1831 the first act incorporating the City of Montreal was presented on March 31st for the sanction of His Majesty, which was given on April 12th, 1832.

By this act, under the name of the Corporation of the City of Montreal, the City was divided into eight wards, East, West, St. Ann, St. Joseph, St. Antoine, St. Lawrence, St. Louis and St. Mary. Each of these was to elect two councillors with certain financial qualifications, and these sixteen elected were to choose one from their number to act

as Mayor, to whom a salary not exceeding the sum of the equivalent of \$400 was to be given. The act was not to remain in force after May 1st, 1836. The first Mayor elected was Jacques Viger, to whom we are responsible for the ultimate choice by the Council of the Seal of Arms "Concordia Salus" (Safety in Concord).

The charter modelled on the English municipal plan continued successful till May 1st, 1836, when for some unaccountable reason its renewal was refused and again Justices of the Peace appointed by the Supreme Council at Quebec ruled the city. They had a difficult task, for there intervened the Patriot Rebellion of 1837. After this, Lorn Durham arrived as Special Commissioner, and it was doubtless due to his animate versions on the absence of responsible municipal government that a new charter of incorporation was granted in 1840, for a municipality under the title of "The Mayor, the Aldermen and the Citizens of Montreal."

The Governor, Mr. C. Poulett Thomson (afterwards Lord Sydenham) was authorized to name the first mayor and councillors for the first term to end on December 2nd, 1842. Peter McGill was his choice as mayor. In 1843 the second council was elected by the people at large, who chose two councillors from each of the six wards, viz., East, Centre, West, Queen, St. Lawrence, St. Mary. Joseph Bourret was elected Mayor by the Council, who also elected six other citizens to act as aldermen, following English precedent.

In 1845 the city was divided into nine wards, the City Wards being East, Centre and West, and having each three representatives in the Council, the other six, called the suburban wards, only having two councillors each. Thus the whole Council had twenty-one members.

This system obtained until 1852 when by the Statute Victoria 14, 15, Chapter 128, passed in 1851, the election of mayor passed to the people at large. The Hon. Charles Wilson was the first mayor thus popularly elected. The number of the aldermen was raised to nine and each of the suburban wards received the same rights as the city wards to three representatives.

This brought the Council up to twenty-seven members. In 1874 the charter was amended when the name of the corporation was changed to "The City of Montreal." The distinction between aldermen and councillors was abolished, the title for all being that of "Aldermen" who were all to be elected by the people.

The History of Greater Montreal now began in the annexation of the rural municipalities. In 1883 the new Hochelaga Ward added three aldermen, in 1886 that of St. Jean Baptiste, three others, and in 1887 St. Gabriel Ward provided three more, etc.

The City Charter was recast in 1898, the work being confided to the Mayor, Raymond Prefontaine, Aldermen Rainville, Martineau, Laporte, McBride, Ames and Archambault, aided by the city law officers and the heads of departments. This commission revised and examined clause by clause, the preliminary draft prepared by Messrs. Choquette and Weir appointed revising advocates in conjunction with the City Clerk and the City attorneys.

The new charter, a progressive document, was sanctioned on March 10th, 1899. By it Montreal was divided into seventeen wards, called respectively, East, Centre, West, St. Ann, St. Antoine South, St. Antoine West, St. Antoine East, St. Lawrence, St. Louis, St. James South, St. James North, St. Mary West, St. Mary East, Hochelaga, St. Jean Baptiste, St. Gabriel and St. Denis. In 1903 Duvernay Ward was formed with a part of St. Jean Baptiste Ward. Among the clauses of this charter was one giving power to the Council to extend the limits of the city and to annex municipalities. The elections now took place biennially instead of annually.

The fault of the civic administration under this charter was the ever growing abuses arising from the "Standing Committees" conflicting with one another, delaying the course of business. A body of citizens applied for a new charter, after a plebiscite of the people had returned a poll desiring a radical change in the system of the municipal government of Montreal. The traditional English Municipal system was to be abandoned and in the adaptation the new form of "Commission Government being exploited in America was chosen as the basic factor in the new Civic Charter granted in 1909.

This charter instituted a "Board of Control of four commissioners, with the Mayor as chairman, all elected by the people at large, to act principally as the financial committee of the city, with great administrative powers, also that the work now given to this board was that hitherto done by the Eleven Standing Committees of the aldermen with seven members in each. The reduced council consisting of thirty-one members only, each representing one

ward, was to be henceforth mostly a legislative body. The first mayor under the new regime was the Hon. J. J. Guerin, M.D.

The consequent despatch in city business, the improvement in public works, the strengthening of heads of departments in the City Hall, hitherto hampered by aldermanic interference and the abolition of patronage secured universal approbation for the new form of civic government. Added to this, the personnel of the first Commissioners being undoubtedly good, led to its success.

After four years the old Board of Control went out of office, and in 1914 a new board came in. Meanwhile opposition has arisen. The success of the Board of Control system is again under criticism, so that there are not wanting those who boldly advise a more complete adoption of the Commission form of Government, by the abolition of the Council and the ward system at one fell swoop. Others would reduce the number of wards to five with three aldermen each.

There is a disposition not to revert to the English Municipal System with its Standing Committees, which with a high standard of personal uprightness works well, but to approach a simplified central small Board, where responsibility can more easily be fixed onto individuals. It is not the province of this special article to forecast coming events; suffice it to present the historical past. One criticism only is ventured, and that is the failures of civic government in the past have been due rather to temporary periods of want of uprightness, and of civic ideals in the governing classes than to the weakness of any system in vogue. Systems, however, do need adjusting. And the question of the manner of so doing is now under earnest consideration.

For a more complete study of civic government of Montreal, see the History of Montreal, Vol. 1 under the French Regime, Vol. 2, Under British Rule, by W. H. Atherton, Ph.D.

A PLACE TO PLAY.

Plenty of room for dives and dens (glitter and glare and sin),

Plenty of room for prison pens (gather the criminals in),
Plenty of room for jails and courts (willing to pay)

But never a place for the lads to race; no, never a place to play!

Plenty of room for shops and stores (mammon must have the best),

Plenty of room for the running sores that rot in the city's breast

Plenty of room for the lures that lead the hearts of our youth astray,

But never a cent on a playground spent; no, never a place to play!

Plenty of room for schools and halls, plenty of room for art,
Plenty of room for teas and balls, platform, stage and mart,

Proud is the city—she finds a place for many a fad to-day,
But she's more than blind if she fails to find a place for the boys to play!

Give them a chance for innocent sport, give them a chance for fun—

Better a playground-plot than a court and a jail when the harm is done.

Give them a chance—if you stint them now, to-morrow you'll have to pay

A larger bill for a darker ill, so give them a chance to play!

—Denis A. McCarthy.

Experienced Municipal clerk, at present employed as Secretary-Treasurer of a large Western town wishes change of position.

Willing to accept moderate salary and can furnish highest references with bonds.

Would consider city or country municipal employment.

Address Box 221 Canadian Municipal Journal.

“How Capital Expenditures Are Paid For”

Instead of providing working capital by an issue of capital stock as do commercial concerns; municipalities resort to borrowing for their requirements usually by way of an issue of redeemable bonds. The term of the bonds is determined by the prospective life of the improvements they are used for. As an example, bonds for road macadam and sewers are generally repayable in twenty to forty years from the date of issue and bonds for the construction of sidewalks in ten to twenty years.

The borrowing powers of a municipality may be regulated in a special charter under which it was incorporated, but in the majority of cases the provisions of the Cities and Towns Act of 1909 will apply. Under that Act, the borrowing powers may briefly be stated as follows:—

The Council may borrow, from time to time, various sums of money for improvements in the municipality and generally for all objects within its jurisdiction.

The loan shall be by an issue of bonds, obligations or debentures payable to bearer at periods fixed by the council with interest (not exceeding the legal rate) payable half yearly on May 1st and November 1st. You will note that the act specifies particularly that the interest payments shall be made on these dates

The principal and interest shall be secured by the general funds of the municipality.

Loans may only be made under a bylaw of the council approved by a majority in number and real value of the Proprietors who are electors and who have voted. The bylaw must be submitted to the electors within 30 days after being passed by the council.

It is customary for the council to advertise the bonds for sale calling for tenders. The tenders should only be opened at a council meeting on a date specified in the advertisement and naturally the highest bid should be accepted.

You will very rarely find an issue of bonds sold at par. Under normal conditions it is not unusual for a strong municipality to dispose of its bonds at a premium but at the present time unless the rate of interest is unusually high, the municipality will realize less than par value.

An interesting point in accountancy arises as to the treatment of this discount or premium, in the accounts. On first thoughts it would seem to be unwise to increase our assets by an amount that is represented by nothing tangible. That being so, the discount should be charged against Revenue, but it is obvious that to charge the discount on a large issue of bonds against the revenue of any one year would be unfair. The logical course would then be to write the amount off during a period of years. As municipalities are bound under statute to provide out of revenues an annual amount for investment to form a sinking fund to redeem the bonds at maturity, in estimating the annual amount required for any given issue, the discount on the bonds could be added and in this way satisfactorily cared for. If the municipality is in the enviable position of obtaining a premium for its bonds, this premium should be credited to a special account, which is often known under the name of Contingent Account, and any expenses that may properly be considered as bond issue expenses can be charged as off-setting the credit obtained for premiums.

The repayment of loans is a very important matter, the standard methods are as follows:—

- 1st Annual repayment of principal and interest on outstanding balance known as installment system.
- 2nd Fixed annual payment of principal and interest known as annuity system.
- 3rd Repayment of debenture bonds by the establishment of a Sinking Fund.

Although the first two methods are not much in vogue in this country, I think our municipalities would find it to their interest to give more consideration to the many advantages they offer, and endeavor to make their loans repayable on either of these principals. The greater advantages are:—

- 1st The amount of loan repaid is a certain known quantity.
- 2nd The cost of the establishment and administration of a Sinking Fund is entirely obviated.
- 3rd The trouble, anxiety and possible loss from misappropriation or bad management of the Sinking Fund are avoided.

On the other hand, it may be argued that there is a more limited market for such loans in Canada, and to float them it may be necessary to pay a higher rate of interest. It is done successfully in other countries, notably in Great

Britain, where large insurance and other financial corporations have for many years accommodated their local authorities with loans upon these conditions.

The Province of Quebec Cities and Towns Act provides that where the repayment of loans is by annuity the term must not exceed fifty years, and each annual payment must contain the interest and an instalment of capital.

Where the loans are upon debenture Bonds repayable at a certain fixed date provision for the redemption is by way of a Sinking Fund. The annual installment required will vary according to the term of the bonds, but under the cities and Towns Act it must not be less than one per cent of the amount of the issue. The annual installments of Sinking Fund are provided from revenue, but a mere book entry debiting Revenue and crediting Sinking Fund Account is not sufficient. It is necessary also to set aside and invest funds to the amount of the annual installment. Unless special provision for this investment is made in the Municipality's Charter, it must be in the form of—

1—Public Funds of the Dominion or the Province.

—A first hypothec to an amount not exceeding one half of the assessed valuation.

3—The redemption of bonds issued by the Corporation; or

4—Deposits in a chartered Bank.

Where the investment is on first hypothec, the borrower must provide insurance in favor of the corporation to an amount not less than one half of the property insured.

In providing our Sinking Fund out of revenue and at the same time making an investment of the amount, a double purpose is accomplished. We have not only obtained funds to liquidate the Bonds, but we have completely depreciated the assets originally purchased with the cash obtained from the sale of the bonds. And this is only proper. Bonds are generally issued redeemable at long periods in many cases 40 years, and no matter how well made the improvement was originally, or how carefully it has been maintained, its value at the end of the period must be questionable, or in any event will have very materially increased in cost of upkeep and so have become an extra charge against revenue.

As the Bonds are paid off the book, credit in Sinking Fund will be transferred to a surplus reserve account.

Passing on to the statutory restrictions as to the amounts which a corporation may borrow under the Cities and Towns Act, we find that when the total debit amounts to 20 per cent of the assessed valuation of taxable property, any further borrowing must be by by-law approved by three-quarters in number and real value of the proprietors, who are electors, and who have voted, also the approval of the Lieut.-Governor-in-Council, if necessary.

Again, where the interest and sinking fund on the loans absorb one-half of the Corporation Revenues, any new loan by-law must be approved by a majority in number and real value of proprietors who are electors and who have voted, in addition to having the special authorization of the Lieutenant-Governor-in-Council. In the event of such a loan being made, a special tax must be levied to provide the annual interest and at least 1 per cent. Sinking Fund.

While we have been considering loans for capital expenditures it may be remembered that for administration purposes, pending the collection of general or special taxes or water rates, the council may on a mere resolution contract temporary loans for a period not exceeding the current fiscal year and for an amount not exceeding one-fourth of the revenue then due and receivable.

TORONTO SENDS BASEBALL OUTFITS.

The Toronto City Council has just contributed seven cases of baseball paraphernalia to the Canadian troops serving at the front. The kindly thought emanated with Mayor Church—who is a thorough sportsman—as a consequence of the many requests from the boys at the front who desire to play ball when taken back from the firing line to rest or when held in reserve.

ESQUIMALT, B.C., NEW SEWERAGE SYSTEM.

The Corporation of Esquimalt, B.C., are installing a large sewerage system comprising over five square miles. It is expected that the work will be completed before the winter sets in.

Municipal Finance

JAMES MURRAY.

PRINCE RUPERT'S NOTES.

Quite a rumpus has been caused in the English press because of the apparent default of Prince Rupert, B.C. in not meeting notes for £281,000 which fell due in London, June 1st. We say "apparent" default for the reason that the fault does not lie with the City itself, or its bankers — the Bank of Montreal — but with the British Treasury Board, which had unexpectedly, at the last moment refused to allow renewal of the certificates for the twelve months asked for. On June 3rd the renewal was allowed, but in the interval of three days the financial critics lost no time with their attacks. The London Daily Mail went on to say:—

"Days pass on and still the city of Prince Rupert is allowed to remain in default, in spite of assurances that a settlement is on the point of arrangement. Doubtless many of these small Canadian municipalities have been rushed in their borrowing, but this was rendered easy for them by financiers, whose profit it was that they should borrow. Settlement should now be rendered easy for them in these exceptional times by those who have profited. In any case, we do not want a Canadian municipality hanging about in default."

This criticism, which is somewhat cheap and tawdry, might be taken to heart by Canadian municipalities, perhaps, if there were any data to back up the insinuation of "and Canadian municipality hanging about in default". But this is the first instance of Canadian municipality even laying itself open to such a possibility, and in this case the responsibility lay on the British side, as an enquiry would have shown the writer of the criticism quoted, and thus have prevented an injustice to the financial status of Canada's municipalities.

UNFAIR CRITICISM.

There is a little too much of this kind of criticism of Canadian municipal securities—criticism for the most part without foundation — particularly in the Canadian press. One reads week after week in the financial papers that the system of municipal financing is all wrong; that they should do this and do that; that they are borrowing too much; spending too much; expanding too quickly; in fact doing everything they should not do and nothing that they should. And though all are eager with advice no two agree. So what are the poor municipalities to do when the experts fall out? The truth is the experts do not know the individual situations of the municipalities. What is good for one is bad for another, and when it is realized that practically every municipality has its own fiscal agent — in most cases local bankers who know the local needs—the advice of these self constituted critics is somewhat absurd and out of place. One recognises that a few councils — very few — ignore the advice of the fiscal agent and take a leap in the dark, with the inevitable consequence that they fall very badly, but they recover, though a big cost, and they don't usually repeat the leap.

Municipal Financing

As Fiscal Agents we are prepared to place at the disposal of municipalities the advantages of our long experience, expert knowledge and valuable connections throughout Canada, Great Britain and the United States. ∴ ∴ ∴

Wood, Gundy & Company

Head Office:—Toronto

Western Office: *Saskatoon, Sask.* | British Office: *14 Cornhill, London*

A. E. AMES & CO.

INVESTMENT BANKERS

Established 1889

UNION BANK BUILDING

TORONTO

**PURCHASERS OF
GOVERNMENT
AND
MUNICIPAL
ISSUES**

Correspondence Solicited.

MUNICIPAL DEBENTURES

BOUGHT AND SOLD

SPECIAL FACILITIES IN THE
UNITED STATES AND ABROAD

COMMUNICATIONS FROM
- MUNICIPALITIES SOLICITED -

R. C. Matthews & Co.

Standard Bank Building,
TORONTO

Cable address: "MATCO."

W. L. McKinnon. Dean H. Pettes. Harry L. Shepherd.

W. L. McKinnon & Co.

DEALERS IN

Government and Municipal Debentures

McKinnon Bldg., Toronto, Ont.

PHONE ADELAIDE 3870

Cable Address: "MAKINOPET," Toronto.

Codes Used: "FIFTH MONTGOMERY,"
"LIEBERS,"
"WESTERN UNION."

Branch Office: Western Trust Bldg., REGINA, Sask.

GOOD WESTERN FINANCING.

"No large capital expenditure is anticipated in the near future, as it is realized that financial conditions, due to the war, necessitate the conserving of all possible resources. We have no bonused industries to carry. We have no outstanding treasury notes to take care of. We have no sinking fund to juggle with. All our debentures are repayable in equal annual instalments of principal and interest, and we have met all debentures when due."

Such is the happy position of Red Deer, Alta., as expressed through its secretary treasurer. That there is wisdom in the financial management of this little municipality is exemplified in its adding to the tax levy a sum of \$8,000, as a reserve against uncollected taxes. This would seem to be rather a large sum, considering that Red Deer has only a population of 3,500, and the present taxes are coming in fairly well, but the Council anxious for the credit of the city are taking no chances. The secretary treasurer figures out that in five years, through the additional levy a reserve fund will be accumulated large enough to take care of all uncollected taxes. Red Deer in this innovation has not only set a good example to sister townships but has given proof that Canadian municipalities are making a start to better guard the treasuries, than they have in the past.

MUNICIPAL BOND INFORMATION

We are pleased to note that the Bond issue form published in the May issue of the Journal has been accepted by municipal treasurers throughout the country, and the introductory remarks received in the spirit they were given. As an example of the interest taken in, and an appreciation of our efforts to bring about a standardized form for municipal bonds, we quote the following letter from Alberta, which speaks for itself:—

THE TOWN OF BASSANO, ALBERTA.

June 12, 1915.

The Editor,—Following out the suggestions made in the May issue of the Municipal Journal, I have had a stock form drawn up and printed to be used from time to time in giving out information required by the Bond Dealers in connection with various debentures we may be offering. I am enclosing a copy herewith, duly filled out with the particulars of the municipality as requested by you and giving, also, particulars of an issue of debentures we are offering by tender on the 26th inst.

I can quite appreciate your remarks in reference to the inconvenience caused to various municipal clerks in supplying information in connection with debentures issues, when practically every request received requires information on an entirely differently worded form, and I trust your efforts in standardizing the forms used for this purpose will meet with every success.

Your sincerely,

GEO. B. R. BOND,
Secretary-Treasurer.

MUNICIPAL DEBENTURE BY-LAWS APPROVED.

Recent by-laws, approved in British Columbia by Inspector of Municipalities, Mr. Robert Baird, are as follows: Saanich Road Improvements, \$450,000, 15-year 5 per cent debentures, certificated May 10.

Saanich Debentures, 1 to 36, issued under Local Improvement By-law, certificated May 10.

North Vancouver City Consolidated Local Improvement \$19,825, 10-year 6 per cent debentures, certificated May 11.

North Vancouver City Consolidated Local Improvements, \$47,440, 30-year 6 per cent debentures, certificated May 11.

Salmon Arm City Waterworks, \$40,000, 30-year 6 per cent debentures, certificated May 11.

Salmon Arm City Electric Light, \$20,000, 30-year 6 per cent debentures, certificated May 11.

Kamloops Hydro-Electric, \$85,000, 15-year 6 per cent debentures, certificated May 21.

Kamloops Debentures, 1 to 170, issued under By-law 231, certificated May 21.

MUNICIPAL BORROWING.

By J. J. GALLOWAY.

Municipalities borrow in two ways: They obtain loans from the banks to provide for the ordinary expenses of the municipality, so as to overcome the difficulty of waiting until taxes are collected. They also borrow from banks in anticipation of the sale of securities in London or elsewhere, which may have been authorized for some particular municipal undertakings, such as water supply, sewers, pavements or public buildings.

In regard to the first, there have been no difficulties in the way of borrowing, and the banks have been very glad to provide the necessary funds so long as the municipal authorities were not too extravagant in their ideas of what really ordinary current expenditure was, and arrears of taxes were not accumulating at a rate to cause apprehension as to the ultimate date of payment.

In regard to the second, the practice of banks making advances for extraordinary expenditures in anticipation of the sale of debentures, was fundamentally wrong, unless the bonds were actually sold and loans were of a very temporary nature. The latter has not been the case, however, and some degree of dissatisfaction has set in between the municipalities and the banks, because the latter were forced to take a prudent course, and demanded curtailment of activities. Firms or individuals who contemplate the erection of a large block or extensive improvements entailing the outlay of large sums of money beyond their own capacity, arrange in advance for the necessary mortgage loan, and the banker being assured that the proceeds will be forthcoming during the progress of the building or on completion of the structure or improvements, very often makes temporary loans, pending receipt of the mortgage moneys. Municipalities should have been treated on the same basis, and if they had, there would never have existed the present measure of discontent and visible estrangement with the banks in regard to their banking arrangements.

During the past year, when municipal bonds were difficult to sell, the banks declined to lend on the old terms. Municipalities therefore had to curtail their activities. This action on the part of the banks gave rise to unjust criticism being directed towards them by municipal corporations, whereas the position of affairs should have been viewed in a calmer and saner light, and the curtailment of expenditure taken into consideration more philosophically than a great many of the municipal bodies were inclined to do. The banks could not be held accountable for the unprecedented state of the bond market, but the municipalities themselves were directly responsible for having surfeited it by their own enormous offerings.

I believe the banks have done their part admirably well in providing loans for current expenditure, but when new borrowings for routine overlap the old, there arose cause for some concern, and there was an apparent danger that municipalities were not keen to comprehend. I venture to remark that a few banks are still carrying balance of certain loans made for current expenses in 1912, which brings to view a feature of municipal borrowing that demands a remark in passing. Where this exists, there can be only three reasons assigned for the municipality's nonfulfillment of its obligations to its particular bank, i.e., the municipality had over-borrowed during the year for ordinary routine expenses, or, they had made outlays that were of a permanent character and should have been covered by an issue of debentures or, they had failed to make sufficient collection of taxes and had allowed arrears to accumulate.

Where a cause for discontent existed, being promoted by the above features, could there be any just argument advanced by municipal councils as to why banks should continue to make loans, and more particularly to enable municipalities to swell their extraordinary expenditure accounts, in anticipation of the sale of debentures; and more especially when the most eminent bankers of our country and the foremost financiers of England, with a broader vision of affairs than the average municipal finance committee, pointed out the danger that must result from such a conglomeration of municipal bond issues that had already been offered, and were only a small percentage of the aggregate amount under way. The Canadian banker had to take heed to the warning and instruct the municipalities to call a halt for fear that the banks would have to carry indefinitely advances depending upon the sale of debentures.

During the year 1913, the protracted Balkan struggle and grave fears of an international outbreak in Europe,

EMILIUS JARVIS

A. D. MORROW

EMILIUS JARVIS & CO.

MEMBERS TORONTO STOCK EXCHANGE

GOVERNMENT
MUNICIPAL
—AND—
CORPORATION
SECURITIES

JARVIS BUILDING - TORONTO

THE
**DOMINION SECURITIES
CORPORATION LIMITED**

ESTABLISHED 1901

HEAD OFFICE: 26 KING ST. EAST, TORONTO
MONTREAL LONDON, E.C., ENG.

Service to Municipalities

Fourteen years of service to Canadian Municipalities and Investors in Canadian Municipal Debentures enables us to give every facility to Municipalities in marketing new issues. Our organization is represented in the principal markets of Canada, Great Britain and the United States.

Correspondence Invited.

**CANADIAN GOVERNMENT MUNICIPAL
AND CORPORATION BONDS**

MUNICIPAL DEBENTURES BOUGHT

MUNICIPALITIES WILL PROFIT
BY COMMUNICATING WITH US
WHEN CONTEMPLATING THE
- ISSUE OF DEBENTURES -

C. H. Burgess & Company
Traders Bank Bldg. - Toronto, Can.

WM. C. BRENT.

HAROLD BRENT.

BRENT NOXON & CO.

DOMINION BANK BUILDING,
TORONTO

DEALERS IN

MUNICIPAL DEBENTURES

Highest Market Prices Paid

Correspondence Solicited

which has already come to pass, completely upset public confidence in England, caused the hoarding of gold by individuals on an enormous scale, the liquidation of securities intermittently at panic prices, and the temporary withdrawal of many investors from the security market caused a distinct money stringency in Canada, a country which had been for a long time looking abroad for permanent capital.

The source of supply being cut off and the financing of our undertakings being left in our hands, the banks had a very difficult task to perform. They had first to assist legitimate lines of industry, in order that the general trade of the country would not receive a setback, or be seriously affected. Their commitments to the agricultural, manufacturing, and varied industries being uncommonly heavy, they were not in control of sufficient funds to further assist municipalities in capital expenditures, pending the sale of bonds, and even if they had the available money it is just a question if they would have favored lending it to municipalities on account of the congestion of the bond market. The anticipated large sale of municipal securities which was expected to take place in 1913 to cover the borrowings of the previous year, did not materialize, and the same may be repeated in regard to bank loans made in 1913, which have not yet been covered by sale of debentures during this year.

Where municipalities deem it necessary to install water works and sewerage systems, lay pavements and erect buildings in the interests of the public, the municipal authorities should commence well beforehand in regard to financing the projects, for it is not within the province of the bank to provide funds for these purposes, even temporarily. The debentures should be sold and the money in hand before any contracts are let. If the municipal councils would pay heed to this, they would find no difficulty in obtaining loans from the banks for the ordinary routine expenses of the municipalities or the amounts directly chargeable to the current year's tax levy.

From a banker's point of view, the ordinary methods of advertising certain debenture issues for sale have not proved satisfactory during the past few years, and this process of hunting purchasers for municipal bonds in vogue is too slow for the present age. When the amount of capital for investment is limited, municipal bodies should strive to place their debentures in the most favorable market, which can only be done through a first-class bond house, and for some time to come, no municipality should undertake municipal improvements of a permanent nature until the bonds are actually sold and the proceeds are in hand.

The unprecedented demand for money during the past few years at remunerative rates by many worthy concerns, has left municipal offerings overshadowed, on account, principally, of the latter's comparatively low rate of interest. While the safety of most of the western municipal loans cannot be questioned, still there has not been a quick turn-over, and the immense total arrears of taxes that is piling up yearly forbids a complete clean-up before the close of the municipalities financial year, and this detracts from the value of the business from a banker's view point.

The municipalities must put to work an effective form of collecting machinery, and the collection of taxes should be energetically pressed by every council before the date of their retirement takes place. A new municipal council usually plans for the current year, instead of taking hold of the past year's arrears of business in a thoroughly business way. The old adage that there is nothing surer than death and taxes, does not apply to the West literally. Scientists have not yet devised a means of preventing death, but the tax payer has religiously avoided paying taxes on his unproductive properties, which, in the course of events, necessitates the lands being offered for sale, and in many cases being bought in by the municipalities—an action which does not meet with favor, on account of the non-contribution of cash to the municipal treasury.

Formerly municipal accounts are more attractive, on account of the substantial sinking fund balances carried with the banks, but of late years and especially in the West, municipal experts have learned that the burden on the tax payer is lowered by adopting the installment or annuity method of debenture repayment. Taking an independent point of view, I cannot fail to agree in this, unless the municipality can invest their sinking funds at a higher rate of interest than banks allow on sinking funds deposits.

From the investor's point of view, the sinking fund plan is more attractive on account of the sinking funds built up locally from year to year, and not applied until the debentures mature in due course, usually ten, twenty or thirty years; whereas, in annuities or installments, interest

SASKATCHEWAN BONDS.

The Local Government Board of Saskatchewan—which has been a large factor in steadying municipal and school issues in that province—has recently addressed some valuable advice to the municipalities. They read as follows:—

(1) When bonds are to be sold, make careful selection between the annuity and instalment methods of repayment, and choose the one best suited to the individual circumstances.

(2) See that in the same municipality the school premises are adequate, no more and no less, to the requirements of attendance.

(3) Do not undertake liabilities and commence building until debentures have been sold and the money is in hand.

(4) Before undertaking any work secure authorization from the local government board.

(5) Only accept bids for bonds subject to approval of the local government board.

(5) Only accept bids for bonds subject to approval of the local government board.

(6) Keep cashing coupons quickly. Failure to pay them promptly lowers the market and reduces the desirability of the securities.

(7) School trustees should sue rural municipalities for non-payment of the amount due quarterly for school taxes, only as a last resource.

(8) All taxes must, therefore, be promptly paid.

(9) Rural municipalities making temporary loans in order to pay over school assessments should wipe them out at the end of the year, thus maintaining their credit at the bank for future advances. The prompt payment of school taxes, which may be made separately, is the only way to ensure the rural municipality being able to repay short-term loans on the due date.

(10) School trustees should keep the rural municipality advised as to the date when bond coupons are payable.

(11) Try to avoid being forced to choose whether the teacher's salary or the bond coupons are to be allowed to go in arrears.

(12) Rural municipalities should not commit the unlawful act of using school taxes for improvements or other works as school taxes are trust funds to be used for school purposes only. Any councillor doing so renders himself personally liable for moneys so misapplied.

In any doubt or difficulty, or when in need of any information, apply immediately to the local government board.

ASSISTING MUNICIPALITIES.

The Provincial Government of Alberta has expended \$140,000 assisting rural municipalities in the construction of roads and proposes to spend about \$70,000 more in like manner. Hon. Charles Stewart, provincial Minister of Public Works, states that the government is not undertaking a huge programme this year, but that a number of comparatively small jobs are to be looked after. The City of Calgary is spending \$270,000 on municipal improvements.

REGINA AND ITS INSURANCE.

The City of Regina has adopted a novel form of letting its fire insurance, and one which gives each company an equal share of the business. As there are 88 companies represented in the City and as the City proposes to place \$1,300,270.00 of fire insurance this year, the amount of insurance which will be thus written by each company will be in advance of \$10,000.00. It is expected that a material reduction will result in the rates of the various risks pooled by the city. Efforts have been made throughout the year towards having the underwriters reduce the rates on the various risks, and as a result the city has been notified that the inspectors had made a thorough re-inspection of all property in Regina and are now working on the new rates, which would be submitted before the matter is finally dealt with.

CITY OF BERLIN, ONT.

The City of Berlin disposed at the beginning of last month \$170,000, 6 per cent debentures, which were secured by Wood, Gundy and Co. at a price to yield around 5¼ per cent. The debentures mature in 3, 5, 10, 20 and 30 instalments.

and a proportion of principal are paid annually, and upon analysis of both of the latter methods it will be observed that they carry within themselves a rate of interest equal to the amount carried by the debentures, which plan, of course, appeals to the tax payer more forcibly.

Extracts from a Paper Delivered Before the Annual Convention of Alberta Municipalities.

H. O'HARA & CO.

MEMBERS TORONTO STOCK EXCHANGE.

**STOCK & DEBENTURE
BROKERS**

WESTERN CANADIAN MUNICIPAL,
SCHOOL DISTRICT AND RURAL
TELEPHONE DEBENTURES
SPECIALIZED IN.

BONDS SUITABLE FOR INVEST-
MENT OF SINKING FUNDS, ETC.,
ALWAYS ON HAND.

Correspondence Invited

Royal Bank Bldg., King & Yonge Sts.,
TORONTO

AND LONDON, ENGLAND.

THE

**Canada Bond
Corporation**

Limited

59 Yonge Street Toronto

—BUYS—

MUNICIPAL DEBENTURES

AND ACTS AS FINANCIAL AGENTS FOR
MUNICIPALITIES

CONSULT THEM**Government and Municipal
Securities****BOUGHT and SOLD**

◆◆◆◆◆

W. A. Mackenzie & Company,

CANADA LIFE BUILDING,

TORONTO

BONGARD, RYERSON & CO.

MEMBERS TORONTO STOCK EXCHANGE

—PURCHASERS OF—

GOVERNMENT AND
MUNICIPAL BONDS

TORONTO GENERAL TRUSTS BUILDING
TORONTO - - CANADA

LOANS MADE TO:
BONDS BOUGHT FROM:

MUNICIPALITIES

A. P. LESPERANCE, Manager

City and District Savings Bank
MONTREAL

A. H. MARTENS

W. W. BALDWIN

T. S. G. PEPLER,
Manager Gov't and Municipal
Bond Department

A. H. Martens & Co'y

MEMBERS TORONTO STOCK EXCHANGE

and

Dealers in

Government and Municipal Debentures

Highest market prices paid
for this class of securities

Correspondence Solicited

Royal Bank Building, Toronto, Ont.

60 Broadway, New York, U.S.A.

SOME BOND SALES DURING JUNE.

Hull, Que.

\$271,000 5½ per cent 7 and 30-years, to Dominion Securities Corporation.

St. Vital, Man.

\$50,000 6 per cent 15-years, to Messrs. Murray, Mather and Company, Toronto. Price 97.19.

Renfrew, Ont.

\$8,000 28-year and \$3,313 30-year 5 per cent, to Messrs. W. L. McKinnon and Company, Toronto. Price \$10,855.48.

Carleton County, Ont.

\$20,000 5 per cent, to the Imperial Bank.

Toronto, Ont.

\$25,000 to the Toronto Police Benefit Fund Committee.

Ottawa, Ont.

\$100,000 to Messrs. Wood, Gundy and Company, Toronto.

Saanich, B.C.

\$150,000 to Messrs. R. C. Matthews and Company, Toronto.

Hanna, Alta.

\$10,000 7 per cent 10-years, to Canada Bond Corporation, Toronto.

Welland, Ont.

\$90,000 5 per cent, to Messrs. W. A. MacKenzie and Company, Toronto. Price 96.56.

Berlin, Ont.

\$170,297 6 per cent 3, 5, 10, 20 and 30-year, to Messrs. Wood, Gundy and Company, Toronto.

East End Schools, Sask.

\$12,000 7¼ per cent 20 instalments, to Messrs. W. L. McKinnon and Company, Toronto.

Sudbury, Ont.

\$20,000 6 per cent 10-years, to Messrs. Martens and Company, Toronto.

Mimico, Ont.

\$66,020 5½ per cent 20-years, to Messrs. C. H. Burgess and Company, Toronto.

Fort Frances, Ont.

\$33,000 6 per cent 30-years, to Messrs. C. H. Burgess and Company, Toronto.

Wallace, R. M., Ont.

\$1,000 7 per cent 10-years, to Messrs. C. H. Burgess and Company, Toronto.

Bathurst, N.B.

\$75,000 5 per cent 40-years, to Messrs. J. M. Robinson and Sons and Eastern Securities Company Limited; price 95.50.

Moose Jaw, Sask.

The completion of sale of \$400,000 bonds by Messrs. Wood, Gundy and Company enables the municipality to retire outstanding temporary loans in London and provides capital for the balance of the year.

Regina, Sask.

With the completion of the negotiations between the city and Messrs. Wood, Gundy and Company, Toronto, the city has provided for the retirement of all short-term securities falling due from the present date up to 1918.

MUNICIPAL INSURANCE.

Municipal insurance is dangerous. Civic authorities too often complain of high rates instead of removing the unfavorable conditions causing them. Municipal insurance is all right until a fire comes along, wipes out the civic insurance fund and piles up a deficit to meet in some way or another. Municipalities cannot afford to gamble with the fire and conflagration risk.—Exchange.

BOND SALES IN CANADA AND UNITED STATES.

\$17,285,028 of Municipal bonds were sold in Canada during the first four months of the year, while during the same period, the United States bought \$20,374,872.

During the first four months bank loans increased from \$35,952,805 to \$43,031,360.

Last year during the same period Canada bought \$22,320,357, United States \$1,843,000, London \$26,231,000.

A SHARP COMPARISON.

The following figures, taken from a paper recently read before the Insurance Institute of Toronto, show how high the per capita fire losses of Canadian cities are compared with those of English cities:

Hamilton	\$1.88
Vancouver	4.45
Calgary . . . . .	.95
Regina	3.47
Halifax	6.66
Toronto	2.45
Brantford	1.98
Winnipeg	3.88
London, Ont.	1.05
Saskatoon	6.85
London	0.46
Glasgow . . . . .	.76
Birmingham . . . . .	.48
Manchester . . . . .	.55
Sheffield . . . . .	.57
Leeds	1.26
Belfast . . . . .	.09
Bristol . . . . .	.15
Edinburgh . . . . .	.21
Dublin . . . . .	.42

BUILDING PERMITS IN WELLAND, ONT., 1st JUNE, 1915.

Building permits for month of May this year \$25,841, last year, \$45,697; total for year to end of above month is \$80,873; total for corresponding period last year, \$201,892.

MUNICIPAL LOANS

Having our own offices in Montreal, Toronto, Boston and New York, we offer exceptional facilities to municipalities desiring money in the form of long or short term loans.

We invite correspondence

N. B. STARK & COMPANY

Montreal New York
Toronto Boston

MURRAY, MATHER & CO.

.. THE ..
BANK OF OTTAWA

ESTABLISHED 1874

Capital Paid-up	-	\$4,000,000
Rest	-	\$4,750,000
Total Assets over	-	\$50,000,000

Head Office - Ottawa, Can.

It is hard to realise what Macaulay called "the present value of a distant advantage." This is seen in the way so many persons neglect to save money in days of prosperity to make provision for a future day of need.

Board of Directors :

- Hon. George Bryson, *President*
John Burns Fraser, *Vice-President*
Sir Henry N. Bate David Maclaren
Russell Blackburn Denis Murphy
Sir Henry K. Egan Hon. Sir George H.
E. C. Whitney Perley
GEORGE BURN, *General Manager*
D. M. FINNIE, *Asst. General Manager*
W. DUTHIE, *Chief Inspector*

IMPERIAL BANK OF CANADA

CAPITAL PAID UP	.....	\$7,000,000.00
RESERVE FUND	.....	7,000,000.00

DIRECTORS:

PELEG HOWLAND, President; ELIAS ROGERS, Vice-Pres.; Wm. Ramsay of Bowland, J. Kerr Osborne, Sir J. A. M. Alkins, K.C., M.P., Winnipeg; Cawthra Mulock; Hon. Richard Turner, Quebec; Wm. Hamilton Merritt, M.D., St. Catharines; W. J. Gage.

HEAD OFFICE - - - TORONTO

BRANCHES:

Ontario	Nashville	Quebec	Alberta
Aurora	New Liskeard		Athabaska Landg.
Amherstburg	Niagara Falls (3)	Montreal (2)	Banff
Belwood	Niagara on the	Quebec (2)	Calgary
Bolton	Lake		Edmonton (4)
Brantford	North Bay	Manitoba	Redcliff
Caledon East	Ottawa		Lethbridge
Cobalt	Palgrave	Brandon	Red Deer
Cottam	Port Arthur	Portage la Prairie	Wetaaskiwin
Cochrane	Port Colborne	Winnipeg (2)	
Elk Lake	Port Robinson		
Essex	Preston		British Col'ba
Fergus	Ridgeway	Saskatchewan	
Fonthill	Saulte Ste.	Balgonic	Athelmar
Fort William	Marie (3)	Broadview	Arrowhead
Galt	Sth. Porcupine	Fort Qu'Appelle	Chase
Hamilton	Sth. Woodilee	Hague	Cranbrook
Harrow	St. Catharines (3)	Kandahar	Fernie
Humberstone	St. Thomas (2)	Mooseaw	Golden
Ingersoll	St. Davids	Nth. Battleford	Kamloops
Jordan	Sparta	Prince Albert	Nelson
Vineland	Thessalon	Regina	Natal
Kenora	Timmins	Rosthern	Revelstoke
Listowel	Toronto (17)	Saskatoon	Vancouver (4)
London	Welland (2)	Wilkie	Victoria (2)
Marahville	Woodstock	Wynyard	

SAVINGS DEPARTMENT:

Interest allowed on all Deposits at Branches of the Bank throughout the Dominion of Canada

Draft Money Orders and Letters of Credit Issued Available in any Part of the World

Agents in England and Scotland: Lloyd's Bank, Limited, and the Commercial Bank of Scotland, Limited, and Branches with whom money may be deposited for transfer by letter or cable to any part of Canada.

Agents in United States: New York, Bank of the Manhattan Company; Chicago: First National Bank; San Francisco: Wells, Fargo Nevada National Bank.

Agents in France: Credit Lyonnais; Germany: Deutsche Bank

BANK OF MONTREAL

(Established 1817)

INCORPORATED BY ACT OF PARLIAMENT

Capital Paid-up..... \$16,000,000.00
 Rest..... 16,000,000.00
 Undivided Profits..... 1,252,864.00

HEAD OFFICE - - - MONTREAL

BOARD OF DIRECTORS:

H. V. MERREDITH, Esq., President

R. B. ANGUS, Esq.	A. BAUMGARTEN, Esq.
E. B. GREENSHIELDS, Esq.	C. B. GORDON, Esq.
SIR WILLIAM MACDONALD,	H. R. DRUMMOND, Esq.
HON. ROBERT MACKAY	D. FORBES ANGUS, Esq.
SIR THOMAS SHAUGHNESSY, K.C.V.O.	WM. MCMASTER, Esq.
C. R. HOSMER, Esq.	

SIR FREDERICK WILLIAMS-TAYLOR, LL.D., General Manager.
 A. D. BRAITHWAITE, Assistant General Manager.
 C. SWEENEY, Supt. British Columbia Branches.
 F. J. COCKBURN, Supt. Quebec Branches.
 E. P. WINSLOW, Supt. North West Branches.
 D. R. CLARKE, Supt. Maritime Provs. and Nfld. Branches.

BRANCHES:

At all Important Cities and Towns in every Province in the Dominion of Canada

IN NEWFOUNDLAND:

ST. JOHN'S CURLING GRAND FALLS

IN GREAT BRITAIN:

LONDON—47 Threadneedle St., E.C., G. C. Cassels, Manager.
 Sub-Agency, 9 Waterloo Place, Pall Mall, S.W.

IN THE UNITED STATES:

NEW YORK: R. Y. HEBDEN, W. A. BOG, and J. T. MOLINEUX, Agents, 64 Wall Street
 CHICAGO, Ill. SPOKANE, Wash.

The Canadian Bank of Commerce

PAID-UP CAPITAL..... \$15,000,000
 REST..... 13,500,000

HEAD OFFICE - TORONTO

BOARD OF DIRECTORS.

Sir Edmund Walker, C.V.O., LL.D., D.C.L., President
 Z. A. Lash, Esq., K.C., LL.D., Vice-President

JOHN HOSKIN, Esq., K.C., LL.D.	ALEXANDER LAIRD, Esq.
J. W. FLAVELLE, Esq., LL.D.	WILLIAM FARWELL, Esq., D.C.L.
A. KINGMAN, Esq.	GARDNER STEVENS, Esq.
HON. SIR LYMAN MELVIN JONES	G. G. FOSTER, Esq., K.C.
HON. W. C. EDWARDS	CHARLES COLBY, Esq., M.A.
E. R. WOOD, Esq.	Ph.D.
SIR JOHN M. GIBSON, K.C.M.G., K.C., LL.D.	A. C. FLUMERFELT, Esq.
ROBERT STUART, Esq.	G. W. ALLAN, Esq.
G. F. GALT, Esq.	H. J. FULLER, Esq.
	F. P. JONES, Esq.

ALEXANDER LAIRD - - - General Manager
 JOHN AIRD, Asst. General Manager

Branches in every Province of Canada and in the United States, Mexico, Newfoundland, & England

Montreal Main Office: H. B. WALKER, Manager

London (England) Office: 2 Lombard Street, E.C.
 H. V. F. JONES, Manager

New York Agency: 16 Exchange Place
 WM. CRAY, and H. P. SCHELL, Agents

This Bank with its Capital of \$15,000,000 and Reserve Fund of \$13,500,000 affords every security to depositors, and its large number of branches and agents in all parts of the world enables it to offer unequalled facilities for the transaction of all kinds of banking business, which will receive the most careful attention.

THE ROYAL BANK OF CANADA

Capital Authorized..... \$ 25,000,000
 Capital Paid Up..... 11,560,000
 Reserve and Undivided Profits..... 13,174,000
 Total Assets..... 185,000,000

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

Sir Herbert S. HOLT, President. E. L. PEASE, Vice-President
 E. F. B. JOHNSTON, K.C. 2nd Vice-President

Wiley Smith	Hon. W. H. Thorne	A. J. Brown, K.C.
Hon. D. MacKeen	Hugh Paton	W. J. Sheppard
Jas. Redmond	T. J. Drummond	C. S. Wilcox
G. R. Crowe	Wm. Robertson	A. E. Dymont
D. K. Elliott		C. E. Neill

OFFICERS

E. L. Pease, General Manager
 C. E. Neill & F. J. Sherman, Asst. Gen.-Managers
 W. B. Torrance, Supt. of Branches

Branches in every Province of the Dominion of Canada and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; ANTIGUA, St. Johns; BAHAMAS, Nassau; BARBADOS, Bridgetown; DOMINICA, Roseau; GRENADA, St. Georges; JAMAICA, Kingston; St. KITT'S, Basseterre; TRINIDAD, Port of Spain and San Fernando; BRITISH GUIANA, Georgetown, New Amsterdam and Rose Hall (Corentyne); BRITISH HONDURAS, Belize.

LONDON, Eng., OFFICE—Princes St., E.C.
 NEW YORK AGENCY—Corner William and Cedar Streets
 Savings Department at all Branches

The Merchants' Bank

OF CANADA

HEAD OFFICE - - - MONTREAL

Capital Paid-up..... \$7,000,000
 Reserve Fund and Undivided Profits..... 7,245,140

BOARD OF DIRECTORS:

SIR H. MONTAGU ALLAN, C.V.O., President
 K. W. BLACKWELL, Vice-President

THOS. LONG	ANDREW A. ALLAN	F. ROBERTSON
ALEX. BARNET	C. C. BALLANTYNE	G. L. CAINS
F. ORR LEWIS	F. HOWARD WILSON	A. B. EVANS
	A. J. DAWES	

E. F. HEBDEN, General Manager
 T. E. MERRETT, Supt. of Branches and Chief Inspector

A GENERAL BANKING BUSINESS TRANSACTED

The Accounts of Municipalities kept and advances made in anticipation of the collection of taxes; also loans for improvement purposes in anticipation of the issue of debentures.

209 BRANCHES AND AGENCIES IN CANADA

Extending from the Atlantic to the Pacific

SAVINGS DEPARTMENT AT ALL BRANCHES

Deposits received and Interest allowed at best current rates

New York Agency: 63 and 65 WALL STREET

The Merchants Bank of Canada

STATEMENT OF LIABILITIES AND ASSETS AT 30th APRIL, 1915

LIABILITIES.

1. To the Shareholders:	
Capital Stock paid in.....	\$ 7,000,000.00
Rest or Reserve Fund.....	7,000,000.00
Dividends declared and unpaid.....	175,710.00
Balance of Profits as per Profit and Loss Account.....	245,140.70
	<u>\$14,420,850.70</u>
2. To the Public:	
Notes of the Bank in Circulation.....	\$ 6,204,069.00
Deposits not bearing interest.....	12,692,061.44
Deposits bearing interest (including interest accrued to date of statement).....	50,037,101.89
Balances due to other Banks in Canada.....	933,204.92
Balances due to Banks and banking correspondents in the United Kingdom and foreign countries.....	1,207,076.30
Bills payable.....	696,100.26
Acceptances under letters of credit.....	.....
Liabilities not included in the foregoing.....	.....
	<u>\$86,190,464.51</u>

ASSETS.

Current Coin held (see also deposit in Central Gold Reserve).....	\$ 2,693,330.53
Dominion Notes held.....	12,732,618.75
Notes of other Banks.....	564,711.00
Cheques on other Banks.....	2,833,748.30
Balances due by other Banks in Canada.....	3,110.67
Balances due by Banks and banking correspondents elsewhere than in Canada.....	2,232,655.91
Dominion and Provincial Government securities, not exceeding market value.....	583,997.72
Canadian Municipal Securities, and British, Foreign and Colonial public securities, other than Canadian, not exceeding market value.....	903,667.02
Railway and other Bonds, Debentures and Stocks, not exceeding market value.....	4,968,195.58
Call Loans in Canada on Bonds, Debentures and Stocks.....	3,606,342.89
Call Loans elsewhere than in Canada.....	964,193.14
	<u>\$32,086,571.51</u>
Other Current Loans and Discounts in Canada (less Rebate of Interest).....	47,401,858.68
Other Current Loans and Discounts elsewhere than in Canada (less Rebate of Interest).....	100,240.32
Liabilities of customers under letters of credit as per contra.....	696,100.26
Real Estate other than bank premises.....	118,816.77
Overdue debts, estimated loss provided for.....	144,721.63
Bank Premises, at not more than cost, less amounts written off.....	4,166,147.94
Deposit with the Minister for the purposes of the Circulation Fund.....	335,000.00
Deposit in the Central Gold Reserve	1,000,000.00
Other Assets not included in the foregoing.....	141,007.40
	<u>\$86,190,464.51</u>

K. W. BLACKWELL, VICE-PRESIDENT.

E. F. HEBDEN, GENERAL MANAGER.

REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE MERCHANTS BANK OF CANADA.

In accordance with the provisions of sub-Sections 19 and 20 of Section 56 of the Bank Act we report to the shareholders as follows:—

We have examined the above Balance Sheet with the Books of Account and other records of the Bank at the Chief Office, and with the signed returns from the Branches and Agencies.

We have checked the cash and verified the securities of the Bank at the Chief Office against the entries in regard thereto in the books of the Bank as on April 30th, 1915, and at a different time during the year and found them to agree with such entries. We have also attended at several of the Branches during the year and checked the cash and verified the securities held at the dates of our attendance and found them to agree with the entries in the books of the Bank with regard thereto.

We have obtained all the information and explanations we have required. In our opinion the transactions of the Bank which have come under our notice have been within the powers of the Bank, and the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us and as shown by the books of the Bank.

MONTREAL, 25TH MAY, 1915.

VIVIAN HARCOURT, of Deloitte, Plender, Griffiths & Co.
J. REID HYDE, of Macintosh & Hyde.

} AUDITORS.

QUEBEC FORGING AHEAD.

Over 200 municipalities in the Province of Quebec are building macadamized or gravelled roads this year.

SAANICH, B.C.

The paving work in the municipality of Saanich, B.C., which has been held up through litigation—now disposed of—is now making rapid progress.

ESSEX, ONT.

By the end of the year the town of Essex, Ont., will have completed 1 1/4 miles of concrete pavement. The road was started last year.

A CIVIC ASPHALT PLANT.

The civic asphalt plant of Victoria, B.C., is now completed and in full operation. It has a daily capacity of 1,500 cu. yds. It is of the semi-portable type and uses oil fuel in its 50 h.p. boiler, which drives a 36 h.p. horizontal engine. Among the principal parts of the plant are a sand drier, dust collector, three melting tanks, each of 24,000 gallons capacity, and an air compressor. There are various bins for the storage of material and a storehouse has been built recently convenient to the plant.

WASTE PRODUCT.

Scientifically speaking, there is no such thing as a waste product, and the word waste has become current because of the lack of knowledge of how to transform residual matter into a marketable commodity. In the study of fuels, for instance, the enormous quantities of carbonaceous substances which exist in different forms, and which have not been utilized or treated in order to extract from them the valuable products they contain, are now being brought into the sphere of commerce by the introduction of new processes. A study of the history of these processes is exceedingly interesting, and indicates very clearly how the theorists have been groping towards the end which appears now to be susceptible to early attainment.—Canadian Engineer.

REGINA TO SPEND \$293,000.

The city of Regina will undertake the construction of works which will cost over \$293,000. The City Council has practically completed arrangements for the construction of the following improvements:—

Concrete sidewalks	\$10,000
Plank sidewalks	7,500
Storm sewers	132,599
Domestic sewers.	10,688
Sewage disposal and connections	16,500
Waterworks—pumps, wells, mains and con- titions.	75,100
Street Railway—Extensions	1,655
Light and Power—Distribution, Power House.	29,117
Total	293,159

The portion of the money expended on improvement works which will be paid in labor is \$145,111.

PERSONAL.

The City of Galt has appointed a new water commissioner—Dr. J. H. Radford—in the place of Lieut.-Col. A. J. Oliver, who has resigned.

Mr. Henry Hadley, Jr., city engineer of Verdun, Que., has resigned his position and is entering active service with the 5th Mounted Rifles. Mr. Hadley is a graduate in civil engineering of McGill University.

The City Engineer of Albert, Alta.—Mr. Smith—has recently passed the C.E. examination of Toronto University. As a practical engineer, Mr. Smith has already proved his worth.

In Winnipeg they have abolished the positions of field, bridge, designing, computing and consulting engineers, so that the City Engineer—Mr. W. P. Brereton—has got a big job in front of him to keep ahead of the work.

R. O. Wynne-Roberts, until recently consulting engineer for the city of Regina, has been elected a member of the American Society of Civil Engineers. He is a member of the Canadian Society of Civil Engineers of Great Britain.

R. A. ROSS & CO.
CONSULTING ENGINEERS
Mechanical, Steam, Electric, Hydraulic,
Examinations, Reports, Valuations
80 St. Francois Xavier St. - MONTREAL

**CANADIAN INSPECTION & TESTING
LABORATORIES, Limited**
INSPECTING AND CONSULTING ENGINEERS AND
CHEMISTS
Inspection and Tests of Waterworks and Municipal Supplies
TORONTO WINNIPEG VANCOUVER
Head Office - - MONTREAL

FREDERICK G. TODD
LANDSCAPE ARCHITECT
MUNICIPAL PARK SYSTEMS AND TOWN
PLANNING
BIRKS BUILDING - - - MONTREAL

Walter J. Francis, C.E., M.Can.Soc. C.E., M.Am.Soc.C.E., M.Inst.C.E.
Frederick B. Brown, M.Sc., M.Can.Soc. C.E., Mem.Am.Soc.M.E., Mem.A.I.E.E.
WALTER J. FRANCIS & CO.
CONSULTING ENGINEERS
Head Office—232 St. James Street, MONTREAL
Long Distance Telephone—Main 5643
Cable Address—"WALFRAN, MONTREAL."—Western Un. Code

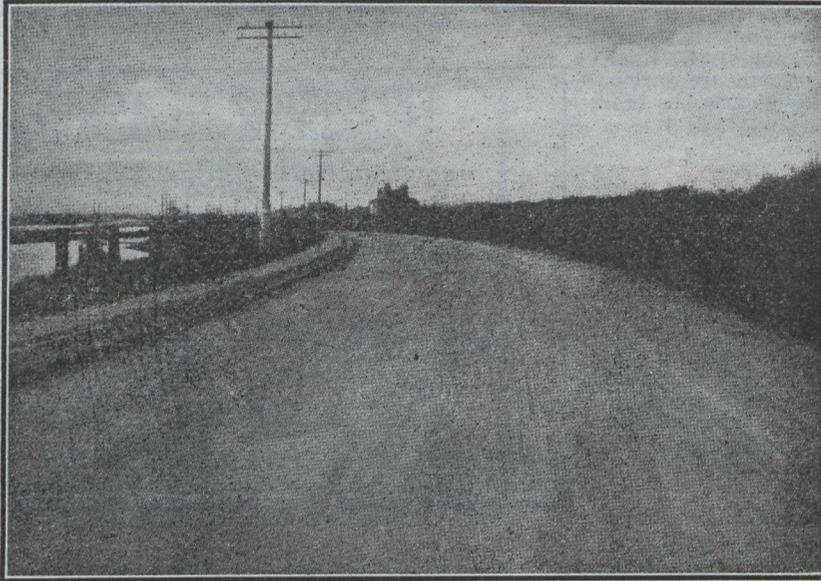
R. S. & W. S. LEA
CONSULTING ENGINEERS
Water Supply and Purification, Sewerage and Sewage Dis-
posal, Water Power Development
Tel. Long Distance Uptown 6740—41
New Birks Bldg. MONTREAL

FAIRCHILD, JONES & TAYLOR
Consulting Engineers & Land Surveyors
Steam and Electric Railways, Electric and Water Power,
Sewerage and Waterworks
Land, Timber & Mine Surveys, Townsite Subdivisions
Room: 608-609 Tegler Block, Edmonton, Alta.

Charles M. Jacobs J. V. Davies George D. Snyder
Members Inst. C.E., Can. Soc. C.E., Am. Soc. C.E.
JACOBS & DAVIES, Inc.
CONSULTING ENGINEERS
MONTREAL LONDON NEW YORK
Foundations, Subaqueous and Land Tunnels, Subways, Rail-
ways, Harbours, Water Power Development, Examinations,
Reports. Montreal Office—Eastern Township Bank Bldg.

W. CHASE THOMSON
M. CAN. SOC. C.E. M. AM. SOC. C.E.
STRUCTURAL ENGINEER
Steel or Reinforced Concrete Bridges, Foundations,
Buildings, etc.
New Birks Building - - - MONTREAL

Fluxphalte



“The
Premier
Road
Dressing
and
Binder”

“Fluxphalte” in England — Southwick to Shoreham Road

Road maintenance is as important as road construction. Large sums were spent on macadam roads in 1914. Do not let them dust away this year! Preserve them with Fluxphalte!

Fluxphalte is a pure liquid asphalt, containing 78 to 80% of solid bitumen, combined with sufficient liquid bitumen to secure the proper consistency for road use.

Fluxphalte should not be confused with mere road oils, tars and other dust layers.

Fluxphalte remains a part of the road—it doesn't flake or blow away. It builds up a true asphaltic surface that outwears a number of applications of inferior products.

NEW ILLUSTRATED BOOKLET ON REQUEST

THE

ASPHALT AND SUPPLY COMPANY, LIMITED

Sole Canadian Agents for the Mexican Eagle Oil Company, Limited

BOARD OF TRADE BUILDING

MONTREAL