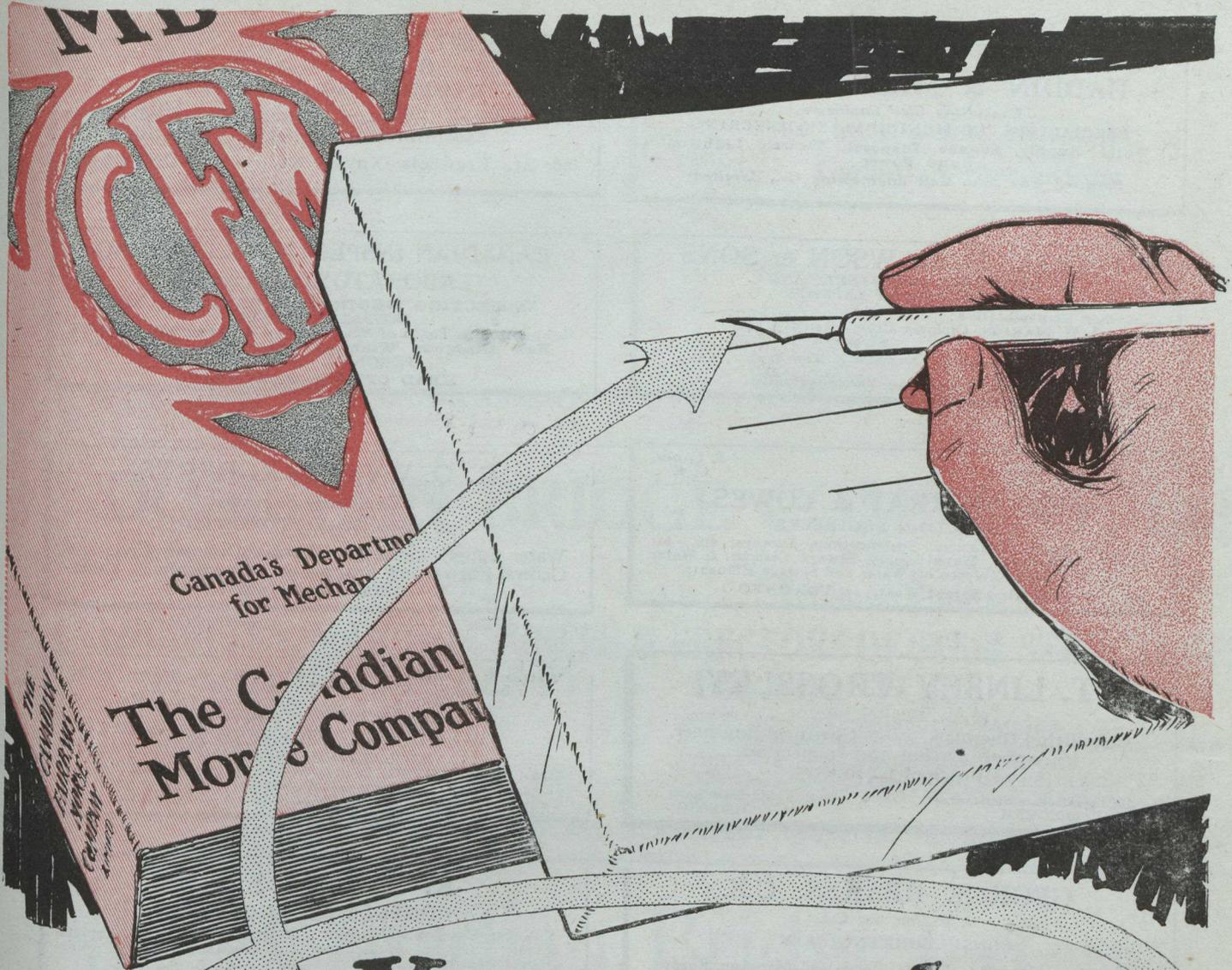


PAGES

MISSING



Your name here

Will bring you free a copy of our new catalogue The F.-M. Book.

A book of over—1000 pages a veritable encyclopedia of mechanical goods.

It contains a very complete line of Fairbanks Scales—Fairbanks Valves—Steam goods of all kinds—Fairbanks-Morse Oil Engines—Automobile & Motor Boat Accessories—Fairbanks-Morse Electrical Machinery—Pumps of all kinds—Machine Tools—Transmission Appliances—Railway & Contractors Supplies Small Tools & Machine Shop Supplies.

Address our nearest warehouse

The Canadian Fairbanks-Morse Co., Limited

ST. JOHN, QUEBEC, MONTREAL, OTTAWA, TORONTO, HAMILTON,
WINDSOR, WINNIPEG, SASKATOON, CALGARY,
VANCOUVER, VICTORIA.

Clip and Mail Coupon

The Canadian Fairbanks-Morse Co., LIMITED

Send me your C. F. M. Book containing a full line of Mechanical goods.

Add my name to your permanent mailing list—free

Name

Street

City and Province

WINNIPEG CALGARY
HADDIN & MILES LIMITED
Consulting Civil Engineers
 SPECIALISTS IN MUNICIPAL ENGINEERING
 Water Supply, Sewage Disposal, Electric Lighting
 and Power
Formerly The John Galt Engineering Co., Limited

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

THOMAS H. MAWSON & SONS
LANDSCAPE ARCHITECTS AND
CITY PLANNING EXPERTS -
 Canadian Representative:
 J. W. MAWSON, Diploma Civic Designs
 Liverpool University.
 Also at London, Lancaster & New York
 1100 Rogers Building, Vancouver, B.C.

CANADIAN INSPECTION & TESTING
LABORATORIES, Limited
INSPECTING ENGINEERS, CHEMISTS AND
METALLURGISTS.
 Inspection & Tests of Waterworks & Municipal Supplies
 New Glasgow, Winnipeg, Edmonton, Vancouver
 TORONTO, NEW YORK
HEAD OFFICE—MONTREAL.

T. Aird Murray, T. Lowes,
 M. Can. Soc. C. E. C. E.
AIRD MURRAY & LOWES
CONSULTING ENGINEERS
 Reports, Plans, Estimates, Specifications, Surveys, etc., for
 Municipal Sewerage, Water Supply, Sewage Disposal & Water
 Purification. Analyses of Water and Sewage Effluents.
 186 King Street West - TORONTO

R. O. WYNNE-ROBERTS
Consulting Engineer
 40 Jarvis Street, TORONTO
 Water Supply, Sewerage, Sewage Disposal, Civic and
 General Engineering, Arbitrations, Investigations, Valua-
 tions, Reports, etc.

T. LINSEY CROSSLEY
 A.M. Can. Soc. C.E.
 Consulting Chemist Chemical Engineer,
 Asphalt Paving and Inspection
 Municipal Chemistry
 318 Lagachetiere Street, West 43 Scott Street,
 MONTREAL TORONTO

Walter J. Francis, C.E., Frederick B. Brown, M.Sc
 M.Can.Soc. C.E. M.Can.Soc. C.E.
 M.Am.Soc.C.E., Mem.Am.Soc.M.E.,
 M.Inst.C.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

GEORGE REAKES, C.E.
 A.M. Can. Soc. C.E.
CONSULTING ENGINEER
 Expert on Concrete, Asphalt, Tarvia and Macadam Roads
 Inspections and Reports Made
 St. Lambert, P.Q.

R. S. & W. S. LEA
CONSULTING ENGINEERS
 Water Supply, Sewerage and Drainage; Water Purifi-
 cation; Disposal of Sewage and Refuse; Water Power
 Developments and Power Plants.
 Reports — Designs — Supervision of Construction.
 New Birks Building, Montreal, Que. Telephone,
 Uptown 733.

Darling Brothers Limited
 ENGINEERS AND MANUFACTURERS
 MONTREAL CANADA
 Branches: Toronto, Winnipeg
 Agents: Halifax, Calgary, Vancouver
 Pumps for any service. Steam Appliances of every kind.

BURNETT & MCGUGAN
 CIVIL ENGINEERS
 DOMINION AND B. C. LAND SURVEYORS
 PLANS, SURVEYS, REPORTS.
 NEW WESTMINSTER,
 P.O. Box 107 British Columbia

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. L. McCULLOCH, M. C. Soc. C.E.
CONSULTING ENGINEER
 Hydro-Electric Power Installation
 Water-Works, Sewerage and Sewage Disposal
 Examinations, Plans, Estimates & Reports
 NELSON, B.C.

Crushed Cut
 Stone Stone
 BRICK,  SAND.
 T A MORRISON & CO., 204 St. James St., Montreal

H. J. ROSS L. I. A.
 ACCOUNTANT - AUDITOR - TRUSTEE
 Trust Funds Administered
 180 St. James St. - Montreal

To Municipal Officers

When experiencing difficulties in framing By-Laws, you will do well to have the latest edition of the Consolidated By-Laws of Toronto. They will aid you in framing By-Laws for your municipalities in regard to the following:

Auctioneers, Auditors, Buildings, Burial Grounds, Cheese Factories, Chimneys, Debentures, Dogs, Disorderly Persons, Elections, Elevators, Excavations, Fish Markets, Food, Gas Works, Gambling, Horses, Horse Thieves, Intelligence Offices, Leases, Lights, Licenses, Menageries, Milk Vendors, Parks and Squares, Pawn Brokers, School Houses, Second Hand Shops, Taxes, Taverns, Trees, Vacant Lots, Vehicles, Verandas, Wooden Buildings.

And a variety of other By-Laws too numerous to specify.

550 Pages; Buckram. \$2.50.

DOMINION LAW BOOK COMPANY
Confederation Life Building, Toronto, Ont.

We have a few copies left of
Canadian Preparedness

Price - - - 50c

Canadian Municipal Journal

DOMINION BRIDGE COMPANY, Ltd.

Head Office and Works:
MONTREAL, P.Q.

Branch Offices and Works:
Toronto, Ottawa, Winnipeg

ENGINEERS, MANUFACTURERS & ERECTORS OF STEEL STRUCTURES
CAPACITY - 135,000 TONS

RAILWAY AND HIGHWAY BRIDGES
SWING AND BASCULE SPANS
BUILDINGS OF ALL KINDS
HEMISPHERICAL BOTTOM AND OTHER TANKS
TRANSMISSION POLES AND TOWERS

RIVETED PIPE, CAISSONS, BARGES
TURNABLES, ELECTRIC AND HAND POWER CRANF
HOISTING APPLIANCES, LIFT LOCKS
HYDRAULIC REGULATING GATES, ETC.
GEAR CUTTING AND GENERAL MACHINE WORK

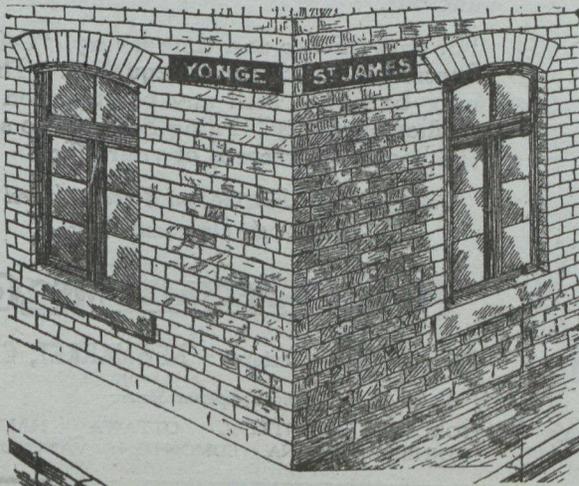
Large Stock of Standard Structural Material at all Works

The Canadian Bridge Co., LIMITED

WALKERVILLE, ONT.

Manufacturers
- - of - - **Railway and Highway Bridges**

Locomotive Turn Tables, Roofs, Steel Buildings and Structural Iron Work
of all descriptions



The Principal Cities in Canada
are using our

**Enamel Steel Street Names
and House Numbers**

THEY LAST A LIFETIME

MADE IN CANADA BY

The THOS. DAVIDSON MFG. CO., Limited

Selling Agent, **J. N. WARMINTON,**

207 St. James St.,

Montreal, Que.

Write for prices and samples

Can a Stranger find his way around your City or Town
without difficulty?

Are all Streets named and houses numbered up to date?

H. J. ROSS
ACCOUNTANT TRUSTE

(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

**Canadian Municipal
Journal**

**BEST MUNICIPAL
ADVERTISING MEDIUM
IN CANADA**

Milton Hersey

COMPANY, LIMITED

**Industrial Chemists, Inspectors,
Consulting Engineers
LABORATORIES**

For analyzing and testing all paving materials,
Asphalt and Tar Cements, Road Oils and Binders,
Sand, Stone, Dust, Gasoline, Lubricating Oils, Coal
Water, Etc.

Montreal — Winnipeg — New York

ROAD AND STREET **PAVING** ROAD AND STREET

CONSULTING SERVICE
Asphalts and Asphalt Paving a Specialty.

Before buying your
MUNICIPAL ASPHALT PAVING PLANT
Call upon us for Practical Information and assistance

Have you received
"PAVING ECONOMY"

If not, write for your Complimentary copy now, to
Director of Paving Department,
CHARLES' A. MULLEN



OFFICE SPECIALTY

VAULT TRUCKS
WOOD and STEEL

HOW convenient it is to load all your
books and records on an easy-run-
ning "Office Specialty" Truck and
roll it into the vault at night.

It saves much time and energy otherwise
lost in carrying the books and records in
and out.

For convenience and time saving, "Office
Specialty" Trucks are unequalled. They
may be fitted with any combination of
"Office Specialty" Filing Sections to suit
the books and records of your office.

*Ask for Folder No. 1863 on Wood and Steel
Trucks for the Office and Vault.*

THE OFFICE SPECIALTY MFG. CO. LIMITED

Home Office and Factories: **NEWMARKET, CAN.**

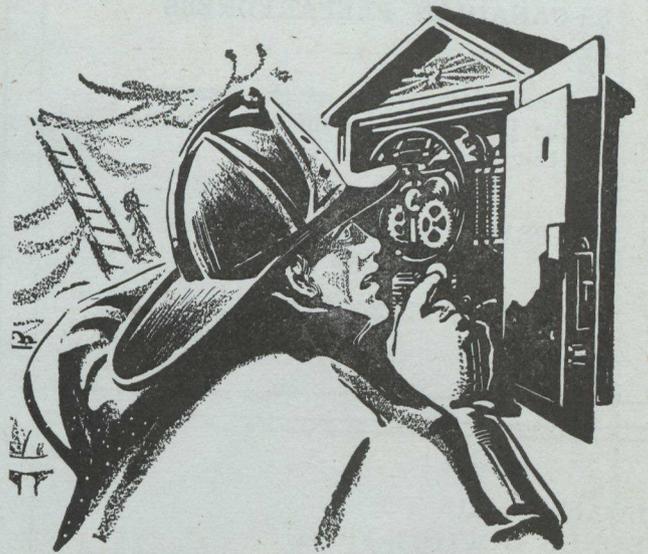
Filing Equipment Stores:

TORONTO MONTREAL OTTAWA HALIFAX
WINNIPEG REGINA EDMONTON VANCOUVER

There is a vast contrast between pushing an easy-running, rubber-tired Record Truck to the vault, and having the clerks make many journeys with arm-breaking loads. Conditions and results favor the "Office Specialty" Truck.

Alphabetical Index of Advertisers

	Page
American Bank Note Co.	278
Ames, A. E., & Co.	280-305
Bank of Montreal	303
Burnett and McGuigan	303
Babcock and Wilcox	Cover 2
Burgess, C. H. & Co.	301
Brent, Noxen & Co.	302
Canada Bond Corporation	301
Canada Cement	Cover 4
Canadian Bank of Commerce	304
Canadian Bridge Co., Limited	375
Canadian Fairbanks-Morse, Ltd.	273
Canadian Inspection and Testing Laboratory.....	275
Carritte-Paterson Mfg. Company	278
City and District Savings Bank	278
Clement, E. C.	274
Crossley, T. Linsey	274
Daly and Co.	300
Darling Bros.	279
Davidson Mfg. Co., Limited	275
Dominion Bridge Co., Ltd.	275
Dominion Law Book Co.	275
Dominion Securities Corporation	288
Francis, Walter J. & Co.	274
Haddin and Miles	274
Hanson Bros.	299
Hersey, Milton & Co., Ltd.	726
Harris, Forbes & Co.	299-303
Imperial Bank of Canada	304
Jarvis & Co., Æ.	297
Joyner, Winter & Co., Ltd.	Cover 2
Lea, R. S. & W. S.	274
Lespérance, A. P.	278
Lighthall and Harwood	274
London Concrete Machinery Co.	Cover 3
Mawson & Sons, Thos. H.	274
McCulloch, A. L.	274
McLaren Belting Co., The J. C.	Cover 3
Merchants Bank of Canada	304
Morrison & Co., T. A.	274
Murray, Aird & Lownes	274
Northern Electric Company	277
Office Specialty Mfg. Co., Ltd.	276
O'Hara & Company, Ltd., H.	298
Paterson Mfg. Co., Ltd.	279
Pedlar People	280
Phillips Electric Works, Eug. F.	Front Cover
Roberts Wynne, R. O.	274
Ross, H. J.	274
Ross & Company, R. A.	274
Royal Bank of Canada	304
Royal Securities Corporation	300
Reakes, George	274
Standard Underground Cable Co., of Canada	278
Stark & Company, N. B.	302
St. John Ambulance	278
Tarvia	279
Trussed Steel Concrete Co.	Cover
Warmington, J. N.	275
Wood, Gundy & Company	287
Wettlaufer Bros., Limited	Cover 2



FIRE!

Seconds may mean lives.

Minutes may mean Millions of Dollars LOST.

In such an emergency the *Northern Electric Fire Alarm System* saves its cost one hundred, yes, a thousand fold.

If your village, town or community has not a

Northern Electric Fire Alarm System

It lacks one of the most vital things conducive to healthy growth.

Such a system cuts fire hazards to a minimum—

—reduces actual losses.

—lowers insurance rates.

—attracts industries to the town.

—and marks a progressive municipal management.

WRITE NOW FOR FULL PARTICULARS ABOUT IT. Address our nearest Branch House, or Headquarters, Montreal.

Northern Electric Company LIMITED

Montreal Ottawa Winnipeg Calgary
Halifax Toronto Regina Vancouver

CANADIAN PREPAREDNESS

—o—

A complete review of the Resources of the Dominion and the opportunities for their development.

—o—

PRICE - - - 50 CENTS.

—o—

CANADIAN MUNICIPAL JOURNAL

LOANS MADE TO:
BONDS BOUGHT FROM:

MUNICIPALITIES

A. P. LESPERANCE, Manager
City and District Savings Bank
MONTREAL

BUSINESS FOUNDED 1795

**American
Bank Note
Company**

ENGRAVERS and PRINTERS

MUNICIPAL DEBENTURES AND CHEQUES
A SPECIALTY

HEAD OFFICE:

208-228 WELLINGTON STREET, OTTAWA

Branches: MONTREAL, TORONTO, WINNIPEG.

THIS WILL INTEREST YOU

EMPLOYERS

OF

LABOUR

should have among their Employees

TRAINED

FIRST AIDERS

capable of rendering assistance

IN CASE OF ACCIDENT

POLICE DEPARTMENTS
FACTORY MANAGERS
MUNICIPAL FIRE DEPARTMENTS
FARMERS
FISHERMEN
LUMBERMEN
FIRE RANGERS
MINE MANAGERS
HUNTERS
ANGLERS

EVERY

ESTABLISHMENT

Should have a supply of

FIRST AID EQUIPMENT

for use in

CASES OF EMERGENCY

Always have a St. John Ambulance First Aid Box ready in case of emergency.

Price, \$5.00; smaller size, \$3.50. Supplied by the Canadian Branch of The St. John Ambulance Association,

14-15 Castle Building, Ottawa, Ont.

You Eliminate Needless Risk

when you install STANDARD Rubber Insulated Wire in that building of yours. Its guarantee of safety consists of many years of unusually successful and dependable service and in the fact that it is specified and used by architects, engineers and contractors of many buildings of international importance, one of which is shown below.

STANDARD Rubber Insulated Wire

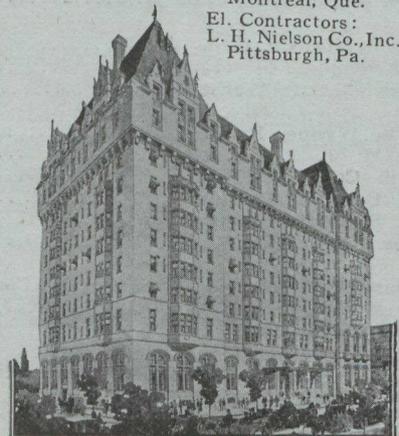
stands for maximum economy and durability. It exceeds N. E. C. requirements to a degree that entitles it to be considered as a separate and higher standard of excellence.

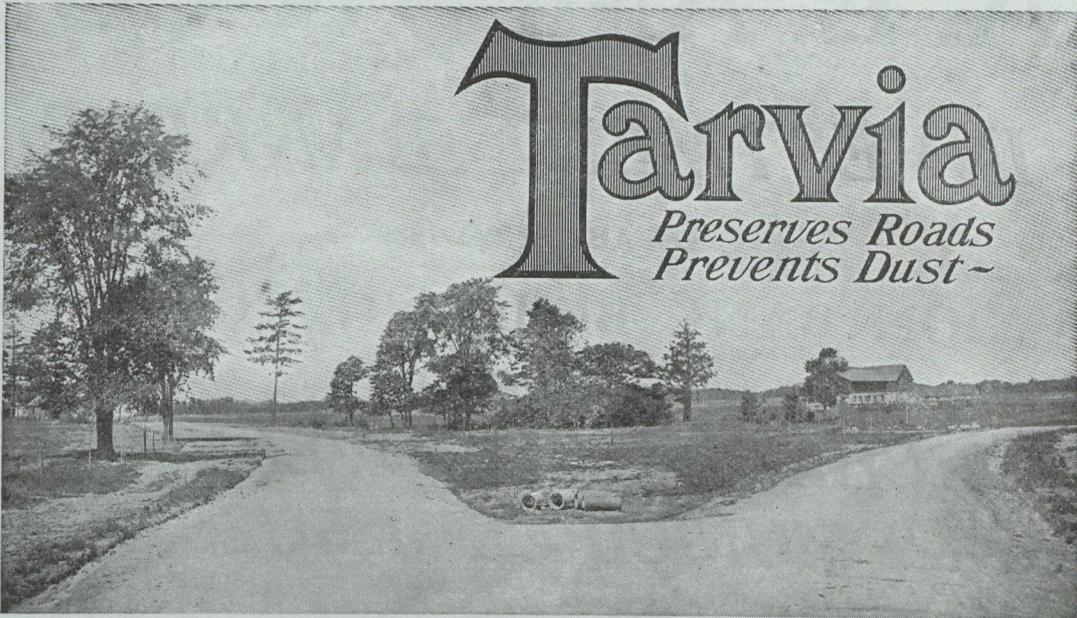
Get prices of STANDARD wire from our nearest office.

Fort Garry Hotel, Winnipeg, Man
Architects: Ross & McDonald, Montreal, Que.
El. Contractors: L. H. Nielson Co., Inc. Pittsburgh, Pa.

Standard Underground Cable Co. of Canada, Limited,

Hamilton, Ont.
Montreal, Que.
Winnipeg, Man.
Seattle, Wash.



Made in Canada

*Ridley Park Roads, York Township, Ont.
Constructed with Tarvia-filled Macadam, 1914*

Greatest Road Efficiency at Lowest Cost!

WHAT wears out a macadam road? Not so much the weight of the traffic or the friction of the wheels carrying that weight, as the pry and dig of the motive force.

With the horse it is the pry and dig of his iron shoes, and with the automobile it is the prying leverage of the driving-wheels that disintegrates the macadam.

The heavier the weight and the greater the traffic, the harder and the more incessant is the pry and dig.

The way to correct this is to build and treat your roads with Tarvia. Its use slightly increases the first cost, but it adds so much to the life of the highway and reduces maintenance expense so materially that its use is a great economy.

About Tarvia

Tarvia is a coal-tar preparation, shipped in barrels or in tank-cars.

It is made in three grades, to be used according to road conditions, viz.: "Tarvia-X," "Tarvia-A," "Tarvia-B."

The chief use of Tarvia is for constructing and treating macadam roads to make them durable, smooth, resilient, dustless, mudless, waterproof.

"Tarvia-X"

"Tarvia-X" is always to be used when you are building a new macadam road, both as a binder and surface coating. The old way in building macadam was to use water as a binder.

But a water-bound macadam wears out quickly under modern traffic that loosens the surface, grinds it into clouds of dust, makes heavy mud, and leaves the road full of holes.

Results and Cost of "Tarvia-X"

With "Tarvia-X" in place of water, you have a road smooth enough to dance on; resilient enough for rubber tires to grip on without skidding or for horses to trot on without slipping; without dust in dry weather; without slime in wet weather. You have a road that lasts.

The first cost of making a tarvia-macadam costs but little more than the old-fashioned macadam, but the saving in maintenance more than pays this difference. So Tarvia costs practically nothing!

"Tarvia-A"

"Tarvia-A" is practically a thin "Tarvia-X," used for recoating the surface of a macadam road already built. It is applied hot and adds greatly to the life of the road. It keeps the road dustless, smooth and inviting to traffic, but its use is confined to certain kinds of traffic to be economical.

"Tarvia-B"

"Tarvia-B" is a much more widely used preservative. It is applied cold. It is thin enough to sink quickly into the road, yet strong enough to bind the surface particles together into a dustless, durable surface. "Tarvia-B" offers the lowest cost of road maintenance yet invented. Tarvia roads give a maximum of road efficiency for a minimum of cost.

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.

A. E. AMES & CO.

INVESTMENT BANKERS

ESTABLISHED 1889

UNION BANK BUILDING, TORONTO

**PURCHASERS OF GOVERNMENT
AND MUNICIPAL ISSUES.: .:**

Correspondence Solicited

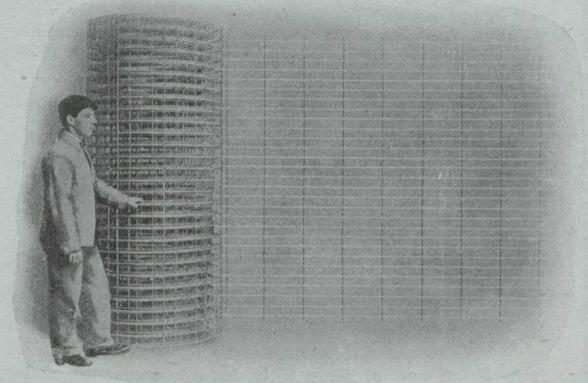
Build Stronger, More Durable Concrete Buildings, Subways, Etc.

By Using

CLINTON

Electrically Welded

WIRE



A base of proven value in the construction of floors, walls, ceilings, roofs or any special purpose in large or small building construction.

Its fine cross mesh becomes imbedded solidly into the cement so that it cannot loosen, crumble or come away.

Each joint is jointed together with special electrical process so strongly as to resist even greater strain than would break the wire itself. Laid with remarkable speed and ordinary labor. Costs little, saves much in repairs, and adds many years to the life and good service to the life of your buildings.

Write for the Clinton Electrically Welded Wire booklet M. J.

Canadian Distributors

THE PEDLAR PEOPLE, Limited

(ESTABLISHED 1861)

Executive Office and Factories: OSHAWA, ONT.

Branches: Montreal Ottawa Toronto London Winnipeg Vancouver

THE CANADIAN MUNICIPAL JOURNAL

SUBSCRIPTION RATES
 City of Montreal and United States \$1.25
 Canada, Great Britain and Countries in Postal Union \$1.00

Published Monthly by
The Canadian Municipal Journal Co., Limited
 HARRY BRAGG - - - - - President
 FREDERICK WRIGHT - - - - - Editor
 All communications to be made to Canadian Municipal Journal
CORISTINE BUILDING, MONTREAL
 Telephone Main 4362.

Any article appearing in these pages may be reproduced 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 yet these are not responsible for any other matter published in its columns 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. XIII.

JUNE, 1917.

NO. 6

CONTENTS.

U. C. M. Convention	282	Immigrant Rates and Effects	289
New Development Policy	283	Commission Government	289
Meeting of U. C. M. Executive	283	Municipal Accounting (E. T. Sampson)	290
How One Municipality Prepares to Meet New Conditions (Ald. R. Ryan).....	284	Hydro-Electric Railways (T. J. Hannigan).....	292
Civic Affairs in British Columbia	285	Civic Affairs in Manitoba	294
U. C. M. Programme	286	An Industrial Survey	295
Civic Affairs in Alberta	287	Transportation Problems (Sanford Evans).....	295
A Cost of Living Tribunal (W. D. Lighthall)	288	Oxy-Acetyline Welding	296
		Municipal Consulting Engineers	297

Flower Festivals and the Community

Most municipalities are keen on advertising their advantages to the outsider, or at least to show their best side, but it has been left to a little city in Ontario to introduce the best method of all to make itself known to the world. Tulips; who can resist then. For three days last month the City of St. Thomas held high court. It was Tulip festival, and visitors came from all parts to admire the public and private beds of this beautiful bulb, surrounded, as it were, with the variegated hues of every known flower. This transforming of the very ordinary into the very beautiful is due to the local horticultural society which is fortunate in having in its president (Dr. Frank Bennett) a man with a vision, and sufficient vitality to put that vision into practice. And the citizens, headed by the city council, have backed the society in competing with each other in the beautifying of their gardens. The result is that St. Thomas during the summer months is one huge flower garden, studied with neat dwellings.

Now surely in this beautifying of their city the people of St. Thomas are advertising their wares in the best possible way. They are doing more. They are propagating the love of the beautiful, and all

that it means, in the minds of their neighbours and their children. They are even spreading the gospel of flowers to surrounding municipalities and it is to be hoped that the day will soon come when every city and town throughout the Dominion will have its annual flower festival. It is strange, but true, that Canada, outside one or two communities, is sadly lacking in beauty in its public thoroughfares and private gardens. There seems to be a general impression abroad that trees and flowers in a public place or street are out of place; that however wide the thoroughfare, it must be completely covered with cement or asphalt or tar, with ugly wooden telephone or telegraph poles on either side to divide the heavy and hard road from the harder pavement. Nothing to soften the view. If a little of the St. Thomas or Hamilton spirit could but penetrate this prosaic utilitarian atmosphere the citizens of many a Canadian municipality would benefit. We believe that if municipal and road engineers were compelled to take a course in landscape gardening their work, without losing in strength or durability, would be more artistic and more in keeping with the wishes of the citizens.

U. C. M. Convention

The Convention of the Union of Canadian Municipalities that is to be held this year in London, Ont., will mark an epoch in the annals of civic life. The programme is to be confined (1st) to the consideration of ways and means of how the municipal councils of Canada can best do their share in helping to win the war and (2nd) to discuss the probability of new conditions as they will affect our civic life when the war is over, and how these conditions should be met. That the Union should lay aside questions appropriate under normal conditions and take up in their stead questions of larger import is the right policy to pursue at this time of national stress. The fact has been brought home to every Canadian that the war is not near won, and will not be won until the whole of the resources of the Empire, which includes Canada, are mobilized with the grim determination to win. And in this determination the municipal councils of Canada have a direct responsibility. The civic authorities of Canada made a splendid start, and many are still doing excellent war work, but by a series of unfortunate circumstances, much of the municipal enthusiasm has petered out. This is not good reading particularly when it has been pointed out by the chief of the Imperial staff that the actual fighting forces represent but twenty-five per cent of the equipment necessary to "strafe" the Central Powers; the balance of the seventy-five per cent being made up of non-combatant forces, beginning at the farm, through the cities, and right up to the trenches and back again in the form of hospitals, convalescent homes, etc., and caring for the returned men. This means then that Canada's contribution of her best fighting men, aye and women, is but part of her responsibility. Her fighting men must have behind them the whole of her human and material resources, utilized intelligently, so that there will be no overlapping, if the nation is to have the satisfaction of feeling that the human sacrifices will not have been made in vain.

When this war broke out, Canada, like the rest of the Empire was not prepared and consequently the machinery for mobilizing her forces—combatant and non-combatant—had to be hastily built with the result that there has been much waste. The time has surely come for this unwieldy machinery to be discarded for better; if there is any. We believe there is.

In every corner of this Dominion there is a municipal council, which has in its corporation officials the best local machinery to deal with any war measure directly affecting the people. As already suggested in this Journal the British authorities from the outset of the war have used the civic councils to carry out their great war measures, from recruiting to pensions, which has had the two-fold effect of relieving the central authority of much heavy and detail work, and of making the citizens of the British Isles realize as they would never have done under any other system their personal responsibility in the war. In Canada on the other hand each of the federal war commissions has its own local committee or board, that has not only caused much overlapping

and repetition of work with the attendant loss of time and excessive expense, but has made it difficult for those interested to find out to whom to apply for information. In England all they have to do is to go to the city or town hall, and their wants are attended to promptly. If the Federal authorities are really in earnest about national efficiency, now is their opportunity to seek the co-operation of the well equipped corporation machinery of the thousands of rural and urban municipalities spread from coast to coast (every foot of Canada is under a municipal body) which up to now have been comparatively idle so far as national service is concerned. A "get together" policy is very desirable at this moment.

We understand that at the convention this question of the municipal councils acting as local authorities in all war measures will be threshed out with a view to action and it behoves every local authority in Canada to send at least one delegate.

The second part of the programme is to study problems of preparedness so that when war ceases Canada can forge ahead, and keep her industrial machinery moving instead of being stopped as at the beginning of the war, when thousands of men were thrown out of employment and their families thrown on the charity of the community. This is a question that affects every municipal council in the country, be it rural or urban, for it was to the civic councils that the citizens looked to solve the problem three years ago, and it will be on the councils again that the onus of finding employment will fall. And unless preparation is made right now the councils will be in anything but an enviable position when the making of war munitions will have ceased, dislocation of trade sets in and some three or four hundred thousand boys come marching home looking for the work that they will be entitled to. The problem cannot be faced too early and we are glad to know that the London convention is to take up this question too.

The latter part of the Convention programme is not to be confined to material preparedness. Because of this war and the reason for it there is a new reasoning force that is working in all the Allied nations; a force that is vitalizing democracy and broadening the outlook of the workers. For want of a better term we will call this force "mental efficiency," for the good of the state and the community," and municipal Canada cannot have too much of it at the present moment (provincial and federal Canada would feel the benefit of a little of this new force too) so that in taking up mental preparedness so as to better meet the new conditions that will arise on the cessation of hostilities the Union of Canadian Municipalities is but keeping abreast of the times—the teaching of citizenship in our schools, a Canadian bureau of information, uniform municipal statistics, and so on.

The Union in its programme has set up a new standard of municipal and national responsibility and opportunity, and it is for each of the civic councils to rally around it, if they would truly carry out their trusteeship to their respective communities.

A DOMINION DEVELOPMENT POLICY.

The following extracts taken from the Report of the Royal Commission on Industrial Training and Technical Education, under the chairmanship of Dr. James W. Robertson, C.M.G., are very appropriate at this time of preparedness.

General Considerations.

1. It is important to adopt a plan which will secure the largest degree of public confidence and maintain the largest measure of public interest and co-operation.
2. It is important to adopt a plan which will preserve Provincial control, encourage local initiative and develop local responsibility.
3. It is important that there should be a large number of persons representing Manufacturing Industries, Trades, Commerce, Transportation, Agriculture, Forestry, Mining, Housekeeping and Education, ready to take the initiative in local undertakings and able to co-operate in making effective application to the needs of localities of financial grants and any other assistance. In the opinion of the Commission, a policy which would be applied wholly or mainly by directive authority from headquarters, leaving to local centres little initiative or responsibility, would not accomplish much for a long time.
4. It is important that there should be in each Province a Central Body or Authority, which could bring to bear on all proposals from local centres the wide knowledge and practical experience of capable men and women familiar with education and with industrial, agricultural and housekeeping problems. Such a Central Body would be able to supply information for the guidance of Local Authorities at the beginning of their work, and to furnish advisory assistance through experts of high ability. Through the meetings and discussions of such a Central Body the permanent officials charged with the administration would be kept in touch with public opinion as to the particular needs of localities, as to the suitability and acceptability of schemes proposed, and as to the practicability of having such schemes supported and carried out. The Central Body would also serve the purpose of a clearing house through which an intimate knowledge of the results from experience in one locality would be made available to other communities.
5. It is important to adopt a plan whereby the Dominion, the Provinces, the Localities and Individuals will co-operate and each contribute in some well-considered and equitable proportion to the cost of development undertakings. A plan of organization which provides for the financial support from Communities being properly articulated with financial grants from Central Authorities would tend to bring about efficiency and stability. A long time is required to realize upon education work; and continuity of effort to meet re-organized needs is essential. The plan should be such as would ensure concurrent progressive action in the same direction by the Central and Local Bodies. Provision should be made for Efficiency Audits, in order that each Contributing Authority may be assured that the money is being used for the purpose for which it is granted, and that the work is being well done.
6. It is important to adopt a plan which will ensure that the national interests as well as the local points of view will be considered.
7. It is important that there should be a Dominion Consultative Body, through which the widest knowledge and experience could be put at the service of all the Provinces and thus be brought to bear on problems and undertakings of consequence to them all.
8. It is important that there should be a Dominion Authority competent to co-operate with Provincial Authorities, to provide expert counsel to any Province which might not be adequately organized or staffed to render service in that respect to all localities and industries within its borders, and to promote scientific research and the diffusion of knowledge resulting therefrom.

The Commission's Recommendations.

The Commission recommends that Local and Provincial Development Bodies be constituted as follows:—

- I.—Local Urban Industrial Development Boards.
 - II.—Local Rural Development Boards.
 - III.—Provincial Development Councils.
 - IV.—Provincial Development Commissions.
- The Commission further recommends the constitution of,—
- V.—A Dominion Development Conference.
 - VI.—A Dominion Development Commission.
 - VII.—A Dominion Development Fund.

MEETING OF EXECUTIVE OF U. C. M.

A meeting of the Executive of the Union of Canadian Municipalities was held in the City Hall, Ottawa, May 3rd, when the following business was brought forward:

- 1st.—To decide on subjects of papers, and discussion for the programme of Annual Convention.
- 2nd.—To consider the draft copy of the revised Railway Act.
- 3rd.—The Toronto, Hamilton and Buffalo Railway Bill.
- 4th.—The Continental Heat and Light Company Bill.
- 5th.—The Brandon Branch Line of Grand Trunk Pacific Railway.
- 6th.—The advisability of more collaboration of the Federal Government and Municipalities in war measures effecting the citizens.

There was a good attendance of representatives of municipalities from Charlottetown, P.E.I., in the east, to Edmonton, Alta., in the west; together with several members of the House of Commons representing various cities; and numerous cities represented by proxy.

Mayor Burgoyne, of St. Catharines, Ont., was requested to act as chairman.

A draft outline of subjects for the Convention Programme was presented by the Assistant Secretary, and after a brief discussion and several suggestions, the matter was left in the hands of the Hon. Secretary, and the Assistant Secretary to complete.

Items 2, 3, 4 and 5, all connected with the Railway Act, were each discussed separately, and then as a whole.

The following special resolutions were adopted:

"That this Executive Committee support the request of the City of Brandon, requiring that the Branch Line of the Grand Trunk Pacific into the city be completed immediately."

"That the Union of Canadian Municipalities formulate a policy of consolidation of railway terminals in cities, and of controlling the methods of entry."

Considerable discussion took place regarding the large issues concerned in many points of the revision of the Railway Act. Mr. Lighthall, Hon. Secretary of the Union, stated that he had arranged with the chairman of the Special Committee of the Commons, which is working on the revision, for a Municipal Day (Friday, 18th May) and urged the attention and attendance of all Corporation Counsel of the larger cities.

Item 6, re co-operation of the Federal Government and Municipalities, was left to the Executive to act on.

A special committee was then appointed to wait upon the Railway Committee in the afternoon to express the views of this Executive meeting (which was done).

The meeting then adjourned.

The difference between a live city and a dead one is that citizens of one are always looking toward the future, while the citizens of the other are looking backward upon the past.

"The moment the war ended the wheels of munition industries would cease to turn. Then the manufacturer would have to hustle for the customers he had not known for two years. Is it best to wait until that time comes, and in the maze of dislocated activities try and work out what we should do for the future? Or shall we prepare for it as best we can?—Sir George Foster.

"There will no doubt be a period of readjustment after the war, and many opinions have been advanced as to what effect this period of readjustment will have upon the affairs of our country. Fears have been expressed that the sudden cessation of war orders may have a serious effect upon financial and trade conditions, but it must be borne in mind that those industries that have been fortunate enough to secure orders for the manufacture of munitions and equipment have, for the most part, been enabled thereby to greatly strengthen their financial position and to increase their capacity and efficiency for handling new business. These concerns should be in a position, at the close of the war, to take advantage of the opportunities that will inevitably occur to participate in the trade that will doubtless spring up in connection with the period of reconstruction which is expected to follow.—Sir. H. H. McMillan.

How One Municipality Prepares to Meet After-War Conditions

Ald. ROBT. RYAN.

I am perfectly in accord with your ideas in regard to Civic Preparedness. Your propaganda as outlined covers the ground very well and should bear good fruit providing the Municipal Councils and Boards of Trade get alive to the possibilities that their localities possess and make same known to capitalists and manufacturers looking for investments.

I have been agitating municipal preparedness in Three Rivers since 1911, the first year I entered municipal politics. It took some time to get our people to realize the possibilities we had here which if properly handled would make Three Rivers an important industrial centre and that the only way to draw attention to our city and attract capitalists was by well planned out truthful publicity. I was successful a short time before war was declared in creating a publicity and industrial bureau which has done good work and from which work I am certain we will get results that will satisfy even the most skeptical.

Local improvements in our city had been neglected up to 1913 when we decided to carry out the laying of concrete sidewalks, pavements, new lighting system and other improvements found necessary. We were also successful in having a company build a first class equipped tramway in our city and we expect this tram line will be extended to the different towns within a radius of 25 miles east, west and north of our city.

We carried out all these different works during the hard times in 1914 and 1915, and last year as there was a demand for labour we stopped all public works, and have no intention of carrying on any as long as the demand for labor continues, unless what is found necessary for the health and safety of the people.

We have secured the services of good engineers to report on our water and sewage system and make plans covering our present system as well as for future developments.

We also intend having a town planning engineer make an industrial survey of our city and report on the possibilities of making a town planning plan so as our city will be developed on scientific as well as economical lines.

We expect to have all this work done within the next year and should there be a reaction after peace has been declared and the demand for labor decreases we will then undertake improvements so as to give employment to those in need.

Although we are devoting much attention to the development of our city I would like to state that we are also doing all we can to develop our rural district as we are well aware if our city is to progress the farming district must also prosper.

Last year we purchased the exhibition property here which was owned by a private company and placed same under municipal control. Our aim in purchasing this property was to allow the City Council to control the administration and award suitable prizes to the farmer for his cattle and produce exhibited and to properly advertise our annual exhibition and interest the farmer to prepare for this annual affair. Judging from the attendance we had last year during our exhibition week I am quite satisfied we can make a success of our undertaking and that this department will be of great assistance to our farmers in this district. It is our intention to make a public park and playground on this property as well as using same for our annual exhibition.

It is my ambition to have our Corporation place under municipal control or have a company formed under the special act passed by the Quebec Legislature to erect suitable homes to be rented or sold on a monthly payment plan to cover interest and capital. By building a number of houses at one time the cost per house can be reduced considerably.

In 1912 I suggested that our City Council buy a large tract of land near our city and operate a municipal farm. I was then confident of the success of this undertaking and I am now convinced that it would be very profitable for our people if we had such a farm. The idea was to build homes on this farm and have each family operate a garden or small piece of ground. Have a manager and necessary help to instruct each man or woman how to farm or work his plot of ground so as to get the most out of it. Have a large piggery, hennery and sufficient land

to raise a certain number of cattle. Have a central heating and lighting system and furnish light and heat at about cost price. Have a wet laundry where all washing would be done for the homes. The object I had in mind was to get all the poor men and women who were too old to do ordinary manual labor and have them locate on this farm where they could perform sufficient work to pay for the cost of their living expenses. Under this plan they would live under much more sanitary conditions than it is possible for them to do now. It would also have permitted us to get our city work done by able-bodied men and at a much cheaper cost than we have to pay at the present time. It is well known that a Corporation has to supply work for a certain number of men who cannot get employment elsewhere. I am firmly of the opinion that not only would the old men and women take up their residence on this farm, but there would be quite a number of younger men to whom such a proposition would appeal. I have by no means abandoned the idea, and I hope before many years to see such a farm in operation here.

There are many things that I expect will be realized here within the next few years that will make this good old city of Lavolette the envy of every other city of this province. As long as I am connected with the Municipal Government of our city it will be my ambition to make Three Rivers not only the best industrial centre but the most healthful city to live in.

I believe in administering a Municipality for the people and I am of the firm belief that this is the way that Federal, Provincial and Municipal Governments will have to be administered in the future.

The time has arrived when Municipal Governments must be administered on a business basis like large railway, industrial or banking business. The usefulness of the aldermanic system of government has outlived itself by many years. This is the age of scientific management and should be applied to government as well as to industry and commerce.

The Governments should give home rule to Municipalities as regards taxation. Every Municipal Government should then adopt a uniform system of taxation so as the burden will be levied equitably. The most uniform system of taxation to my mind is the land value tax. With such a tax the cost of making the assessment and collecting the tax levied can be reduced to a minimum. With such a system there must be a uniform system of arri- land values.

The money that will be required by our Federal Government to meet interest and sinking fund charges on the war debt we all know will be enormous, but if our natural resources are properly developed and a tax system adopted so as it will fall on our natural assets the burden will be easily carried and our resources will be developed at a much greater rate than ever dreamt of by any living man before the war.

To my mind there are three things necessary before municipalities can be economically and scientifically administered, viz.:

1st.—Proportional representation which was outlined by Mr. H. S. Ross, K.C., at our last convention.

2nd.—City manager, with a board of directors composed of the heads of departments. A City Council to act as legislators only to pass by-laws, appropriations, etc., and make suggestions to city manager. According to my way of thinking the manager should be elected by the people for an indefinite period; subject to the recall.

3rd.—All revenue to be derived from a system of tax on land values only. This to my mind is not only the most equitable system but the most economical in the making of the assessment and collection of taxes.

You have my best wishes in the good work you have undertaken and I trust that success will attend your efforts.

"We must devote ourselves to real patriotism, for there is pending an epoch in Canada's history that will have results of huge proportions for all time, and in this there is no place for partizanship. As the great war will be the crowning event of all future histories of the world, so the strides Canada makes within three years after peace is declared will mark the emergence of this country into the status of a great nation."—Exchange.

Civic Affairs in British Columbia

JACK LOUDET.

The "War Relief Act," which has been the subject of much criticism is now being amended to remove the difficulties which municipalities have experienced under the original act. The principal amendment is as follows:

"14. This act shall not be deemed to in any way affect the power of a municipality to assess or tax the property of any person entitled to the benefits of this act; nor shall this act invalidate a sale by a municipality of any land for taxes, or prevent the giving of a deed thereunder for any land heretofore or hereafter sold where neither the clerk, nor the assessor, nor the collector of the municipality has had actual notice that any person having an interest in the land sold is entitled to the benefit of this act. In all notices of sale for taxes a municipality shall express the readiness of the clerk and assessor and collector of the municipality to receive notice from any source of the interests of those entitled to the benefit of this act. Where, either by inadvertence or ignorance of the facts, lands of a person entitled to the benefits of this act are sold, the municipality may cancel the sale and refund to the purchaser the amount paid by him, with interest at 8 per centum per annum, and thereupon all arrears of taxes shall be and continue a lien on the lands as if no tax sale thereof had taken place."

Relief will cease when a soldier is discharged for misconduct and also three months after discharge where such discharge takes place by reason of a physical or other defect or incapacity which existed at the time of enlistment.

The application of the act will extend until six months after the war instead of until the end of the war as previously enacted. Discretionary powers are given the courts to decide who should obtain the benefits of the act and to prevent abuses.

The new amendments do not seem to make clear whether sales of land made inadvertently may be cancelled after a deed is issued or whether this part is confined to the years redemption period. After a deed is given and indefensible title issued cancellation might be difficult. If this point had been made clear the difficulties of tax sale purchasers would be fewer and tax sales might be more successful than hitherto.

LAND REGISTRY ACT.

As mentioned last month the government had under consideration an amendment to the Land Registry Act to provide that applications for registration of a transfer of land, of an agreement for sale mortgages, etc., must be accompanied by a certificate that the taxes have been paid. This is being enacted and should prove of inestimable benefit to municipalities and also tend to reduce the number of properties in arrears.

In Vancouver the board of investigation which has been enquiring into the claims of city laborers for increased wages has recommended a minimum wage of \$3 per day, but adds that only efficient labor should be employed. One of the great difficulties which municipalities have to contend with is this question of efficiency. Ratepayers associations insist on ratepayers exclusively being employed and very seldom does the standard of work reach that of private corporations. At the present time \$3 per day is by no means excessive. Municipalities will, however, be likely to curtail new works as much as possible, thus releasing men and material to be used on work of greater immediate value to the country. The investigating board makes no suggestion as to wages of men whom the municipality may have to employ to prevent them becoming a charge on the community. A uniform method of dealing with municipal labor problems will eventually have to be found as municipalities do not operate for profit and have to provide for men incapable of earning standard wages with private employers.

MEMORIAL TO SOLDIERS.

Vancouver is to get a 99 year lease of the old Court House site on Hastings Street for park purposes, and the provision of a suitable memorial for the British Columbians who have fallen in the present war. The government is being congratulated on saving this open space in a crowded portion of the city. Reeve Fraser of Burnaby, who was in Eastern Canada when the proposal to bonus a film cor-

poration was before the Burnaby council has protested against the agreement which will be submitted to the people, on the grounds that such bonusing of industries is not desirable. Where free water and a reduced or fixed rate of taxation for a period of years has been the extent of the bonus no harm has resulted, but where money has to be raised or bonds guaranteed the experience of most municipalities has been unfortunate. It is reported that West Vancouver has sold a 5½ per cent. bond issue of \$10,000 at 75. Thus municipalities' financial difficulties are a legacy from previous years, and careful management will be necessary to bring back the credit of the municipality to where it should be.

A proposal was made recently that power should be granted to municipalities to borrow up to 50 per cent. of the assessed value of lands falling to the municipality at tax sale. Such a power would be a very dangerous one. With tax arrears being pledged for loans, the land later being sold to the municipality for the taxes and a further debt being placed on it under the proposed power a heavy debt would be incurred by the tax paying properties of the municipality. What is required now if it is not too late in some cases, is more restrictions on borrowing such as a local government board would provide. The issue of treasury certificates against bonds and tax arrears has been found to be a most expensive method of financing. In the cases of bonds it has been found to tie the hands of the council in attempting to dispose of the bonds the trust deed usually providing for notice before repayment of the certificates, and such notice being impossible to give before a sale is made. In most cases six months' interest is lost, thus increasing the cost of the accommodation to the municipality. Recently there has been some criticism of the Union of British Columbia Municipalities by persons who take exception to the request of the Union that proposed amendments to the Municipal Act should be submitted to the Union executive for their consideration. It was stated before the municipal committee of the legislature that the period of heavy expenditures by municipalities coincided with the period of the Union's existence, the inference being that the Union was to blame.

Some criticism is based on ignorance of the functions of the Union and overlooks the many important matters successfully dealt with by the Union particularly during the late period of depression. The complainants seemed to imagine that the Union did not like any amendments to be made which had not originated with it. This is of course wrong, the sole idea being that the Union as representing many municipalities should have an opportunity of expressing its opinion of the probable results of the amendment before action is taken by the legislature.

Very few bond issues are now being made in British Columbia, but it is noticeable that of late that the business offering has practically been abandoned by Eastern Canadian bond houses and is passing into the hands of American bond dealers. While some municipalities may be in a precarious financial condition this is by no means general and while the Eastern offerings may be attractive at present, the Western securities may be sought when it is too late to recover the business through neglect at the present time.

IMPROVING RURAL HOMES.

One of the indirect but highly beneficial effects of visiting children in foster homes is the improvement in tidiness and the addition of home comforts that very often result. The agent of the Children's Aid Society, when he makes his call, notices the conditions that prevail, and where there is a lack of tidiness and poor housekeeping, points out in a kindly way that the example is not a good one for the child.

He often does a good turn for the housekeeper by suggesting simple improvements that would make the work of the woman much easier and pleasanter, the installation of water in the kitchen, perhaps putting in of toilet facilities, a few shelves here and there, etc.

Attention is also called to the necessity for church attendance, and the importance of giving the child moral instruction as well as some knowledge of his own physical development—all this has a tendency towards a higher standard of living in the rural districts.—J. J. Kelso.

The Union of Canadian Municipalities

Officers and Executive for the year 1916-1917

President:

MAJOR T. J. STEVENSON, M. D.
Mayor of London, Ont.

1st Vice-President:

W. D. L. HARDIE, Esq.,
Mayor of Lethbridge, Alta.

ONTARIO

Vice-Presidents:

- 1st. J. W. Nelson, Esq., Controller, Ottawa.
- 2nd. A. M. Edwards, Esq., Mayor of Galt.
- 3rd. John O'Neill, Esq., Controller, Toronto.
- 4th. W. B. Bugoyne, Esq., Mayor, St. Catharines.
- 5th. T. J. Patton, Esq., Mayor North Bay.

BRITISH COLUMBIA

Vice-Presidents:

- 1st. M. McBeath, Esq., Mayor of Vancouver.
- 2nd. A. M. Tyrrell, Esq., Mayor of Kamloops.
- 3rd. A. W. Gray, Esq., Mayor, New Westminster.
- 4th. H. McKenzie, Esqs., Mayor of Nanaimo.

NOVA SCOTIA

Vice-Presidents:

- 1st. F. W. Doane, Esq., City Engineer, Halifax.
- 2nd. P. F. Martin, Esq., Mayor of Halifax.
- 3rd. A. Roberts, Esq. K.C., Solicitor, Bridgewater.
- 4th. W. A. Richardson, Esq., Mayor of Sydney.

Official Organ

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

Hon. Secretary-Treasurer:

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

3rd Vice-President:

R. T. HAYES, Esq.
Mayor of St. John, N.B.

QUEBEC

Vice-Presidents:

- 1st. J. Beaubien, Esq., Mayor of Outremont.
- 2nd. Robert Ryan, Esq., Alderman, Three Rivers.
- 3rd. E. Lariviere, Esq., Alderman, Montreal.
- 4th. E. Sylvestre, Esq., Mayor of Sherbrooke.
- 5th. A. Mercure, Esq., Mayor of Drummondville.

ALBERTA

Vice-Presidents:

- 1st. W. T. Henry, Esq., Mayor of Edmonton.
- 2nd. G. W. Smith, Mayor of Red Deer.
- 3rd. A. C. Hawthorne, Esq., Mayor of Medicine Hat.
- 4th. W. J. Loggie, Esq., Mayor of Wetaskiwin.

NEW BRUNSWICK

Vice-Presidents:

- 1st. J. W. McCreedy, Esq., Clerk, Fredericton.
- 2nd. H. BURTT, Esq., Mayor of Woodstock.
- 3rd. J. E. Masters, Esq., Mayor of Moncton.
- 4th. F. P. Grimmer, Esq., Mayor of St. Stephen.

MANITOBA

Vice-Presidents:

- 1st. H. Cater, Esq., Mayor of Brandon.
- 2nd. J. W. Cockburn, Esq., Controller, Winnipeg.
- 3rd. J. P. Howden, Esq., Mayor of St. Boniface.
- 4th. R. Forke, Esq., Reeve of Pipestone.
- 5th. C. E. Ivens, Esq., Reeve of Wallace.

SASKATCHEWAN

Vice-Presidents:

- 1st. W. W. Davidson, Esq., Mayor of Moose Jaw.
- 2nd. A. McG. Young, Esq., Mayor of Saskatoon.
- 3rd. W. Jones, Esq., Mayor, of Swift Current.
- 4th. John Creba, Esq., Mayor of Kerrobert.

PRINCE EDWARD ISLAND

Vice-Presidents:

- 1st. P. S. Brown, Esq., Mayor of Charlottetown.
- 2nd. J. Jardine, Esq., Mayor of Summerside.
- 3rd. S. C. Knight, Esq., Mayor of Georgetown.
- 4th. J. Paton, Esq., Ex-Mayor, Charlottetown.

G. S. WILSON, Assistant-Secretary,
Bureau of Information, Coristine Bldg.,
Montreal.

To All Municipalities

His Worship the Mayor, and Council:

Dear Sirs,—By the cordial invitation of His Worship Mayor Stevenson, the Board of Control, and City Council, the Annual Convention of the Union of Canadian Municipalities will be held in the City Hall, London, Ontario, Monday, Tuesday and Wednesday, August 27th, 28th, and 29th.

Your Council is earnestly invited to send one or more delegates to take an active part in the proceedings. Matters of the greatest importance to our municipalities are happening this year — such as the pressing War Problems, After-the-War Preparations, etc., etc.

The Executive of the Union, realizing the responsibility of the municipal councils in the crisis through which Canada was, and is, passing, so arranged the programme of the last convention as to show the way in which each council could best fulfil its duties to the community and the nation. That the Convention of last year has borne good fruit, not only in Canada, but in the United States, is best illustrated in the fact that a number of the American civic associations have followed along the lines suggested by the Union of Canadian Municipalities. The National Municipal League (U. S.), says the following:

“Did you ever stop to think what is going to happen after the war? Do you realize what the appropriation of billions of dollars by federal, state,

county and city governments will mean to this country? Many think that because our economic condition is so good now that everything will be taken care of nicely later. In the history of the entire world a period of prosperous years has always been followed by lean ones. Does not exceptional spending by governments, exceptional prices for commodities, exceptional industrial conditions now, mean exceptional taxation and other exceptional problems later? Where will the burdens fall? Are we ready for them? Are we getting ready?”

To-day the responsibility of the municipal councils of Canada in helping to Win the War, and preparing for After the War is more paramount than ever, but there should be uniformity in action, and the Convention in London will give a special opportunity to discuss the question.

You are particularly requested by our executive to draft any resolution, or any municipal question you wish to be brought before the Convention. Will you not take an active part?

The Convention Programme is now being prepared, and a copy will be sent you, with full particulars, at an early date.

Faithfully yours,

W. D. LIGHTHALL,
Hon. Secretary-Treasurer.

Montreal, May 30th, 1917.

Municipal Affairs in Alberta

REGINALD G. J. SMITH.

HOW TAX SALES HAVE WORKED OUT.

In the May article of municipal affairs in Alberta, special attention was paid to the Edmonton tax sale, the method of conducting the sale and how the purchasers would benefit from their investments. While this article is being prepared for the June issue, the sale is still proceeding, and it may go on for some time yet, as there are or rather were before the sale started, something like 27,661 lots with unpaid taxes.

A number of lists with this total number of lots inscribed with arrears owing, were handed to the city treasurer. He announced the sale, and at the same time notified the property owners that under the provisions of the Moratorium Act as it is familiarly called, but known on the Alberta Statutes, as the Volunteers and Reservists Act, that if they wanted to seek the protection of the terms of the act to immediately notify him and the lot would be struck off the list of "for sales."

After the moratorium brigade had done its worst the newspapers of Edmonton published several columns of properties for sale, totalling 19,313 lots, thus 8,248 lots were withdrawn under the act. Since the advertising of the sale has taken place, another 3,500 lots have been withdrawn. The auctioneers have called the entire list through once, and are now on the second call.

The Imperial Bank of Canada was the heaviest investor in the tax sale, and purchasers have receipts now in Toronto, Montreal, Vancouver, Winnipeg, Regina and Calgary. The tax sale has been the means of bringing in about \$350,000 of tax arrears, although this sum is frightfully small compared to the arrears outstanding. This is approximately half of the arrears for the year 1913, and on top of this are the arrears to date, amounting in all, according to the report of the city controller, \$5,230,257.03 as compared with \$1,082,745.59 in 1913, which includes that year and previous.

The tax arrear question is a serious one, and one which will have to be faced. Whether or not a system will be devised for long term payments remains to be seen. This system is being mooted, but anyway it is a question of time only before the majority of the taxes will be paid.

The city authorities in charge of the tax sale are expected to close down about the twelfth of May and adjourn for two weeks or more, then start up again. The procedure on the first call of the list was to take the property as advertised and in an automatic manner the auctioneer would keep on calling until a sale was made and then proceed. On the second call any purchaser can enter the hall, ask for any lot to be put up, bid for it and pay his cash. It might be called a preference call, for any one can have any lot put up at any time irrespective of whether or not the land was up the day before or would not in the ordinary event of things come up till the last day.

To be quite candid the sale has not been as pronounced a success as was anticipated. There is this consolation though, the city will hold tax sales every year now for some time to come. Another sale is due in 1918 to raise sufficient money to repay a loan which is redeemable in July. Then again the city council at a recent meeting made arrangements to borrow on 1916 arrears, thus making it compulsory to hold a sale in the spring of 1919. Land purchasers who think they are going to live again the past, and be careless about paying taxes, are going to make a big mistake. The time is not far distant when arrears of one year will be sold within eighteen months after the expiration of the year in arrears, so the city has made a good move in rehabilitating its credit at any rate.

There is one thing which could be impressed upon the minds of easterners—for westerners have the impression whether rightly or wrongly that the criticisms of the west come from the east—that for the year 1916, to quote the comptroller's report: "Edmonton shows a surplus for the year under review of \$44,094.83 over and above all expenditures." The policy of economy was inaugurated in 1915 with the change of civic administration, and as soon after the war broke out as possible. In the controllable expenditure of that year there was a saving of \$775,047.68 under 1914, and since then further savings have been effected amounting to \$410,452.45, making a total reduction in the past two years of \$1,185,500.13.

PUBLIC UTILITIES OF EDMONTON.

Of the utilities of Edmonton, the electric light and power

department reduced its operating cost 36 per cent. The surplus for 1916 was \$64,788.82, as compared with \$35,760.88 in 1915, and \$55,190.95 in 1914. The street railway reduced its operating expenses 27 per cent. and this is the only utility which recorded a deficit. The deficit for 1916 was \$119,597.66, of which \$4,669.60 is shown to be for shortage in the stock of stores and materials on hand, this having been ascertained as a result of an inventory during the month of February. The cost of operation was 73 per cent. in 1914; 68 per cent. in 1915, and 65 per cent. in 1916.

The telephone department shows a surplus for the first time since 1912 over all charges, the profit for the year 1916 being \$9,570.84 as against a loss of \$37,242.77 in 1915. From 24 per cent. in 1914, the cost of operation has been reduced to 18 per cent. in 1916.

The waterworks department reduced its cost of operation 4 per cent. Increased revenue, together with reduction in operating expenses places this department with those returning profits, a surplus of \$24,410.04 being earned in 1916, as against a deficit of \$5,749.98 in 1915.

The report also gives a forecast of the city's need financially for a few years to come. After taking into account all the available resources disclosed in order to liquidate its indebtedness, Edmonton will require the following sums in the years named:

1917	\$1,700,000
1918	3,200,000
1919	2,000,000
1920	1,400,000
1921	3,000,000

TRUE CITIZENSHIP.

C. J. YORATH.

It seems to me that the present position of our country and the Empire is similar to the example of the wrecked crew when endeavoring to escape in an open boat, and the boat is crowded, the provisions scanty and the prospect of making land distant. Laws are instantly established and enforced which no one thinks of disobeying. An entire equality of claim to the provisions is acknowledged without dispute and an equal liability to, necessary labor. No man who can row is allowed to refuse his oar, no man, however much money he has saved in his pocket, is allowed as much as half a biscuit beyond his proper ration. Any riotous person who endangered the safety of the rest would be bound and laid in the bottom of the boat without the smallest compunction for such violation of the principles of liberty, and on the other hand any child or woman, or aged person who was helpless and exposed to great danger and suffering by their weakness, would receive more than ordinary care and indulgence not unaccompanied with unanimous self-sacrifice on the part of the laboring crew. There is never any question under circumstances like these, of what is right or wrong, worthy or unworthy, wise or foolish. If there be any question, there is little hope for boat or crew.

The right man is put at the helm, every available hand is set to the oars, the sick are tended and the vicious restrained at once and decisively or if not the end is near."

So it is with our Province, our Dominion and our Empire to-day. This is not the time for playing politics, for courting with the foreign vote, for charges and countercharges of the two political parties.

The whole brain power, energies and patriotism of our rulers must be entirely concentrated upon perfecting our system of government, eliminating graft or suspicion of graft and working with a common united effort towards the goal of every true citizen—the establishment of an everlasting peace upon a foundation of justice.

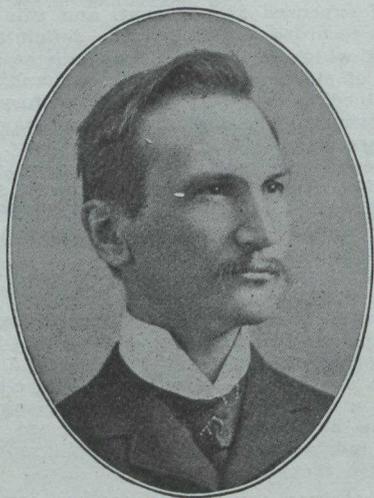
Our Governments are on the threshold of a new era and upon the way in which the foundation of the new structure of the British Empire is constructed will depend the permanence of the edifice.

UNITED STATES BOND HOUSE AT REGINA.

The Wells, Dickey Company, of Minneapolis, a well known municipal bond house, is opening a branch at Regina, Sask. Mr. Stuart W. Wells states that this move is in anticipation of the larger development of Western Canada after the war.

A Cost of Living Tribunal

W. D. LIGHTHALL, K.C.



The people and government of Canada are looking eagerly for a remedy for the high cost of living. A few days ago a prominent employer of labor said the situation of his employees was becoming unbearable, notwithstanding that his firm had increased their wages as much as the business would permit. He had been making enquiries, as to, among other things, the cost of bread, and his conclusion was that the chief fault lay with the milling concerns, who bought wheat low and fixed their profits high. I do not pretend to know at first hand whether his figures were correct, but they confirmed me in a proposal formed for some time and which I ventured to put forward to the Dominion Cabinet as one of the municipal delegation on the high cost of living last year. It is for the formation of a permanent tribunal, like the Dominion Railway Commission, to receive complaints, institute investigations, and render judgments, on such questions. The principles to recognize are: (1) That the law of supply and demand, which formerly regulated prices, no longer applies, because it depended on competition; (2) That competition tends more and more to disappear with the formation of powerful mergers, trusts and combines; (3) That the result is a series of virtual monopolies; (4) That uncontrolled monopolies fix their own prices arbitrarily; (5) That it is contrary to the public interest that any monopoly should have this arbitrary power, and, therefore, (6) There ought to be over every monopoly a controlling tribunal. That tribunal ought to be adapted closely to the object and highly specialized. Parliament has been tried, and has passed various laws, which have all fallen short. Temporary commissions of enquiry have also produced little practical result. The ordinary courts of law are too cumbersome and occupied with other affairs. A Food Controller is now suggested, who by dictatorship may possibly effect some improvements during the war. But the rational remedy is a commercial tribunal, before which all parties, both the trust and the consumer, may go with confidence, feeling that they are to get the judgment of a Court of Justice, prompt, un-

technical, thoroughly studied and aided by experts, absolutely impartial and yet sympathetic to every fair consideration on both sides, and above all, specially versed in disputes of the kind. We are at somewhat the same kind of juncture as was solved in 1903 by the establishment of the Railway Commission. Previous to that event, the railways did, or were supposed to do, somewhat as they pleased in many things. They were popularly likened to the political system of Turkey—a despotism tempered by assassination. These recurrent assassinations of company power, in Parliament and elsewhere, were no more good for the companies than their occasional autocratic methods are good for the public. The old Railway Committee, which was practically the Cabinet, tried to deal diplomatically with such questions, but without much satisfaction to anybody. The telephone companies introduced several new difficulties, especially in the matter of arbitrary rates. A period of turmoil with individuals and municipalities followed. It was then that the late Hon. Mr. Blair devised the Dominion Railway Commission to cope with all these disputes, and became its Chief Commissioner. From that time, both the public and the companies felt that the period of makeshift remedies was over, and that a competent body of specialists existed to examine into their mutual contentions and decide them with the impartiality and care for the public interest of a competent British Court. I do not believe that the subject of the cost of living is any more beyond the reach of such a body, if carefully appointed, than railway and telephone questions are beyond that of the now well-tried and well-established Railway Commission. Consequently, I submit to the Government and the public the proposal to establish a similar tribunal to regulate the charges and service of millers, bakers, cold storage companies, sugar refineries, and other purveyors of necessaries and ordinary comforts of life. Who ever wishes a fair deal will have no fear of a court of justice.

CANADA AFTER THE WAR.

The perspective of every man, woman and child, who shall make up the population of Canada after the war, will be very different from that which obtained before the war. The outlook will be broader. There will be, throughout the world, a more intelligent comprehension of what Canada is and of what are its possibilities. When "the boys come marching home," these boys will understand better, and appreciate better than ever before, for having been away, the resources of their own country, and their enthusiasm for development will be like that which inspired the disbanded troops of Grant and Lee on the southern side of the line in '65. The great west of the United States sprang into life, and a new empire was born, in the days when "the boys went marching home" from Appomattox. The resources of Canada in soil, in mine, and in forest, have scarcely been scratched. The grasp of Canada upon their possibilities has hardly been felt. The time is coming, and is near at hand, when the Dominion will experience the onrush of new and powerful energies that only a mighty struggle with self, and a victory over self, could have awakened.—Christian Science Monitor.

WHERE LADIES BUILD ROADS.

In the Old Country they have women working on the roads. According to a correspondent two members of the fair sex were recently seen driving a steam roller, while a number were using picks, and others were laying tar in quite a business-like way.

IMMIGRANT RATES AND EFFECTS.

J. E. MARTIN.

An immigrant coming into Canada is given rates on, and is allowed to bring in, duty free, a certain amount of stock and machinery; he is limited as to how much he is to bring in, and he must have owned it for a period of six months prior to bringing it into Canada. Why? Would it not be sound business to allow him to bring in all the stock and machinery he can use in connection with his farm operations? The more he brings with him, whether it be money, stock, machinery, or what not, the better for Canada; Canada has got it. The man who buys and intends to farm up to two or three sections and brings his family and equipment with him is allowed no greater inducements than the man who gets a quarter of section from the Government for nothing. It is absolutely foolish to think that he will bring in more than he will use. In all events, a man should be allowed the same immigrant rates and effects, in proportion to what he buys and farms, as the man who gets a quarter section from the Government for nothing. Nobody would be hurt by such a policy, for the more land a man buys and puts under cultivation, the more he will raise, the more machinery and goods he will use and it will only be a few years until your manufacturers will get the benefit of this increased business, and your railroads, banks, merchants—everybody will be benefitted by this man's business. You want him—give him inducements. You want the man with property, the man of a family—show that you want and appreciate him. A man of this kind coming to Canada, has in mind bettering himself and making provision for his family. He does not want a quarter section; he wants more and he should be allowed to bring in stock and machinery to work all that he will farm. He will not bring more than he can use; but if thought necessary, you could prohibit him selling his effects for two or three years from the time he brings them in (instead of one year, as you now provide). A Wisconsin man was considering moving to Manitoba, near Winnipeg, with a dairy herd of sixty-five milch cows. He was informed that he would have to pay a duty on the greater part of his cows to get them in—it was even suggested that he sell part of his herd and buy again in Canada, the one making this suggestion failing absolutely to take into consideration that this man had been years in building up this dairy herd and that he would have to take beef prices for them and then start in all over again to build up another dairy herd in Canada. The result was that this man decided to stay where he was. Considering that cattle, sheep and hogs are free into the United States and that Winnipeg is importing hundreds of thousands of dollars worth of dairy products from the States yearly, such things as this are absolutely foolish.

An immigrant is allowed his plough, disc, harrow, drill, binder; but if he has a threshing outfit, he must leave it behind or be penalized. In other words, he can plough his land, work it down, crop it, harvest the crop, but he cannot thresh it. And this in spite of the fact that never has there been enough threshing rigs in Western Canada to handle the crop as it should be handled. The tractor, threshing outfit and the automobile were not and are not a part of the homesteader's outfit, but they certainly are a part of the modern farmer's equipment.

When you are bidding for people to come in, these things are inconsistent, and Canada is losing lots of good people by them.

"The West is, generally speaking, not a manufacturing country, and the cessation of the war orders should consequently not affect its position to the same extent as it may affect the east. Our trouble, such as they are, have resulted more from over-speculation in land and in the decline of building activities than from any other causes. We depend for our prosperity largely upon what we can produce, and are in a position to supply precisely the commodities that will be required in less fortunate countries during the period of reconstruction."—Sir H. H. McMillan President Crown Bank.

"Some people are all the time worrying about finding new markets in foreign lands for our producers. My proposal is to bring those new markets home to our producers. Why go abroad to look for consumers when you can bring the consumers home with you? The best consumer for our goods in Canada is the man who comes here to live and work and assist in the building up of our young nation."—Hon. Robt. Rogers.

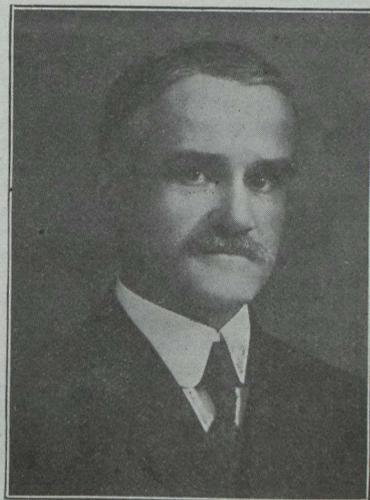
COMMISSION GOVERNMENT.

"It may be that neither the commission form nor the city-manager type of government is the last word in municipal organization in the United States. To my mind they are of less interest as types than as an expression of a manifest and compelling need, on the one hand, and the proof of a change of public mental attitude on the other. They express the need for simplicity in municipal organization. Democracy cannot function properly through a complicated organization which it cannot visualize and cannot comprehend. Pinning our faith to the catholicon of reorganization, we early began to emerge from simplicity in municipal organization. For more than half a century we reaped the reward that might have been expected from the complications we introduced. We are now in the era of a return to simplicity. It is a sign that is full of hope, whatever may be the specific type of government in which the movement find expression.

"I do not ignore the importance of governmental form in a democracy. But I am profoundly convinced that we have laid and are laying too great stress upon this matter of form. This or that type of government is of importance only to the extent that it lends itself to the smooth functioning of democratic control. We cannot assume that any organic form will give the people of a city a better government than they desire. The fundamental assumption of democracy is that the people actively and possibly desire the best government possible. The machinery of government is of interest and importance only in the degree that it facilitates or obstructs the realization of this desire.

"I am inclined to believe that had the commission or the city-manager type of government been established a generation or so ago it would have been a dismal failure. In an atmosphere of public indifference, of inactivity, or lack of heart or of interest, it would have lent itself admirably to the machinations of professional politicians and spoilsmen. We should hesitate to give to the genius of a designer credit that is in fact due to a new motive force—in this case to an awakened, vitalized and actively operating public opinion. Unstinted laudation of the virtues of these types of government may be justified as a means for keeping public opinion upon its mettle; but is the danger not real that it may also result in convincing a busy and not too exacting people that here at last, after all the futile searching of the years, they have come upon their long-sought Eldorado—a super-government, a government so perfect in type that they can wind it up at periodical elections and, with supreme confidence in its ability to run itself, turn their attention to other things"—Howard Lee McBain, in National Municipal Review.

"The plain, the wheat, the mill contain an invincibility which war will not reduce."—M. Pierre Hamp.



CONTROLLER JOSEPH AINEY,

of Montreal, who has been appointed a member of the new "Board of Grain Supervisors of Canada."

Municipal Accounting

E. T. SAMPSON.

Secretary-Treasurer of Outremont, Que., and Member of the Society of Municipal Treasurers and Accountants (Eng.).

(FOURTH INSTALLMENT.)

Cash and Banking.

In important municipalities the following (adopted from Professor Dicksee's code) or similar regulations to be observed by the staff should be adopted, viz.:

1. Clerks in control of cash should not have access to the particular ledger controlling their receipts or payments.
2. Daily bank deposits whenever collections exceed a minimum to be fixed by Committee.
3. No deductions whatever should be allowed from cash receipts which should be deposited in full.
4. Payments to be by cheque drawn to order, signed by mayor or pro-mayor and countersigned by treasurer.
5. Receiving tellers should not be entrusted with payment of moneys and vice versa.
6. Prescribed forms of acknowledgement should be given for all cash received.
7. An allowances register should be kept of all applications for reductions of all sorts.

Cash Books.

The general cash book will be placed in charge of chief cashier; this official should also supervise the assistant cashier who will have charge of the subsidiary cash books.

Form of Cash Books.

Tabular rulings in general cash book are always preferable to my mind. If the system of daily transfers is the custom, then the tabular system of ruling is essential.

Subsidiary Cash Books.

Should be kept where the following classes of receipts are numerous, viz.: For each class of tax—current year and arrears—also for discounts allowed and for interest received).

2. Licenses (tabular form; column for each class of license—receipt No. and tag No.) Business taxes might be included here.
3. Magistrates or Recorders' Court fines and costs cash book. (May form part of court register).
4. Recreation fees, etc.
 1. Skating rink.
 2. Use of tennis courts.
 3. Use of bowling green, etc., etc.,

Miscellaneous classes:

- Library receipts (detailed where necessary).
- Baths receipts (detailed where necessary).
- Lavatories Receipts (detailed where necessary).
- Etc., etc.

In all the foregoing subsidiary cash books and wherever receipts are given, a duplicate of the receipt given should be retained and numbered (if not already) consecutively and number to be repeated against the item shown in cash book.

Form of Receipt Cheque Book.

The manifold carbon copy receipt cheque books are undoubtedly the best for the following reasons:

1. Stub or counterfoil is an exact copy of receipt issued, thus reduces risks of errors.
2. No waste of time looking for a receipt already prepared.
3. Manipulation by dishonest clerk rendered more difficult and more easily detected.
4. As many receipt books as are necessary can be used simultaneously.
5. Alternate books can be used which will prevent delays to auditors or collectors.

Unused receipt books should be kept under safe control and a register kept of stock of same, recording the delivery and examination of numbering, etc.

Cash summary books or slips should be kept by each collector, showing his total daily cash receipts and payment thereof to chief cashier, who should initial same. It is a very safe rule not to allow any balances to be retained. Advances for change, if required, should be issued daily.

Petty Cash.

Is best kept upon the imprest system, viz.: A fixed amount advanced to each accounting officer, who utilizes same to pay the small disbursements occurring in his department; receipt for each payment wherever possible must be obtained by him and delivered to treasurer with

a statement of all disbursements made. The treasurer after having satisfied himself as to correctness, or after approval of finance committee, will issue cheque for total of disbursements made by officer. By this means the original amount is all the time kept intact. Refund of all advances for petty cash should be requested at close of financial year. Self detailed, self balancing form of ruling is most suitable.

Deposits to Bankers.

Deposits should be made daily if total collections exceed, say \$200. Retention of copy of bank credit slip is a good rule to adopt; future disputes as to payments can often be cleared up by such copies.

Bank Account.

The choice of the number of bank accounts to be kept by a municipality can safely be left to the discretion of its treasurer, provided the following points are well observed:

1. That capital and revenue bank balances on all funds of the municipality can be ascertained at any time without delay either in cash book or bank pass book.
2. Balances of all bank accounts to be aggregated for purpose of calculation of interest charges. (To avoid losses by paying higher interest rates on debit a/cs than is being received on credit a/cs).

Form of Bank Loans.

If accommodation is required in anticipation of tax revenues, then bankers should be induced to lend by overdraft subject to monthly reports or oftener. If accommodation is required for capital expenditure pending issue of sale of securities, notes should be issued in respect thereof "Payable on Demand."

Attention should here be paid to the legal powers of the municipality and where it is not specifically stated in charter that power rests with municipality to deposit with banks unsold securities as collateral for accommodation received, then application should be made to Provincial Parliament for such powers under an amending charter.

CAPITAL EXPENDITURE.

Double Account System.

I submit that what is now known in accounting circles as the double account system is the only system of recording capital expenditure which will reveal:

1. Complete historical record of capital outlays.
2. Agreement of specific capital expenditure with the loan by-laws or the ordinances in respect of which the loan was made.

An extra column can (and it will be often found very convenient) be added showing amount estimated. The three columns shown on the pro forma ruling at end of series, supplemented by cost account will enable the closest scrutiny to be kept on every detail. Special attention will be required to be given to the apportionment of suspense accounts, viz.:

- Stable account.
- Use of plant.
- Accident insurance or contribution to municipality's own accident fund.
- Share of maintenance of engineer's department.
- Share of general administration expenses.
- Miscellaneous disbursements in respect of several improvements or services.

Apportionments will in some cases be more or less arbitrary and each account will require particular treatment.

Interest on Works in Progress.

Where the capital expenditure is for self liquidating local improvements (viz.: Local improvement outlays on which loan charges will be provided out of a special tax upon benefitting proprietors). Care must be taken that each progress account is being properly charged for interest on outlays. The maximum rate chargeable will be the legal rate, but wherever possible the same rate should be charged as the city itself pays for temporary financial accommodation, otherwise the difference will have to be assumed by the general revenue account, and may thus become a charge upon tax payers who will not obtain any benefit from the improvement.

SHARE OF ENGINEERING CHARGES.

For Self Liquidating Local Improvements: An equitable basis can easily be established for these overhead charges by ascertaining what would have been the scale of charges of an expert not in the regular employ of the municipality, and by deducting therefrom, say 25 per cent, in consideration of the reduced cost to the city of having its own engineering staff. Care must be taken that no charges are debited to outlays over which the engineering department have not exercised expert supervision, viz.: Sundry land purchases, etc.

To General Improvements: An allocation of part of cost of engineering department to these outlays is very debatable. To my mind it will only be justifiable when the improvements are of such a nature and importance as to necessitate expenditure on this department which would otherwise not have been made. Caution must be exercised that no expenditure is thus capitalized which should rightly have been assumed by the "general administration and paid out of annual revenues."

Review of Ledger Account.

I have now completed my outline of a municipal ledger. Upon close inspection readers will no doubt find many matters of varying importance omitted, and also many others which will not be applicable in certain cases, but I have given my own experience in these matters.

Balance Brought Forward.

Deficit. Where an adverse balance has occurred in the previous financial year it is undoubtedly the duty of the Council to see that it is liquidated in the present year, and thus impose the burden upon those who are benefiting by the services.

Surplus: While the accumulation of a large surplus on the revenue is to be condemned for the following reasons:

1. Injustice upon present tax payers.
 2. Tends to extravagance,
- yet I hold to the opinion that a permanent fixed surplus is very convenient and proper, as it will often obviate having recourse to bankers for accommodation in anticipation of tax collections.

Trial Balance.

If these are prepared in a suitable record book, financial statements can be prepared at very short notice. In any event a trial balance should be taken out of ledgers at least once a month, and before and after all closing entries are made.

Balance Sheets.

Much controversy has taken place upon the subject of the statement of the assets in municipal balance sheets. I personally hold the opinion expressed by most writers I have read on this subject that: Municipal assets and capital outlays should be maintained at cost and that the amount of depreciation provided for from year to year together with the provision made for the redemption of loan debts, etc., should be shown as a liability against such assets. This is strictly in accordance with the double a/c principles. (The foregoing remarks will not apply to special suspense accounts established for the spending of sundry outlays over the revenues of a few years only). There should be separate balancings of the revenue and capital sections of the balance sheet. Sinking funds and other special or reserve funds separately stated in the balance sheet should also be separately balanced. In the sample balance sheet at end of series I have endeavored to outline the groupings only of the items, the details and extent of such groupings will require careful study and attention. Efforts should be made to dissect the loans into such groups that the annual loan charges can be easily charged to its particular section in the revenue account. This is a great convenience, obtainable only by the certificates of treasurer and auditors should always appear at foot of balance sheet, and attention should be especially given to any qualifications appearing in such certificates. Unless special reasons exist an unqualified and unequivocal certificate should be required. It will thus be possible to show the true cost of every service of the municipality.

Aggregate Balance Sheet.

In a few of our large municipalities only, will there be the necessity of an aggregate balance sheet, which as already is a resume of the balance sheets of the various funds and undertakings of such municipalities.

SINKING FUNDS, REDEMPTION FUNDS, ETC.

As these accounts are often kept entirely separate from the rest of the accounts of the municipality, a few special remarks hereon will not be at all out of place.

First of all—What is a sinking fund?

A sinking fund is a fund established, by setting apart periodical instalments out of the annual revenues of any undertaking (municipal or otherwise) which, with or without, the interest earnings, of such accumulations, will be sufficient to redeem any loan in respect of which it was established at the expiration of the loan period.

It will be a:

1. Non-Accumulating Sinking Fund.

When the periodical instalments include the interest earned on the accumulations. (Now very rare).

2. Accumulating Sinking Fund.

When the annual instalment is a fixed amount, and all the interest earned on the accumulations of Fund are credited to same, computation having been made that the annual instalment accumulating at a given rate per cent will be sufficient to redeem the loan at the expiration of the loan period!

(Archer's Annuity and Sinking Fund Tables)

or

(Robinson's Annuity Tables).

BASIS OF INSTALMENT (Annual or Otherwise) to SINKING FUND.

The establishment of the actual amount of instalment is merely an arithmetical calculation, requiring little comment. Its establishment, however, should be clear and readily ascertained. Municipal loan by-laws often prescribe the percentage of the loan debt that is to be set aside as sinking fund instalment.

Date of First Instalment to Sinking Fund.

Opinions here in Canada often differ on this point, and I think expediency often enters into the question. The following is in turn claimed as the rightful date, viz.:

1. From the date shown on the securities.
2. From the date of the actual sale of the securities.
3. From the date of the actual outlays in respect of which the loan is made.
4. From the date of the imposition of the special tax for the purpose of providing for the loan charges.

In actual practice I think that Nos. 3 and 4 are the more reasonable, and that (with certain exceptions) No. 3—"From the date of the actual outlay" is the proper method for the following reasons:

1. Depreciation commences as soon as the asset is constructed. (Depreciation and sinking fund instalment are, or should be synonymous).
2. Benefit to present proprietors of assessable lands, commences immediately improvement work is started. (By increased land values).
3. Liability to all municipal taxes on benefiting property being more quickly established, protects prospective purchasers from misrepresentation.

Transfer of Sinking Fund Instalment.

1. By transfer of cash in bank accounts.
2. By transfer of assets in books of municipality.
3. By admitting a liability to sinking fund in the general funds of the municipality.

No. 1 is the most tangible method of making the transfer, although the other two methods are equally effective. The really important operation is:

"The Charge in the Annual Revenue Account."

The Provincial Governments would do wisely to require the filing, with them after the expiration of each financial year:

1. Sworn declarations (or affidavits) of the mayor and treasurer of each municipality:

"That due provision has been made out of the annual revenue or administrative accounts for the annual amount due to the sinking fund, and that the same has been duly credited thereto;

2. An annual return to be prepared by the municipal treasurers immediately after the termination of the financial year, and also to be certified by the auditors of the municipality showing:

1. Amount actually accumulated in the sinking fund;
2. Amount which should have been accumulated in the sinking fund, according to general laws and by-laws governing same.

Insistence upon all deficits shown in such returns, to be provided out of revenues during the ensuing year, should be within the powers of each Provincial Government.

(To be concluded.)

The Hydro-Electric Railways of Ontario

By T. J. HANNIGAN.

Secretary, Hydro-Electric Railway Association, and Ontario Municipal Electric Association.

The growth of the Hydro-Electric Railway Association has been, for the past few years, so closely interwoven with the growth of the Hydro movement, the carrying out of the Hydro policy of Municipal ownership, and operation of utilities pertaining to power and transportation, that in speaking or writing of one it is necessary to build up, broaden, and extend the sphere of influence of the other.

In the month of December, 1912, at the annual meeting of representatives from the municipalities of Ontario, which for some years previous had been engaged in the distribution of electrical energy as a municipal undertaking, a general feeling, which had been growing for some time, crystallized in an unanimous resolution urging the Hydro-Electric Power Commission of Ontario, administrators of the municipal system, to request the Provincial Government to enact legislation that would enable one or more municipalities to engage in electrical transportation.

This was not done on the impulse of the moment, but was really the result of the experience of those men, and the people whom they represented, in handling their own utilities, giving the people public service at cost, and proving that the people were competent to handle their own business.

Accordingly the Hydro-Electric Railway Act of 1913 was placed on the Statute Books of the Province, which provides that whenever required by the Lieutenant-Governor-in-Council so to do, the Hydro-Electric Power Commission of Ontario may inquire into, examine, investigate, and report upon (a) The cost of constructing and operating an electric railway in any locality in which electrical power or energy may be supplied by the Commission under the Power Commission Act; (b) The Municipalities, the inhabitants of which will be served by such railways; (c) The population of each of such municipalities as shown by the last enumeration thereof by the assessors; (d) An estimate of the probable revenue from the railway; (e) The practicability of the undertaking and its economic value to the locality to be served by it.

A corporation, or two or more corporations, may, if authorized by the Lieutenant-Governor-in-Council to do so, enter into an agreement with the Commission for the construction, equipment, and operation of an electric railway to be operated by electrical power or energy supplied by the Commission.

In order to secure this information all that was necessary was for a municipal council to pass a resolution making this request and forward it to the Lieutenant-Governor-in-Council. Information was to be gathered, estimates prepared, and reports presented to the municipalities free of charge.

During the first few months after the passing of the Bill only a few municipalities took advantage of this Legislation, as many municipalities who no doubt desired the information, did not know exactly how to go about it to secure same, and there was no organization whose business it was to keep the people of the municipalities informed.

In the Fall of 1913, a resolution was introduced in the Council of the City of Guelph by the writer, who, at that time, was Chairman of Railways and Manufacturers, asking for a survey from our Municipality to two adjoining Municipalities and this was carried, but arrangements were made to have a further meeting of the Council a day or two afterwards when further information would be available, and at that meeting a resolution was unanimously carried asking for estimates for a railway from the city of Guelph to several points on the Georgian Bay, and eventually extending southward to connect at Hamilton.

Our Council felt that, in order to get early action, it would be necessary to secure the co-operation of the municipalities, through which it was desired to have these surveys made.

To do this most effectively an organization was absolutely necessary so that speakers might visit the other Municipalities and explain the project, and give such details as were available at that time.

Accordingly a meeting was called, and we started with an organization of six men—Mr. S. Carter, the then Mayor of Guelph; Mr. J. W. Lyon, one of the pioneers of the Hydro Power movement, and President of the Guelph Junction Railway and Guelph Radial Railway; ex-Mayor

George J. Thorp; Mr. G. H. Ryan, then Water Commissioner; Alex. Simmers; and the writer, who acted as both chairman and secretary.

Two or more of this small body visited nearly all of the Councils in that district and explained the procedure necessary that the Municipalities might avail themselves of the opportunities afforded by this legislation, and in 29 days 25 Municipalities passed the necessary resolutions which were duly forwarded, and which really marked the commencement of a movement that has exceeded the wildest expectations of those who started it.

The city of Guelph decided to celebrate the results of the campaign by a banquet to representatives from the Municipalities in the district extending north from Guelph to the Georgian Bay, and it was decided to hold this during the time of the Provincial Winter Fair, which is held in Guelph each year early in December. Arrangements were made, delegates were notified to attend, and the Honourable Adam Beck (now Sir Adam Beck), Chairman of the Hydro-Electric Power Commission of Ontario, was invited to come and address this gathering and explain the project more fully than our committee had been able to do.

The Hydro Radial Union formed that night for the purpose of looking after the needs of this district, eventually became the Provincial Organization, the President, Secretary, and Treasurer of the Provincial Organization to-day being the same men who were elected that evening, and most of those who assisted with the forming of the Radial Union are still taking an active part in the Hydro Radial Campaigns.

The objects of the Radial Union were: The dissemination of useful information amongst its members, and giving assistance to the Commission in the gathering of necessary statistics; an organization for campaign purposes acting automatically when the engineers of the Commission are in a position to place in its hands all information as to cost of construction, operation, method of financing, and location of line; to educate every citizen in the municipalities covered by said Union in order that when the said Municipalities are asked to guarantee the bonds to build said line, the response will be a unanimous one.

Following this a number of other district organizations were formed, each having local branches carrying on the district work, and on March 26th, 1914, an immense deputation, composed of over 2,000 representatives of the Great Waterways Union, the Hydro Radial Union, and the Ontario Municipal Electric Association (previously known as the Niagara Power Union), journeyed to Ottawa and presented memorials to the Dominion Government relative to the deepening of the channels connecting the Great Lakes, the conserving of the water powers of the Province for the benefit of the people, and assisting the construction of a system of Hydro-Electric Railways to be publicly owned and operated.

On that occasion the various District Radial Unions formed a Provincial Association for the purpose of carrying on, to a fuller extent, the work so well begun by the district organizations.

The following week a deputation of over 200 members of the Hydro Radial Union, representing Municipalities all over the Province, waited on the Provincial Government at Toronto, and presented a memorial embodying requests for the acquirement or development of a further supply of power for the Municipalities, and for Legislation providing for the necessary amendments to the Hydro-Electric Railway Act to enable the municipalities to take fuller advantage of the opportunities offered for electric railways and power development.

The reports had been already prepared and presented to the municipalities in what is known as the Toronto and North Eastern District, comprising some 13 Municipalities, and involving an expenditure of between \$4,000,000 and \$5,000,000, and the preliminary work had been carried on almost entirely by Mr. A. F. Wilson, of Markham, until the time for the campaign, previous to the vote being taken on October 19th, 1914, when, in response to his request, our Association gave such assistance as we could in the matter of attending meetings and explaining the proposition, and the By-Laws carried with overwhelming majorities in nearly all the Municipalities interested.

HYDRO-ELECTRIC RAILWAYS—Continued.

The work of the Association had increased very largely during this year owing to the large number of municipalities becoming affiliated, and it was deemed advisable by our Executive Committee to provide for some kind of a permanent organization and on February 24th, 1915, at the annual meeting, the Provincial Hydro Radial Union was re-organized and a proper Constitution and By-Laws prepared and adopted, and the name changed to the Hydro-Electric Railway Association of Ontario.

Up to this time the expenses in connection with the carrying on of the work had been largely met by the officers of the Association outside of a few small donations, but the new Constitution provided for an assessment of \$2.00 per 1,000 of population for each Municipality becoming a member of the Association.

Following the annual meeting a small deputation, consisting of the Chairman of the Commission and half a dozen members of our Executive waited on Sir Robert L. Borden, on March 10th, and a memorial, passed at our annual meeting, was presented to him and members of his Cabinet, and on March 26th a deputation of some 2,000 representatives, from the Municipalities in all parts of the Province, assembled in Toronto and presented a memorial, setting forth their requests, to the Premier, Hon. W. H. Hearst, and members of the Cabinet.

The City of London had arranged with the Commission for the electrification of the London and Port Stanley Railway, and the official opening was scheduled to take place on the 22nd of July, 1915.

The City of London, recognizing the work done by our Association, asked us to invite representatives from all the Municipalities interested in Hydro-Electric Railways, and a very large and representative gathering attended, as guests of the City of London, on this occasion, journeyed over the railway from London to Port Stanley and return, and enjoyed the hospitality of the London City Council at a banquet held in the Masonic Temple that evening.

This occasion marked an epoch in the history of the Hydro-Electric Railway movement in the Province of Ontario, as the electrification of this road had been carried out at the suggestion of the Hydro Commission and under the supervision of their engineers, and the municipalities from all districts awaited anxiously the results of the operation of this line as the future of the Hydro-Electric Railway proposition depended very largely upon the success or failure of this line.

The public, generally, is familiar with the results achieved during a year and a half's operation. Results which, in spite of the most strenuous opposition on the part of those opposed to the project, exceeded the expectations of the most ardent Hydro-enthusiast.

This road is a model in electrical equipment and rolling stock, and may well be called the corner stone of the Hydro-Electric Railway System, as it will serve as a standard of excellence for many years to come.

From the passing of the Hydro-Electric Railway Act the staff of the Commission had been engaged in gathering and compiling statistics in regard to the construction and operation of electric railways were in operation, and an immense amount of information had been tabulated in regard to the different standards of construction, types of equipment and rolling stock, and systems of administration and operation, in use by the various railways, investigated.

Many hundreds of miles of surveys had been made, and early in the fall the Municipal representatives of three districts were called together and preliminary reports presented to them by the Hydro-Electric Power Commission. The groups referred to were the districts from Toronto to London, from London to Sarnia, and from Toronto to Collingwood, Midland and Penetang.

The various conferences approved of the plans as presented by Sir Adam Beck, Chairman of the Commission, and they passed resolutions endorsing same and asked that they be presented to the Municipalities in order, if possible, to allow a vote to be taken at the Municipal Elections in January.

It was found to be impossible to complete plans and estimates for more than the district from Toronto to London, which might be called a main or trunk line, and consequently arrangements were made to lay the plans before the Councils in that district, which was done by Mr. Gaby, Chief Engineer, and members of the engineering staff, accompanied by the president and secretary of our Association.

The amount to be guaranteed by the Municipalities for this line was between \$13,000,000 and \$14,000,000, and 24 Municipalities in this district decided to submit the By-Law to the electors in their respective localities. Our Association was given charge of the campaign. Arrangements were made for about 100 meetings to be addressed by speakers for the purpose of explaining all details in connection with the proposition. Articles were prepared for the newspapers and pamphlets were gotten out giving reasons for supporting the By-Law. The principal speakers were Sir Adam Beck and the officers of our Association, in many cases two meetings a day being taken by the same set of speakers.

The results more than justified our expectations, for despite the short time we had in which to place the matter fully before the electors, and the limited number of speakers at our disposal, the By-Law was carried by overwhelming majorities in 20 out of 24 Municipalities voting on it.

The Association has proven of immense value to the Municipalities as, in the first instance, Municipal Councils are advised as to the necessary procedure, forms being printed for such resolutions as are necessary, and when the reports are ready members of the Association accompany the engineering staff of the Commission and explain the details of the proposition to the various Councils interested, and when the vote is to be taken the Association takes charge of the campaign, furnishes speakers for all meetings, and literature so that all citizens may be fully conversant with the proposition before casting their ballots.

The growth of the Power Transmission system has kept pace with the growth of our Association until to-day, four times as much power is being furnished to the people of Ontario as when our Association was organized less than four years ago, as in speaking in the various places on Hydro-Electric Railways it was necessary to refer to the great benefits enjoyed by the people as the result of the inauguration of the Hydro Power policy, showing that the people are competent to manage their own affairs, thus saving the profits hitherto given to private companies.

Many Municipalities are to-day, through the efficient administration of the Hydro-Electric Power Commission, enjoying first class lighting service as compared with the very inferior service of 10 years ago at four times the cost.

Electric railways will widen the field of operation very considerably in this respect as it is possible to serve districts several miles from the power line of the railway that could not be served as conveniently under any other system, so that in addition to cheap, frequent, and rapid transportation, the Hydro-Electric Railway proposition offers to the people in rural communities all the advantages of cheap light and power that at present, in a very large measure, are only enjoyed by those in the larger centres of population.

In addition to this the Association, on a request from the municipalities, opposes all Legislation inimical to the interests of the people, and from time to time presents to the Commission, to the Legislature, and the Federal Government, requests for such amendments to existing Legislation as the Municipalities deem necessary.

To do these things it is necessary to keep constantly in touch with all parts of the Province interested in Municipal power and transportation development, and this we have been able to do by reason of having a very capable office staff and a complete system of organization.

It is with feelings of gratification that the members of our Association look back on what has been accomplished in such a short space of time, and the people of the Province of Ontario have never paid a finer tribute to any public man than that paid to Sir Adam Beck, Chairman of the Commission, in the magnificent vote accorded the By-Laws in reference to both power and railways, as, after all, it was the faith in him, in his ability and honesty of purpose, and his sincere interest in the welfare of the Municipalities that has enabled us to achieve such magnificent results, and the faith shown in him has been more than repaid by what he has accomplished in the wonderful work of this great public service utility which will stand as an enduring monument to him through all time to come.

What has been, and is being accomplished, by the people of the Province of Ontario in this great public service enterprise of power and railways, should be an inspiration to the people of the other Provinces of this great Dominion to look into their own affairs and see if the same system of public service at cost would not prove as great a blessing to their people as it has to the people of Ontario.

Municipal Affairs in Manitoba

H. E. MORTON.

In Winnipeg's financial estimates for the fiscal year 1917-1918, now being compiled by the board of control and expected to be completed about the middle of this month, they will likely call for a tax rate of 16.50 mills, compared with the 15.70 mills rate for the fiscal year ending April 30 last. Considering the recent paring of speculative values by which the city's assessment was reduced by over \$25,000,000, the fulfilment of such a prophecy will be considered highly satisfactory, as with values placed on a more sane basis, the call to many will be about the same or even less, despite greatly increased expenditure in departmental salaries and other uncontrollable outlays.

Before, however, the next year's estimates call for preparation, the city's system of taxation may have undergone a complete change. Much of the objection to the present system of civic taxation—and Winnipeg's is no exception—rests upon its lack of proportion to income and profits. In the payment for municipal services enjoyed by all citizens, earnings or ability ought certainly to form the main guide to taxation, for discrimination as to the amount of use made by individuals of essential service is impossible. Essentials are equally essentials whatever the amount of income enjoyed, and the principal of payment for them in proportion to ability has long been recognized. Even were it feasible to determine in what degree a resident utilized them, the payment required from, say, a citizen supporting a large family upon slender earnings, would become unjustly burdensome.

Civic expenditures seldom decrease, hence the importance of arriving at a just basis of individual contribution to the common expense charges. Education already being paid for, brings with it a growing knowledge which adds to the services demanded from the civic authority, every year bringing with it new ideas and new public needs, so that with all the talk of economy by candidates for municipal honors and even its extensive practice, few cities can point to permanent lessening of outgoings.

City Council Petitions Dominion Government.

The outstanding features of business transacted at the last meeting of the city council was a resolution moved by Controller Chas. F. Gray, the well known consulting electrician, who has been quite a factor to be counted with since his entry into the council last December. This resolution, which after a hot debate, was passed with only one dissented, read as follows:

"That the council, in view of the almost prohibitive prices now being asked for even such foodstuffs as are the necessities of life, and in the belief that the food situation in Canada will shortly reach an acute stage, do urge upon the Federal government the necessity of immediately mobilizing the food supplies throughout the Dominion, and of establishing a central control, or of appointing a food supervisor who will regulate prices; and

"That the council do urge upon the government the necessity of establishing government abattoirs and cold storage plants, or, if private ownership is continued, of limiting by statute the period of cold storage commodities."

The resolution was telegraphed to Sir Robert Borden and the Hon. Robert Rogers, and satisfactory replies were received from both ministers.

School Board to Have Dental Clinic.

Provision has been made in the estimates of the Trustees of the Winnipeg School Board, which controls the education of nearly 32,000 children, for a free dental clinic, that at the General Hospital being much appreciated, being, it is declared, quite inadequate for the children's needs.

The annual report of the department of medical inspection of Winnipeg Schools just published shows that of 4,480 new pupils admitted during 1916, and medically examined, no fewer than 2,533 new pupils of these were found to be in some way defective in health, 1,168 suffering from dental defects.

The medical officers, Dr. Mary Crawford and Dr. A. W. Allum, in their report, emphasized the necessity for the establishment of the clinic to be used exclusively by school children, and stated that 75 per cent. of the children examined were found to have some untreated defect of the temporary or permanent teeth, leading to serious physical ills, in some cases even causing facial deformities. Extra inducements are also to be held out to scholars to take advantage of the free baths provided at the schools.

City Trying Semaphore For Traffic.

The new traffic regulating semaphore service is being tried out at the intersection of Portage avenue and Donald

street, one of the busiest corners in the city and opposite the big Eaton departmental store. The semaphore is worked by a lever and has "stop" and "go" signs for directing traffic. Up to the present, satisfaction is being expressed at the better regulating of traffic, and it is just possible that semaphores of an improved pattern may be instituted at all the important and busy street intersections in the city.

For the still better control of traffic, white lines are to be painted across the asphalt, between which pedestrians will be expected, or at least advised, to walk when crossing, and over which vehicular traffic will be barred while the "stop" sign is being shown.

Want Jitney Men to Carry Bonds.

Following up representations made by letter to the civic board of control a delegation of automobile owners, including members of the Winnipeg Automobile Club, waited on the civic license committee recently urging that jitney drivers be compelled to furnish a bond of sufficient amount to cover damages which they might inflict on persons or property through reckless driving or otherwise. Business firms, said the spokesman, insured their truck drivers to cover possible damages, some carrying as high as \$10,000, and jitney drivers should be placed on the same level. Individual drivers, it was realized, might not be able to insure, but the association to which they belonged could, it was thought, probably make arrangements with a bonding company for a joint bond.

The Prevention of Fires.

A somewhat serious statement was recently made in the annual statement of the Board of Trade relative to the efficiency or otherwise of the Fire Department in dealing with big fires, the discussion being reminiscent of the controversy which arose shortly after the big Stovel fire in May, 1916.

Local newspapers commenting favorable on the report, feel that the expense to which the City might be put in the creation of a practically independent department charged with the carrying out of inspections and the recommendation to the council of the legislation required to make the prevention of fires effective and thorough, ought to be more than repaid by the reductions in fire insurance premiums resulting from the lessening of the fire risk. In this connection the example of Toronto is quoted. That city inaugurated last year, a fire prevention staff of three men, soon to be enlarged to five. To quote the statement of the Toronto Bureau of Municipal Research: "All appointees are experienced men, and, when a completely organized fire school is established, should prove excellent instructors of the uniformed force in methods of fire prevention inspection, so that every fireman may in time become a fire preventer as well as a fire fighter."

The report of the Winnipeg Board of Trade will no doubt have the effect of reminding the city council that it is high time to take into consideration the advisability of drafting more stringent regulation, and of perhaps giving owners notice to remove or demolish within a stated period all the many wooden shacks, stores, or buildings of similar inflammable nature which abound in the down-town area, endangering the many modern office blocks and fine bank buildings for which Winnipeg is noted.

Affairs in Brandon.

They proposed amalgamation of the Police and Fire Departments is still very much alive as a local issue, judging by the stir it created at a meeting of the committee of the city council recently. The reading of the report of the police and fire chiefs put the fat in the fire. The report, briefly stated, found objections to the satisfactory working of the scheme, and prayed the council not to carry the idea any further. To be thus flouted, as some of the aldermen considered they were, was too much, and the final upshot was, that the report was referred back to the two chiefs with definite instructions to present a plan whereby the scheme might be given a trial.

A somewhat crushing rejoinder was recently made by superintendent Alfred White to the suggestions that have frequently been made of late that the education of the children of Brandon was excessively costly. At a regular meeting of the school board held recently, Mr. White went into figures which tended to show that direct school expenditure in Brandon was slightly below the average of similar cities, while on the other hand the total expenses of the city were nearly five per cent. above those western cities with which comparison had been made.

NATURAL RESOURCES SURVEY.

A Survey of the Natural Resources of Canada is being conducted under the direction of Arthur D. Little, Limited, of Montreal, and the following article indicates the nature and scope of this important work. Municipalities desiring special and particular scientific information regarding its local resources and the opportunities for their development are invited to correspond with the directors of the survey.

The first step in any plan for the broad development of the Natural Resources of the Dominion necessarily involves the collection of definite and accurate information regarding the resources themselves and the systematic classification of this information in such form that it shall be readily available to those who may be expected to utilize it to advantage.

With full appreciation of the splendid work of many governmental, corporate and private agencies it may fairly be said that the resources of Canada have as yet scarcely been touched. Many recognized sources of national wealth and individual prosperity are still practically ignored. Undoubtedly many others, now wholly unknown, await discovery and exploration.

It is nevertheless true that a vast amount of information of the highest practical value has been accumulated by the Government Departments, notably, for example, by the Department of Mines and the Water Powers Branch, Department of the Interior, the Railways, the Canadian Mining Institute, Society of Chemical Industry, and other scientific bodies, trade organizations, industrial corporations and individual explorers, engineers and prospectors. A continuous and increasing stream of data may confidently be expected to flow from these sources. The immediate need is, therefore, not for new agencies for obtaining new facts, but for an effective organization which shall collate and classify the data already in hand or directly forthcoming. It is the hope and purpose of its sponsors to supply such an organization in the Natural Resources Survey.

It is the initial object of the Survey to recast into quickly available form the immense mass of valuable information regarding Canadian resources now stagnant in Government publications, scientific and technical journals, corporation records and the special reports of individuals. It is therefore proposed to abstract this data and transfer the salient and important facts regarding agriculture, mines, minerals, waterpowers, forests, fisheries and furs to standardized forms capable of close classification and to so control and key the information that related groups of facts may be promptly furnished as required. Concurrently therewith and supplementary thereto a census will be made of Canadian scientific and technical men with particular reference to their specialized lines of study and performance; the special libraries and research facilities of the country will be catalogued and classified lists made of the corporations and individuals most directly interested in specific natural resources, and presumably able to utilize them to advantage.

This plan, so comprehensive in scope and involving such widespread benefits to the Dominion, was originated by Lord Shaughnessy. Its development was in May, 1916, entrusted by His Lordship to Arthur D. Little, Limited, a Canadian Corporation operating under Dominion charter, and including in its organization chemists and engineers of many years experience in the industrial applications of science in many parts of the world. In their consideration of the broader questions of policy and development the Directors will be guided by the Survey Advisory Board composed of eminent specialists and organizers.

Although initiated by the Executive of the Canadian Pacific Railway and supported by that Company, the work of the Survey will be conducted in the interest of no individual or corporation, but impartially for the benefit of all and with the sole purpose of advancing the industrial development and prosperity of the Dominion.

Obviously a work of this magnitude cannot attain its full measure of usefulness without the cordial support and concurrent effort of all the agencies, organizations and individuals having at heart the welfare of the nation and in a position to co-operate with the Survey. The Directors have already been assured of the support of scientific organizations and business associations, and they confidently appeal to corporations and individuals throughout the Dominion for co-operation. The mass of detail to be considered is so great that the Survey must in large part rely upon the voluntary assistance of occasional and part time collaborators, and the Directors therefore particularly desire to be brought into touch with scientific and technical specialists who are prepared to furnish information re-

TRANSPORTATION FACILITIES.

W. SANFORD EVANS.

Chairman, Georgian Bay Canal Commission.

Mr. Sanford Evans, the Chairman of the Georgian Bay Canal Commission, who was to contribute an article for our preparedness number on the subject of CANADIAN WHEAT AND ITS MARKETING finds the wheat situation so very peculiar at the moment because of the war, that he has decided to postpone his article until better conditions prevail. The article will be published in a later edition of this Journal and mailed to all readers of this number. The following are excerpts taken from Mr. Evans' interim report of general conditions of transportation bearing on the economic problem of the proposed Georgian Bay Canal.

While by comparison with that of the United States the Canadian mercantile fleet on the inland waters is small, it is yet of considerable size and its capacity has been steadily growing.

In actual number of vessels there has been no great change in recent years, but the type and size have improved. In the fiscal year 1899-1900 there were 242 vessels so engaged; in 1905-06 the number was 270; and in 1913-14 the number was 265.

In the autumn of 1915, the United States and Canada were the only important sources of wheat supply for Europe. Southern Russia and Roumania were still blocked at the Dardanelles, and Northern Russia could send out only very small quantities through Archangel; the Government of India was in control of the supplies in that country and was conserving the surplus; Australia, owing to the partial crop failure in 1914 and pending the harvesting of the new crop, had nothing to export; and the Argentine had already disposed of the greater part of its 1914-15 surplus.

* * * *

Canada has never yet been able to secure at Canadian ports enough vessels to carry all the Canadian exports; that is, no measures so far taken to that end have been sufficient to seriously disturb the simple economic balance of the load factor along the North Atlantic coast.

* * * *

It is evident that not only do the general conditions of ocean transportation largely determine the distribution of international commerce, but that in the one particular of a change in the basis of freight rates, and even when there is no discrimination for or against any route, a factor exists of such varying power that it may seem to produce different kinds of effects according to the degree to which rates are raised or lowered.

* * * *

Western Canadian wheat fields are further from the ocean than the Argentine wheat fields, and although interior transportation costs per mile in Canada are more favorable, the Argentine is in a good competitive position when the spread in ocean rates is only from 3 to 6 cents per bushel, but when the spread is 30 cents per bushel, Western Canada can obtain a good price for its wheat, can absorb the costs of all-rail transportation in the winter months and then can undersell Argentine wheat in Europe even in the very months in which Argentine wheat is intrinsically cheapest.

garding specific resources or willing to abstract reports and publications dealing with such resources.

The Survey intends to issue from time to time Bulletins devoted to particular resources or immediate industrial opportunities and to place, as occasion arises, special reports before corporations and individuals in Canada, Great Britain and the United States, who may be expected to base industrial developments thereon.

The plan of the Survey further provides for the prosecution of industrial research on lines selected for their promise of yielding results of broad general benefit or of immediate advantage to individual communities or industries. Several such researches are already in progress, among which may be mentioned the series of co-ordinated studies which has for its object the industrial utilization of cereal straws.

The Survey is, obviously, a natural complement and correlative of the larger plans, to which the Federal and Imperial Governments are committed, for mobilizing the resources of the Dominion and the Empire.

Correspondence regarding the work of the Natural Resources Survey and tenders of co-operation should be addressed to the Directors.

Oxy-Acetylene Welding and Cutting

PRINCIPAL TABLE.

This subject, which is a very interesting one owing to its rapid rise and indispensable place in all industrial concerns to-day, covers a very wide field, but will be practically dealt with here briefly, under three headings, — Inauguration, Transportation and Operation.

Inauguration.

Ten years ago the Oxy-Acetylene Process was practically unknown on the Continent of America, although in France, where the process was first perfected, the importance of burning in combination Oxygen and Acetylene, which has a temperature of over 6,000 degrees F., compared with the temperature of 3,000 degrees F. in the best fuel furnaces, with 4,000 degrees of the Oxy-hydrogen flame, was known for some years previously where a French engineer produced a torch or blowpipe employing both acetylene and oxygen under high pressure, in the year 1901, and so overcame the first obstacle of the commercial use of Oxy-Acetylene.

Acetylene.

The method of generating acetylene gas from carbide with water as a reactionary agent, is so universal that it needs no explanation, and for the purposes of Oxy-Acetylene welding the gas supply is available in two different forms. Low pressure from an acetylene generator either of the stationary or portable type, working at a pressure up to 15 lbs. 6 lbs., however, is the pressure recommended as being the best, or, high pressure as supplied in cylinders at a pressure up to 250 pounds.

When acetylene gas is supplied at high pressure it has to be dissolved to prevent any chance of spontaneous explosion due to the high compression, the cylinders are therefore filled with some porous material and charged with a certain pre-determined amount of acetone which has the remarkable property of absorbing about twenty-five times its volume of acetylene per atmosphere of pressure. In this form compressed acetylene can be handled with perfect safety.

Both low pressure and high pressure systems have their own special fields of usefulness, and the adoption of either one should be decided by the user to meet his own special requirements.

Oxygen is generally extracted from the air by the Liquide Air Process, and since oxygen is an indecomposable gas, its use in a compressed state, when containing no injurious impurity, does not represent any risk of explosion.

Transportation.

The gases are made at some central works and delivered in approved steel cylinders, tanks, tubes or bottles, as they are variously named. These combined with the torch or blowpipe, and suitable rubber tubing for connecting through pressure regulating gauges, comprises the Oxy-Acetylene Welding and Cutting Equipment, which can be handled with every safety, and shipped by rail or steamer, or mounted on a hand truck, can be moved from one job to another without any special precautions, or carried on a fire wagon for salvage work, cutting steel doors, bars, etc. The portability alone assures its success, and is of very great value in steel foundries for cutting off gates and risers on heavy castings.

Operation.

The process is now used successfully for so many operations that to name them would require many pages; cast iron, steel, aluminum, brass, copper, lead and various alloys are welded without compression with a homogeneous union so perfect that when smoothed or machined the union is not discernible. For steel cutting the apparatus or process are similar, the welding flame of oxygen and acetylene being applied as a heating flame which brings the steel to a point of incandescence almost immediately; a jet of pure oxygen then being turned on which cuts or oxidizes the steel in a narrow, smooth surface krf.

In manufacture it is extensively employed for welding sheet metal; in place of riveting of tanks and containers which have to be absolutely leak proof, when finish,

strength and rigidity are required; for welding pipe lengths; for tube welding; for uniting parts difficult of forming or of casting; for welding steel tubes, steel furniture, steel cars, etc.

Repair Work.

In the repair field its value is unlimited for welding and reclaiming broken, worn out and defective castings of all metals, either light or heavy section; welding new teeth on broken gears; welding broken machine parts of all kinds; repairing boilers; cutting out rivets; cutting up oil boilers, rails, bridges, and all structural steel works, etc. After the equipment is once installed, the problem is not so much how to find work for it, but to keep work away from it, as it soon becomes known around the plant as a sort of "Cure-all," and is treated accordingly.

Pipe Lines.

One very interesting field for oxy-acetylene welding and cutting is in the installation of all sizes of water and gas mains. Pipes can be welded at the joints, making them absolutely leak proof. Holes can be cut in piping when in position, and branches, tees, drips and Y's can be welded on iron or steel mains. Pipe, where worn thin through corrosion, can be reinforced by adding more metal of exactly the same constituents as the pipe itself.

Advantages of Welded Pipe Lines.

Avoiding practically all chances of leak it permits distribution of gas under high pressure, reducing considerably cost of installation; pressure regulators are used at certain spots to reduce the high pressure to the working pressure. This system can be compared to the system of high voltage transmission of electric power, and offers the same advantages.

Tenders for the Construction of an Incinerator.

City of Outremont, Quebec.

Sealed tenders clearly marked as to their contents will be received by E. T. Sampson, City Clerk, City of Outremont, Quebec, up to 8 o'clock P.M. on WEDNESDAY, the 18th day of JULY, 1917, for the construction of an Incinerator with a chimney and suitable building of a capacity of 15 tons of garbage for a continuous run of 10 hours.

Envelopes must be marked "Tenders for the construction of an Incinerator for the City of Outremont."

Specifications may be obtained from J. A. Duchastel, B. A. Sc., City Engineer, City Hall, Outremont, Quebec.

The lowest or any tender will not necessarily be accepted.

Outremont, Quebec.

June 18th, 1917.

J. A. DUCHASTEL,

City Engineer.

Municipal Finance

JAMES MURRAY.

MUNICIPAL CONSULTING ENGINEERS.

The Editor:

I saw that in your last issue you reprinted an article from the Canadian Engineer criticizing the article published in the Western Municipal News in January on "Consulting Engineers' Fees." I think this was hardly fair to me, as your readers might think I did not know what I was talking about, which would not have been the case had you published the article to which the Canadian Engineer replied.

I now enclose a copy of my reply to the Canadian Engineer, which I trust you will see your way to publish.

Yours faithfully,

O. J. GODFREY.

Indian Head, Sask.,

The Editor, Canadian Engineer,

Sir,—I am sorry you gave my article on "Consulting Engineers Fees" a meaning it was not intended to, and does not, convey.

You say that stripped of excess verbiage, I assert that Consulting Engineers purposely under-estimate. I said no such thing, but I did state that on the percentage system a temptation is placed before the Engineer to underestimate. My article further stated that in many cases which have come before me, the preliminary estimate bore little relation to the final cost. You say it is hardly likely that I can give chapter and verse in substantiation, which is precisely what I am able to do in a good many instances. I am prepared to give, and to substantiate, many cases of under estimating, in which, as I stated in my article, the preliminary estimate bears little relation to the final cost, but I do not think you should suggest the Canadian Society of Civil Engineers as the tribunal, as however fair minded its members may be, it could scarcely be called an impartial tribunal. Probably the Canadian Union of Municipalities could better appoint a tribunal to consider the matter, and if you wish it carried further, the following is one of the cases I have in mind.

In the Town of "X," a well known Eastern Consulting Engineer prepared a preliminary estimate for a water-works system, which was to include delivery to the town and the laying of mains, to cost, as per the estimate, say \$100,000. The report continued: "Laterals and houses connections will, of course, be paid for by the properties served." In other words, this latter sentence would lead anyone not familiar with municipal finance to believe there was no need to borrow money for laterals and house connections, and that \$100,000 was all the capital required. What was the result? The town, having endorsed the preliminary estimate, had to go on, and spent more than twice \$100,000 in completing the work covered by the preliminary report. This year the Local Government Board held an enquiry to see whether this town could pay its fixed charges or not, and every ratepayer interrogated said that the preliminary report had misled him as to the cost of the proposed works.

That "mild amusement" is not the effect on the engineering profession, is evident from an article in the Western Municipal News this month, by a well known Consulting Engineer in the person of Mr. T. A. rd Murray, M. Can Sos. C. E. He says: "The method of charging upon a percentage basis has often been criticized both by engineers themselves and others, but no other satisfactory method has been formulated. The danger in engineers under-estimating the value of work chiefly exists at the time when the preliminary report and estimate are prepared, and this is more so when two or more engineers may be competing against one another for the work."

Again, in the Engineering Record of March 24th, 1917, Sir Maurice Fitz Maurice, in his inaugural address as President of the Institution of Civil Engineers, is reported to have asked the question: "Are engineers too optimistic in designing their work, and in their estimates of time and cost?" Answering the question, he says that engineers must plead guilty to the charge, sometimes at least.

Further, I believe that an American Engineering Weekly recently adversely criticized the percentage system.

What further justification do I need?

I also perused, with interest, another letter to you from Mr. Underwood, of Saskatoon, criticizing my article. I wonder if Mr. Underwood ever heard of the case of a

Our Services At Your Disposal

Municipalities that are contemplating the issue of Bonds, the investment of Sinking Funds, or any change in financial policy, are cordially invited to avail themselves of our services as specialists in—

Municipal Securities

Wood, Gundy & Company

Head Office:

C. P. R. Building,
Toronto

Branches:

Montreal
London

Saskatoon
New York

EMILIUS JARVIS

A. D. MORROW

EMILIUS JARVIS & CO.

MEMBERS TORONTO STOCK EXCHANGE

GOVERNMENT
MUNICIPAL
—AND—
CORPORATION
SECURITIES

JARVIS BUILDING - TORONTO

H. O'HARA & CO.

(Members Toronto Stock Exchange)

Stocks & Bonds dealt in on all Exchanges.

Government, Municipal and other Bonds bought and sold.

Western Municipal, School District and Telephone Debentures specialized in. Secretary Treasurers should communicate with us regarding the disposal of their issues.

ROYAL BANK BUILDING
TORONTO

CANADIAN GOVERNMENT MUNICIPAL AND CORPORATION BONDS

Service to Municipalities

Fifteen 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.

THE DOMINION SECURITIES CORPORATION LIMITED

ESTABLISHED 1901
HEAD OFFICE: 26 KING ST. EAST, TORONTO
MONTREAL LONDON, E.C., ENG.

town in the southern part of this province, for which an engineer he may wot of, estimated the cost of a water-works system at a certain figure, and who, when the bids for the work were found to be in excess of his estimate, and that the money to proceed with the work would not be forthcoming, pared his estimated and received bids within the amount available, after assuring all concerned that his first figure was an over-estimate for the work proposed.

"Oh wad some one the giftie gae us
"To see ourselves as others see us."

You overlook entirely the other phase of my article. In it I blame councils for the lax manner in which they enter into arrangements with their engineers, and I attribute many existing municipal financial embarrassments to this cause. One case came within my notice where the only document relating to the engagement of an engineer was a telegram from his stating his terms. And this for work estimated at over half a million, and as a result, when the final settlement came to be made, the engineer did not apparently know to 25 per cent. the exact cost of the work, having merely taken the annual financial statement as a basis for commission, so that he might be claiming on his own fees, legal fees, debenture discount, and all sorts of other things.

I still contend that a fixed sum for the work covered by the original estimate is the fairest all round, and, of course councils would expect to pay extra for any additional work performed by their instructions. Can you tell me any good reason why an engineer should receive \$600 extra commission if, between the date of the report and the acceptance of the tender for cast iron piping and specials estimated to cost \$60,000, the market should suddenly soar, so that the lowest tender was \$72,000, or why on the reverse, if the market should drop so that the material could be bought for \$48,000, the engineer's commission should be reduced by \$600.

There is a provision in the Municipal Acts of this province, that where special work is performed for Municipalities by members of my profession, the bill can be submitted to the government for approval, before payment. My profession sees no objection in this. Would the engineering profession be satisfied with a similar provision?

Happily, nowadays in Saskatchewan capital expenditure by Municipalities is under very strict control, and we do not think we shall have the same trouble in the future from engineers' and councils' extravagance that we have had in the past. Other provinces please note.

Now, Sir, in concluding an article already too long, may I say that I am proud my father was an English civil engineer, my brother is, or was, president of a society of civil engineers in China, and that I am and all my brothers are, or have been municipal men. It is not likely, therefore, that I should make an "unjustified attack" upon a profession of which my nearest and dearest relatives are members, without I felt that in spite of your assertion to the contrary, an evil existed of which my municipal experience, not merely in my own province, seemed to fit me to draw attention. It is only natural that you, Sir, as the monthpiece of the engineering profession should, to some extent, resent my article, but if you are typical of your profession, you are a sportsman, and will bear no ill will.

Yours, etc.,

O. J. GODFREY.

"FINANCIAL SUGGESTIONS TO PROVINCE OF QUEBEC MUNICIPALITIES."

This publication by Messrs. A. E. Ames & Company, may profitably be read by every Municipal and School official in the Province of Quebec. It aims to encourage Municipal Finance along the most economical lines. Common errors are frankly discussed, and remedies suggested.

Model forms of by-laws, resolutions, bonds, etc., are reproduced, which will prove a boon to small Municipalities that are infrequent borrowers.

The difference between Sinking Fund and Installment Bond issues is clearly demonstrated, and this much debated question receives careful consideration.

The Administration of a Sinking Fund is another interesting subject. Many Province of Quebec Municipalities have paid too little attention to this in the past.

This booklet was prepared by J. B. How, manager of the Montreal office of A. E. Ames & Co., and is printed in both French and English.

Complimentary copies may be procured from the publishers.

READJUSTMENT AFTER THE WAR.

"With the advent of peace will come relief to our Empire, but to financial and trade conditions peace will bring a necessity for sudden readjustment, that in Canada, as elsewhere, must tax every resource to the utmost. I am satisfied that our banks stand prepared to meet these new conditions with the adaptability and strength that have made them the bulwark of the Canadian financial situation.—Sir Frederick Williams-Taylor.

WAR ORDERS.

"There will no doubt be a period of readjustment after the war, and many opinions have been advanced as to what effect this period of readjustment will have upon the affairs of our country. Fears have been expressed that the sudden cessation of war orders may have a serious effect upon financial and trade conditions that have been borne in mind that those industries that have been fortunate enough to secure orders for the manufacture of munitions and equipment have, for the most part, been enabled thereby to greatly strengthen their financial position and to increase their capacity and efficiency for handling new business. These concerns should be in a position, at the close of the war, to take advantage of the opportunities that will inevitably occur to participate in the trade that will doubtless spring up in connection with the period of reconstruction which is expected to follow.—Sir H. H. McMillan.

DEVELOPMENT OF CANADA'S STEEL INDUSTRY.

"General Canadian industrial development has built up an increasing market for iron and steel. It has called for the building of railways which has always resulted in an increase in the Canadian iron and steel industry. It has resulted in the discovery of ores of considerable importance and it has found the labor supply and the capital necessary for large industrial undertakings. These minor phases of Canadian development are themselves interrelated. The whole process of Canadian economic organization goes far to explain the recent development of the iron and steel industry. Meanwhile the fact that the industry is so intimately connected with every phase of Canadian economic life suggests the condition of success, and demands that a wise commercial policy in respect to iron and steel shall not retard any phase of that Canadian future which seems so promising."—Dr. W. J. A. Donald.

RURAL CREDITS.

The Dominion Government and the various Provincial Governments are now considering the matter of rural credits. In this connection, it might be well to point out that the loan companies in Canada have at the present time more money than they can put out. It is, therefore, apparent that the trouble with rural loans at this time is not caused by lack of money; as a matter of fact, if the loan companies had a hundred million dollars at the present time, they probably would not put it out for the reason that they could not feel safe. Land values have been depreciated to a point where the lenders do not feel safe in loaning a reasonable amount per acre and find it necessary to charge a high rate of interest for what they do loan. In the Dominion and Provincial Governments desire to better the situation, it will be necessary to establish credits by establishing land values, and the only way to do this is to create a demand for this land by doing away with all forms of penalty taxes and encouraging the inflow of people and capital. Capital, like water, seeks its own level—establish credits and capital will flow in; destroy credit and capital recedes. If the Dominion and the Provinces intend to help the farmers, they must establish credits; if they would have the farmer get a reasonable loan at a reasonable rate of interest, they must make his secure good. If the Dominion and Provinces are going to loan money or guarantee mortgages, can they allow a surtax, hail insurance tax, gopher tax, weed tax, wild land tax, unearned increment tax, hospital or charities aid tax, etc., to take precedence over the first mortgage security given for these loans? Will such taxes as these tend to bring in people and capital and establish credits?

—J. E. Martin.

EDWIN HANSON

WILLIAM HANSON

THE OLD AND RELIABLE HOUSE
OF**HANSON BROS.,****BOND DEALERS****MONTREAL**

Are prepared to consider the purchase of entire issues of bonds made by municipalities large or small

*Correspondence Solicited***HANSON BROS.,**

164 ST. JAMES STREET,

MONTREAL

Established 1883

Municipal Debentures**Bought and Sold**

With offices in Canada, Great Britain and the United States, we are especially equipped to give municipalities expert advice in regard to the purchase and sale of municipal debentures in the principal markets of the world.

HARRIS, FORBES & CO

INCORPORATED

21 St. John St

Montreal

WE are prepared to purchase
entire issues of

MUNICIPAL BONDS

and invite enquiries from
Municipal Authorities as
to market conditions
when new financing is
contemplated.

ROYAL SECURITIES CORPORATION Limited

164 St. James St., MONTREAL

13 King St. East, TORONTO

Correspondence Invited

We are always open to
purchase entire issues of
Municipalities whose af-
fairs are kept in sound
condition.

R. A. DALY & CO.

Bank of Nova Scotia Building,
TORONTO

BANK OF MONTREAL.

The Bank of Montreal statement for the six months to April 30th, 1917, provides interesting reading in Canadian banking and financial circles. Coming, as it does, for the six months' period, it is the first report yet available which will permit of an opinion being formed, as to just how the Canadian banks are coming through the year 1917. On this account, there will be special interest in finding that the Bank of Montreal is to-day in a stronger position than it ever has been. This is especially noteworthy at the present time, as ever since the outbreak of the European war the Bank has centered almost entire attention on keeping itself in such a position as would enable it to deal with any contingency that might possibly arise as a result of the unsettlement caused by the developments in Europe.

While the showing made will be greatly appreciated at home, the record established will be of even greater assistance to Canada in outside banking fields, especially those in which Canadian financing may have to be carried out during the next few years. From time to time it has been remarked that Canada has come through the uncertain period of the war very nicely, but it is doubtful whether at the outbreak of hostilities anybody could have guessed that after three years the leading financial institutions of the country would be in such strong shape as is now reported by the Bank of Montreal.

The outstanding features of the report, as compared with the end of the last fiscal year, includes an increase of over \$21,000,000 in assets, bringing the total assets up to \$386,806,887 liquid assets amounting to as much as \$270,004,422, equal to 77.16 per cent. of liabilities to the public and cash on hand equal to 15.01 per cent. That the Canadian people are continuing to add steadily to their savings is shown by a gain in deposits during the six months of over \$22,000,000, this being at the rate of over \$3,500,000 a month. What makes this gain especially noteworthy is that during the same period there have been very large withdrawals on the part of depositors who were taking a share of the last Canadian war loan.

A closer examination of this statement indicates that evidently in its position as bankers for the Government, the Bank of Montreal has been largely identified with government war loans and special business and, at the same time, has handled a very considerable amount of the munition business of the country. This condition is shown by an increase of over \$10,000,000 in Dominion notes, a gain of approximately \$7,000,000 in British securities and the maintenance of the circulation of the Bank at over \$21,000,000, which is close to record levels.

Ever since the outbreak of the European war the Bank of Montreal has strongly advocated a policy of caution and has set an example by keeping its powder dry, with a view of being prepared for all contingencies. With the unprecedented financial conditions prevailing throughout the world, it has been impossible to forecast just what conditions might prevail from time to time, and with the war under way for almost three years, it must be admitted that this condition prevails to an even greater extent to-day. Of course, with the position which the Bank occupies, such a policy is of just as great benefit to the Dominion as it is to the Bank itself. On this account there must, necessarily, be a certain amount of satisfaction that Canada is pulling through the war period in such a satisfactory manner.

It has been felt that Canada's record overseas and the enormous wheat crops the country has delivered to the Allies would mean considerable immigration to this country after the war. At the same time, the strength shown by the Bank of Montreal will lend confidence in the investment of capital in the Dominion and will indicate just how well the country has been able to look after its own.

Continued Growth in Deposits.

One of the most satisfactory features of the entire report is the evidence of the thrift that is being continued by the Canadian people, as represented by the large increase in deposits bearing interest. To-day's statement will be examined carefully from this standpoint, as it is the first report issued since the recent Canadian loan was brought out, and it was known that a very large amount of money had been withdrawn from the leading Canadian Banks by subscribers desirous of co-operating by subscribing to these loans. Notwithstanding the extensive withdrawals, the deposits bearing interest now stand at \$232,731,994, up from \$210,439,031 at the end of the fiscal year, while deposits not bearing interest amount to \$91,412,284, up from \$88,767,018.

OREGON STATE HIGHWAY BOND ELECTION.

Telegraph advice of election June 5th states that this bond issue of \$6,000,000, although strenuously opposed by non-progressive element, has carried by a majority of over 10,000.

The bond issue was passed by the Oregon Legislature during the past winter, subject to ratification by vote of the people of the entire State.

No part of the money is to be expended in cities and together with the Federal Aid Funds is to be expended entirely on country road work.

COMBINATION WILL WIN.

"When the war is over and peace comes and the world of business sets itself to work, competition will be on a basis different from ever before. Tom and John and Harry with small capitals and little businesses will have no chance in the world to go into Russia and do big business. It must be done on a different plane. Combination must come in; co-operation must come in; mobilization of forces must come in. Suspicion, small business, and petty jealousies must be swept out and men must be willing to give of the best that is in them to their neighbor in the same trade and in other trades, in order that you may get at the best national results. Is there any doubt in the world about this? I do not think there is. What are we doing? What are we going to do? For Canada is a country of brain and nerve and business ability, of resource and adaptability. It is going to secure its place in the world in the future as it has in the past. It is going to play its part, but we have got to do something that we have not yet done if we are to give ourselves a chance to play the part.—Exchange.

IMMIGRATION WANTED.

"Our foreign trade last year, exceeded \$1,800,000,000, being nearly double the amount for the previous year, and nearly two and a half times as great as in 1914. These abnormal figures are due to enormous munition orders and high prices for commodities. All our energies should be directed to counter-balancing the loss of these orders on the return of peace as far as possible by supplementary exports. In addition to revealing to us our economic power, the war has created a great opportunity in the field of foreign trade. The primary essentials to success in this direction are immigration, which should be stimulated to a sufficient extent to provide for a large development of our natural resources, and encouragement by the Government in some form, to industrial interests, without which, as a young manufacturing country, it would be difficult to take full advantage of the coming opportunity to enter competitive markets."—E. L. Pease, Royal Bank.

THE EUGENE PHILLIPS ELECTRICAL WORKS.

The many friends of Mr. Lawford Grant, C.E., will be glad to learn of his appointment to the position of managing director of the Eugene F. Phillips Electrical Works, Limited, Montreal. Mr. Grant has earned his promotion by hard work and ability. For a number of years he was assistant to his predecessor, Mr. George H. Olney, who resigned because of ill health, which he has been suffering for some time during which period Mr. Grant managed the huge business. As an electrical engineer Mr. Grant is ranked as one of the best on this continent and his experience and knowledge have been given to many municipal councils who have sought his advice.

Mr. R. H. Balfour, chief engineer of the Electrical Service Commission, and late assistant General Superintendent of Montreal Light, Heat and Power Co. has been appointed sales manager of the Eugene F. Phillips Electrical Works, Limited, of Montreal. Mr. Balfour commences his duties on June 15.

"Of all forms of productive capacity there is none more vital, indispensable and steady than the application of human industry to the cultivation of the soil. And if there is one point at which orders seems beginning to emerge from the present confusion of our political and social aims it is precisely with regard to this fundamental necessity of making a better use of the greatest of all natural resources."—Viscount Milner.

MUNICIPAL DEBENTURES BOUGHT

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

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

The Canada Bond Corporation

Limited

59 Yonge Street, Toronto

—Buys—

Municipal Debentures

And Acts as Financial Agents for
Municipalities

CONSULT THEM

WM. C. BRENT.

HAROLD BRENT.

BRENT NOXON & CO.

DOMINION BANK BUILDING,
TORONTO

DEALERS IN

MUNICIPAL DEBENTURES

Highest Market Prices Paid

Correspondence Solicited

CULTIVATING HOLDINGS.

In order to encourage the settlement and cultivation of vacant lands in the Western Provinces, the Canadian Pacific Railway Company, through its Colonization and Development Department, of which Mr. J. S. Dennis is the head, has undertaken an active campaign to try and induce absentee owners to cultivate their holdings.

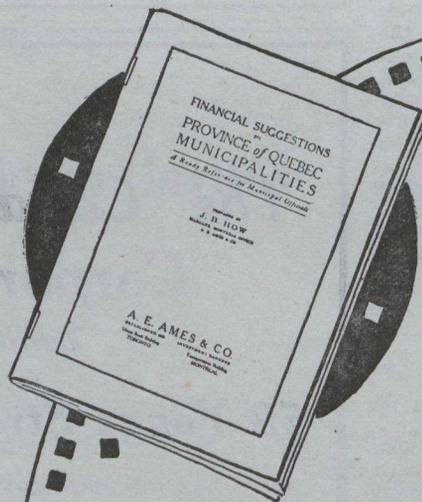
A circular has been issued to some 8,000 absentee owners, pointing out the profits which can be made by cultivating their lands, and showing how many farmers sold their last year's crop for more than the original cost of their farms.

The Company offers the advice and assistance of its Colonization and Development Department, free of charge, in supplying reliable information as to how to go about getting the land under cultivation and will send, on request, the fullest details as to routes of travel, customs regulations, passenger and freight rates and similar data.

In undertaking this campaign the Company is following its usual broad policy of Dominion-wide development, realizing that every new settler means greater production to meet the food shortage which at present threatens the world, and which Canada, with its extensive and fertile unploughed areas, can provide.

EXPORTS.

If Canada is to become the large manufacturing country which her raw material warrants and that her citizens desire she must find markets for the products. The home market is limited to a population of eight millions, a comparatively small one for her basic products, but the foreign markets are only limited by Canada's capacity to compete with other exporting countries. In no branch of commerce is more intelligence required than in the foreign trade of a country, particularly when trying to secure new markets.—F. W.



The Elements of Municipal Finance

—clearly outlined in this booklet—
a ready reference for Municipal
Officials, School Commissioners
and other interested parties.

It aims to promote a more
uniform and more satisfactory
system of sound Municipal
Finance.

Send for a complimentary
copy. French and English editions.

A. E. AMES & CO.

Transportation Building

Investment
Bankers
TORONTO

MONTREAL

Established
1889

NEW YORK

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
Toronto

New York
Boston

MURRAY, MATHER & CO.

BANK OF MONTREAL

Established 100 Years (1817-1917)

CAPITAL (PAID UP)	- - -	\$16,000,000
REST	- - -	\$16,000,000
UNDIVIDED PROFITS		\$1,557,034
TOTAL ASSETS	- - -	\$386,806,887

BOARD OF DIRECTORS

Sir Vincent Meredith, Bart., President.
C. B. Gordon, Esq., Vice-President.

R. B. Angus, Esq.	H. R. Drummond, Esq.
A. Baumgarten, Esq.	Maj. Herbert Molson, M.C.
Wm. McMaster, Esq.	C. R. Hosmer, Esq.
Lord Shaughnessy, K.C.V.O.	D. Forbes Angus, Esq.
	Harold Kennedy, Esq.

Head Office : MONTREAL

General Manager -- Sir Frederick Williams-Taylor,
Assistant General Manager -- A. D. Braithwaite.

BRANCHES and AGENCIES { Throughout Canada and Newfoundland;
Also at London, England;
And New York, Chicago and Spokane, in the United States.

A GENERAL BANKING BUSINESS TRANSACTED

Any investor or manufacturer who wants the

FACTS

about any CANADIAN CITY or TOWN with the view of investing or establishing an industrial enterprise, should secure a copy of

Canadian Preparedness

Bureau of Information

CANADIAN MUNICIPAL JOURNAL

221 Coristine Bldg., Montreal, P.Q.

Harris, Forbes and Company

INCORPORATED

announce the removal of their office

to the

Lewis Building
21 St. John Street

Montreal, June 1917

THE ROYAL BANK OF CANADA

Capital Authorized..... \$ 25,000,000
 Capital Paid Up..... 12,911,700
 Reserve and Undivided Profits..... 14,300,000
 Total Assets..... 270,000,000

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

Sir Herbert S. HOLT, Pres. E. L. PEASE Vice-Pres.
 E. F. B. JOHNSTON, K.C., 2nd Vice-Pres.
 Jas. Redmond C. S. Wilcox
 G. R. Crowe A. E. Dymont
 D. K. Elliott C. E. Neill
 Hon. W. H. Thorne Sir M. B. Davis
 Hugh Paton G. H. Duggan
 Wm. Robertson John T. Ross
 A. J. Brown, K.C. R. MacD. Paterson
 W. J. Sheppard G. G. Stuart, K.C.

OFFICERS

E. L. Pease, Managing Director, C. E. Neill, General Manager,
 F. J. Sherman, Asst. Gen.-Manager, 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, Dominican Republic, Costa Rica, and Venezuela; Antigua, St. John's; Bahamas, Nassau; Barbados, Bridgetown; Dominica, Roseau; Grenada, St. George's; 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, England, OFFICE—Princes St., E. C.
 NEW YORK AGENCY—Cor. William and Cedar Sts.
 Savings Department at all Branches.

The Canadian Bank of Commerce

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

HEAD OFFICE—TORONTO.

Sir Edmund Walker, C.V.O., LL.D., D.C.L., President.
 John Aird, General Manager.
 H. V. F. Jones, Assistant General Manager.

Branches of the Bank in every Province of Canada and at the following points outside Canada :

UNITED STATES,
 NEW YORK—16 Exchange Place,
 Francis, Kemp & Stephenson, Agents,
 Portland, Ore.; San Francisco, Cal.; Seattle, Wash.
 NEWFOUNDLAND, St. John's.
 GREAT BRITAIN, London.
 MEXICO, Mexico City.
 Agents and Correspondents Throughout the World.

ESTABLISHED - 1875
IMPERIAL BANK OF CANADA

CAPITAL PAID UP - - - - \$7,000,000
 RESERVE FUND - - - - - \$7,000,000

PELEG HOWLAND, President
 E. HAY, General Manager.

Head Office - TORONTO

A general banking business transacted. Domestic and Foreign Exchange Bought and Sold. Collections made throughout Canada and in Foreign Countries.

128 Branches in Dominion of Canada

The Merchants Bank OF CANADA

HEAD OFFICE - - - - MONTREAL

Paid up Capital - - - - - \$ 7,000,000
 Reserve Funds - - - - - 7,421,292
 Total Deposits - - - - - 92,102,072
 Total Assets - - - - - 121,130,558

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
 E. F. HEBDEN, Managing Director
 D. C. MACAROW, 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.

233 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