

PAGES

MISSING

Fairbanks-cales

Aveling & Porter Road Roller

Kerosene Road Rollers

Concrete Mixers

Oil Tractors

Steam Tractors

Portable Engines

"Torpedo" Scarifiers

"Best Roads"

Hoisting Engines

Require
Best Machinery

Steel Rock Crushers

Mounted Bins

Revolving Screens

Road Plows

Steel Drag Scrapers

Wheel Scrapers

Road Machines

Road Graders

Road Levelers

Elevating Graders

Dump Wagons

Rapid Loaders

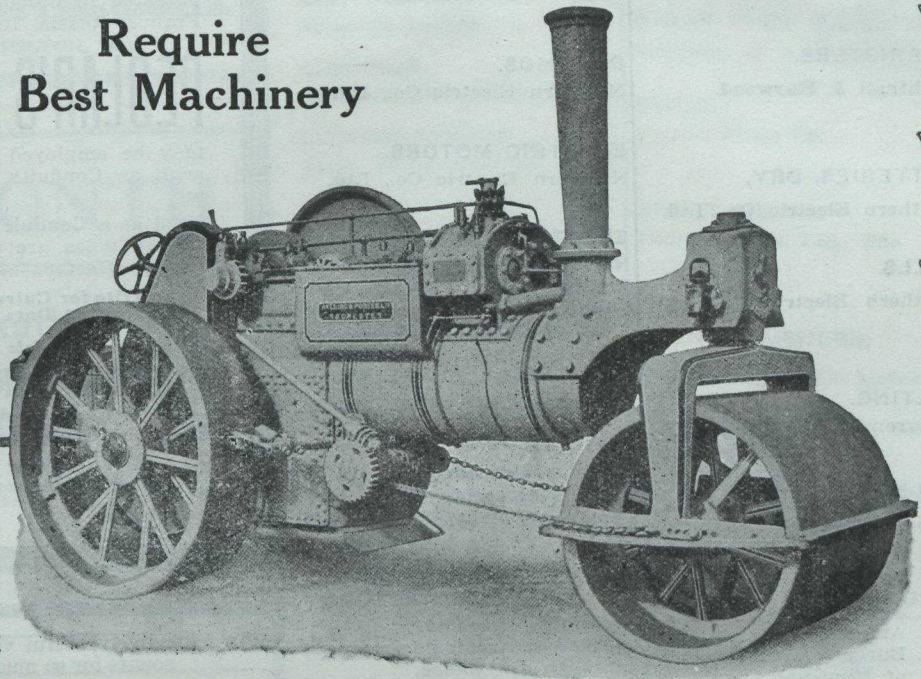
Street Sweepers

Street Sprinklers

Barrows, Tools

Milburn Lights

Contractors' Supplies



Not necessarily the most expensive but the most economical. The Engineer or Contractor is vitally interested in any equipment which will help him reduce his costs of construction.

Fairbanks-Morse Machinery

is ruggedly built to give the most economical service.

"The Canadian Fairbanks-Morse nameplate on any article is a guarantee of absolute reliability under the most stringent conditions of service."—COMMERCIAL AND FINANCIAL WORLD.

BEFORE PURCHASING ROAD MACHINERY SEND FOR A
CATOLOGUE OF FAIRBANKS - MORSE ROAD MACHINERY

The Canadian Fairbanks-Morse Co., Limited

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

Canada's Departmental House for Mechanical Goods

BUYERS' DIRECTORY

ACCOUNTANTS.

Ross, H. J.

ARTIFICIAL STONE.

Morrison Co., T. A.

BRIDGES.

Trussed Concrete Steel Co., Limited.

BARRISTERS.

Lighthall & Harwood.

BATTERIES, DRY.

Northern Electric Co., Ltd.

BELLS.

Northern Electric Co., Ltd.

BELTING.

McLaren Belting Co., J. C.

BOILERS.

Robb Engineering Co.

BONDS, Etc.

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

BRIDGES.

Canadian Bridge Co.
 Dominion Bridge Co.

CABLES.

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

CAST IRON PIPES.

Can. Iron Corporation.

CONCRETE MIXERS.

London Concrete Machy. Co.
 Canadian Fairbanks-Morse,

CONCRETE REINFORCEMENT.

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

DUST PREVENTIVE.

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

DYNAMOS.

Northern Electric Co., Ltd.

ELECTRIC MOTORS.

Northern Electric Co., Ltd.

ELECTRIC WIRE.

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

ELECTRICAL SUPPLIES.

Northern Electric Co., Ltd.

ENGINES.

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

ENGINEERS & CONTRACTORS.

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

ENGRAVERS.

Amer. Bank Note Co.

FIRE ALARMS.

Northern Electric Co., Ltd.

FIRE BRICK MASONRY.

Ideal Incinerator Co.

FIRE DEPT. SUPPLIES.

Northern Electric Co., Ltd.

GENERATORS.

Northern Electric Co., Ltd.

PEDLAR'S PERFECT PRODUCTS

MADE IN CANADA



For Municipal Service

Pedlar's "Perfect" Culvert is used and recommended by Municipal Corporations and Rural Municipalities both at home and abroad. It is patented in Canada, Great Britain, Belgium, France, Russia, Italy and other Countries.

PEDLAR'S "Perfect" RIVETTED CULVERT

may be employed for a wide variety of uses, such as Conduits, Sewers, Ventilation Shafts, etc.

Used as a Conduit for Underground Wires, unsightly poles are done away with and public safety effected.

Write for Culvert Reference Book No. 4 giving Data and Drainage Tables

Sole Manufacturers:

THE PEDLAR PEOPLE LIMITED

(ESTABLISHED 1861)

Executive Office and Factories: OSHAWA, Ont.

Address nearest Branch—

Montreal, Toronto. Ottawa, London, Winnipeg 51.0

An exceedingly useful volume in these days when time counts for so much.—*Montreal Daily Star.*

IMPERIAL YEAR BOOK

DEALS IN A UNIQUE AND COMPREHENSIVE WAY WITH

CANADA

No Canadian Citizen Should Be Without It.

UNFOLDS A BIRD'S EYE VIEW OF THE WHOLE

EMPIRE

Every Student of Imperial Affairs should possess it.
 SECOND EDITION NOW BEING PREPARED

\$1.50 in cloth. \$1.00 in paper. Postage Free.

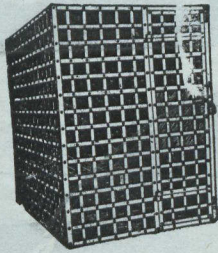
Remittances payable to "THE IMPERIAL YEAR BOOK." When paying by cheque from outside points, please add 15c. to cover bank charges.

The Imperial Year Book for Canada

221 CORISTINE BUILDING, MONTREAL

BUYERS' DIRECTORY—Continued

Jail Cells



We are Headquarters for all Classes of
PRISON WORK
 Our Village and Town cells are all equipped
 with our Patented Automatic Locking Device
 No Padlock to bother with.

Inquiries Solicited

Canada Wire & Iron Goods Co.
 HAMILTON, Ont.

NEXT MONTH

Municipal Taxation in
 Relation to Speculative
 Land Values

By Dr. ADAM SHORTT

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

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

A VENDRE
"TAMCO" Pierre Concassée,
 de toutes dimensions. Gravier
 pour couvertures. Pierre arti-
 ficiale "Roman." Brique pressée
 "Milton." Concasseur de pierre.
 Pompes à Incendies, etc.
T. A. MORRISON & CIE,
 204 Rue St-Jacques,
 Tl. Main 4532. Montréal.

H. J. ROSS ACCOUNTANT TRUSTEE

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

Municipal Audits a Specialty
 Municipal Bonds Negotiated
 Estates Managed

180 St. James St., Montreal

INCINERATORS.
 Ideal Incinerator Co.

JAIL CELLS.
 Can. Wire & Iron Goods Co.
 Page Wire & Fence Co.

LANDSCAPE ARCHITECTS
 Mawson & Sons, Thos.
 Todd, Frederic G.

LEATHER BELTING.
 McLaren Belting Co., J. C.

LIGHTING.
 Northern Electric Co., Ltd.

LITHOGRAPHERS.
 Amer. Bank Note Co.

MOTORS.
 Northern Electric Co., Ltd.

STREET NUMBERS.
 Davidson Mfg. Co., Thos.
 Warminton, J. N.

ORNAMENTAL IRON.
 Can. Wire & Iron Goods Co.

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

POLES.
 Northern Electric Co., Ltd.

POLICE SIGNAL SYSTEMS
 Northern Electric Co., Ltd.

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

PUBLICATIONS.
 Imperial Year Book.

RAILINGS.
 Can. Wire & Iron Goods Co.
 Page Wire & Fence Co.

ROAD MACHINERY.
 Morrison, T. A. & Co.
 Canadian Fairbanks Morse Co.

ROAD PRESERVATIVE.
 Asphalt and Supply Co.
 Carritte-Paterson Mfg. Co.
 Patterson Mfg. Co.
 Trussed Concrete Steel Co.,
 Limited.
 American Oil Company,

ROAD ROLLERS.
 Morrison, T. A. & Co.
 Wettlaufer Bros.

SEWER PIPE.
 Dominion Sewer Pipe Co.
 Morrison, T. A. & Co.

SEWER PIPE MOULDS.
 London Concrete Machy. Co.

STAIRCASES.
 Can. Wire & Iron Goods Co.

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

STEAM FIRE ENGINES.
 Morrison, T. A. & Co.

STONE.
 Roman Stone Co.

SHEET METAL.
 Pedler People, Ltd., The

STONE CRUSHERS,
 Canadian Fairbanks Morse Co.

STREET NAMES.
 Davidson Mfg. Co., Thos.
 Warmington, J. N.

STRUCTURAL STEEL.
 Canadian Bridge Co.
 Dominion Bridge Co.
 Belliss and Morcom.
 Pedler People, Ltd., The

SUPPLIES & MACHINERY.
 Morrison, T. A. & Co.

TELEPHONES.
 Northern Electric Co., Ltd.

TURBINES.
 Belliss & Morcom.
 Robb Engineering Co.

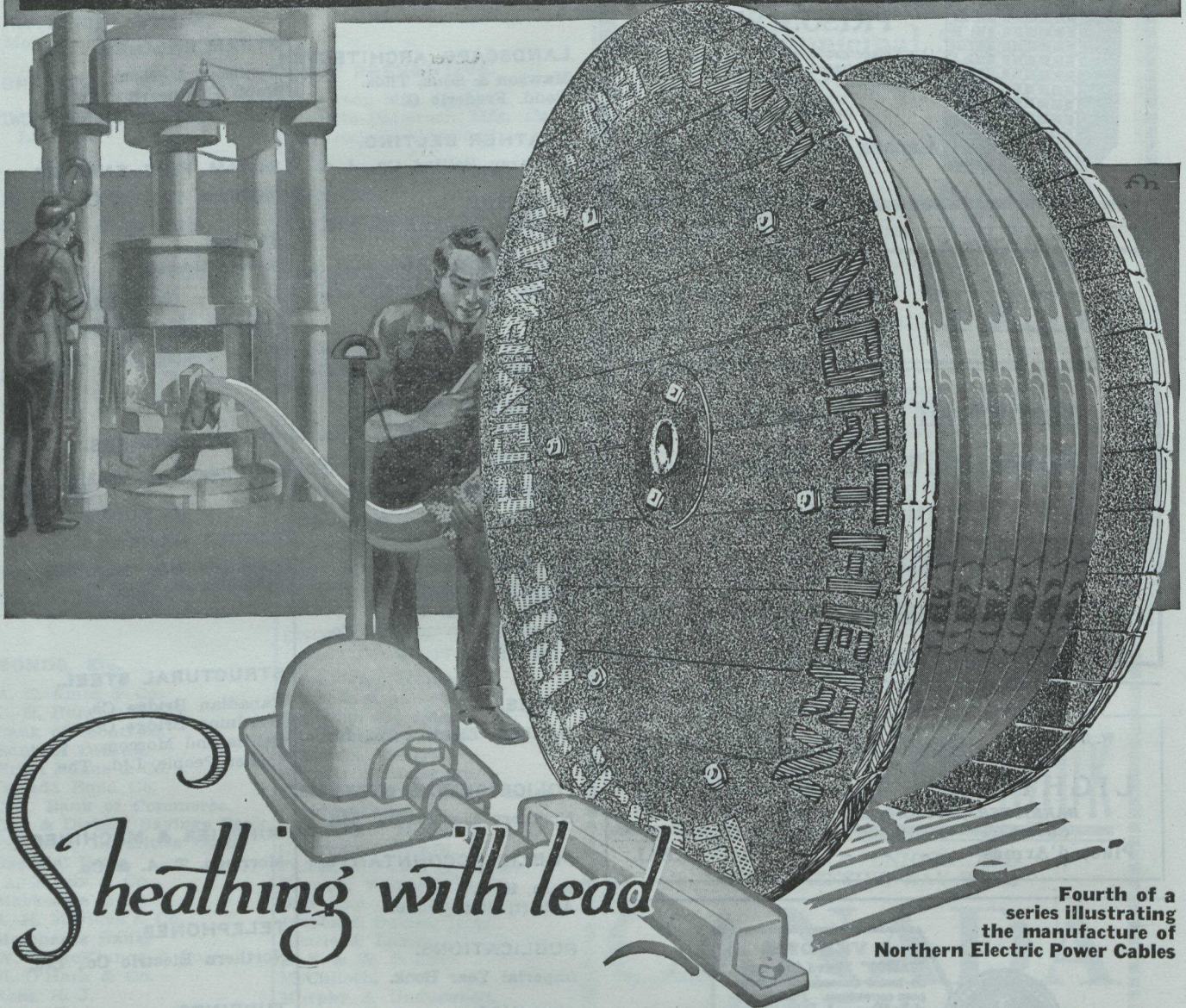
WATER WORKS SUPPLIES
 Dom. Wood Pipe Co.

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

WINDOW GUARDS.
 Dom. Wood Pipe Co.

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

Northern Electric



Fourth of a series illustrating the manufacture of Northern Electric Power Cables

Sheathing with lead

The Impregnated paper-insulated cable passes from a warm room through a cartridge shaped core and circular die enclosed in the lead press to the cable reel. Great pressure from a hydraulic ram forms the sheath about the cable by forcing pure lead in a semi-molten condition between the core and the die, which are

arranged with the proper clearance to give the thickness of lead required. This operation requires very skilful attention. Our long experience in the manufacture of all classes of lead-covered cables ensures for our product, cable sheaths of the highest quality.

MONTREAL
HALIFAX
TORONTO
WINNIPEG
REGINA

Northern Electric Company
LIMITED

EDMONTON
VANCOUVER
VICTORIA
CALGARY

Power Cables

ALPHABETICAL INDEX OF ADVERTISERS

Asphalt and Supply Co.	COVER	Fairchild, Jones & Taylor.....	223	Northern Electric Company.....	192
American Bank Note Co.....	COVER 4	Francis, Walter J. & Company.....	223	O'Hara & Co., H.....	217
Ames, A. E. & Co.....	213	Galt Engineering Company, The		Pedlar People, Ltd., The	190
Bongard Ryerson & Co.....	218	John.....	222	Paterson Manufacturing Company.	194
Bank of Montreal.....	220	Ideal Incinerators	COVER 2	Limited.....	194
Bank of Ottawa.....	219	Imperial Bank of Canada.....	219	Phillips Electrical Works, Eug. F....	224
Bayfield & Archibald.....	222	Imperial Year Book.....	190	Page Wire Fence Company, Limited	COVER PAGE 3
Brandies, Charles.....	222	Jacob & Davis.....	223	Robb Engineering Company.....	COVER PAGE 4
Burnett & McGugan.....	222	Jarvis and Co. A.....	215	Ross, H. J.....	191
Belliss & Morcom.....	COVER PAGE 2	Kahn Concrete Steel Company		Ross & Company, R. A.....	223
Burgess, C. H. & Co.....	216	COVER PAGE 2	Royal Bank of Canada.....	220
Brent Noxen & Co.....	216	Lighthall & Harwood.....	191	Standard Underground Cable	
Canadian Fairbanks.....	199	Laurie & Lamb.....	COVER PAGE 2	Company of Canada.....	COVER 2
Canadian Bank of Commerce.....	220	Lea, R. S. & W. S.....	223	Stark & Company, N. B.....	219
Canadian Bridge Co., Limited C'r	PAGE 3	Lesperance, A. P.....	218	Tarvia.....	194
Canadian Inspection and Testing		London Concrete Machinery		Trussed Steel Concrete Company...	COVER PAGE 2
Laboratory.....	223	Company.....	COVER PAGE 4	Thomson, Chase.....	223
Carritte-Paterson Manufacturing		Mawson & Sons, Thos. H.....	222	Todd, Fred. R.....	223
Company.....	194	McLaren Belting Company.....	COVER PAGE 4	Warminton, J. N.....	COVER PAGE 3
City & District Savings Bank.....	218	McCulloch, A. L.....	222	Wood, Gundy & Company.....	213
Clement, E. C.....	222	Merchants Bank of Canada.....	220		
Canada Bond Corporation	217	Morrison & Company, T A.....	191		
Canada Wire and Iron Goods Co. . .	191	Marten & Co., A. H.....	218		
Davidson Manufacturing Company,		McKinnon, W. L. & Co.....	214		
Limited.....	COVER PAGE 3	Mackenzie & Co., W. A.....	217		
Dominion Bridge Company		Murray, Aird & Lowes	222		
Limited.....	COVER PAGE 4	Matthews & Co., R. C.....	214		
Dominion Securities Corporation....	215				
Dominion Sewer Pipe Company					
.....	COVER PAGE 3				

Pavement Laid in 1914 in Thirty Cities and Towns in Canada

City & Prov.	Sheet Asphalt.	Apshalt Block.	Granite or Sand-stone Block.	Brick or clay Block.	Creo-soted wood Block.	Concrete Con-crete.	Concrete with Bitu-lithic Top.	Bit. Con-crete.	Bit. Mac-adam.	Water-bound Mac-adam.	Gravel.
Berlin, Ont.						0.27m		10,435			1m
Brantford, Ont.								769			
Chatham								42,907			
Edmonton, Alta.								3,780			
Galt, Ont.						937c				12,475m	
Kingston, Ont.	7,999c		5,255c					22,896			
Lachine, Que.						4,755m					6,471m
London, Ont.	41,106c			7,930c				95,203			
Montreal, Que.								98,419			
Nanaimo, B.C.								4,958			
New Glasgow, N.S.								22,051			
N. Westminster, B. C.								12,350			
Point Grey, B.C.											
Quebec, Que.		4,586n						59,376			
Regina, Sask.								18,143			
Revelstoke, B.C.								231,597			
Saanich, B.C.								10,179			
St. Boniface, Man.								12,127			
St. Catharines, Ont.								6,001			
St. Lamberts, Que.									8,448g		
St. Vital, Man.								4,900			
Saskatoon, Sask.								20,180			
Sault Ste. Marie, Ont.								29,434			
So. Vancouver, B.C.								29,406			
Sudbury, Ont.						14,400		73,890			
Toronto, Ont.						21,230c		7,369c	105,807c		16,701m
Vancouver, B.C.	1,350		2,086c	13,958c	27,268c						
Victoria, B.C.	46,613c	56,951ew						15,090			
Waterloo						67,348c	1,190ce				
Windsor		32,578c									

c—By contract. m—By municipality. e—Rock asphalt with no binder.—Quantities are in squire yards or halt. g—Warrenite. n—Scoria blocks. w—Sheet as- miles; the size will indicate which in each case.

"Made in Canada"



Good roads at low cost—

Champagneur Avenue, Outremont, P.Q.
Constructed in 1914 with "Tarvia X".

The proper kind of roads in a community means increased property values, more accessible markets, reduced transportation expenses.

The important question now is—"Can good roads be built at low cost?"

The answer is—"Yes, if Tarvia is used—and here are the facts."

For many years, outside of the heavy traffic zones in large centres, macadam roads were recognized as the most economical and satisfactory. The advent of the automobile changed this. Macadam roads, as then constructed, rapidly disintegrated under motor car traffic.

The French engineers were the first to make this discovery. They, also, were the first to find a remedy, namely, *the use of tar preparations instead of water* in building macadam roads.

Thousands of miles of macadam roadways have been treated with Tarvia and today a tarviated roadway with its firm, easy traction surface, free from dust and mud, is a blessing to hundreds of communities in various parts of the land.

A tarviated roadway is durable enough to be called permanent, because it is strong enough to withstand modern automobile traffic.

The first cost of tarviating a road is not greatly in excess of the cost of constructing plain macadam. The saving in maintenance expense, however, is usually greater than the cost of the Tarvia treatment.

In other words, a tarviated road is really less expensive than ordinary dusty, muddy, water-bound macadam.

Special Service Department

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

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

THE PATERSON MANUFACTURING COMPANY, LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER

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

THE CANADIAN MUNICIPAL JOURNAL

AND REVIEW OF CIVIC IMPROVEMENT

SUBSCRIPTION RATES

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

Published Monthly by

The Canadian Municipal Journal Co., Limited

HARRY BRAGG President
FREDERICK WRIGHT Editor
H. WISELY BRAGG Business Manager
All communications to be made to Canadian Municipal Journal
CORISTINE BUILDING, MONTREAL
Telephone Main 4362

Any article appearing in these pages may be 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 named below, yet these are not responsible for any other matter published in it than what in each article or itself is stated to be authorized by either of these bodies.

Official Organ of the Union of Canadian Municipalities

Circulates in every city, town and village

"Municipal from cover to cover"

Vol. XI

JUNE, 1915

No 6

CONTENTS.

The Unemployed Problem	196	Town Planning in Maritime Provinces	207
Baron de Hirsch Institute (D. Dainow)	201	Civic Patriotism (G. W. Stephens)	209
Creosoted Wood Block Pavements (A. F. Macallum)	202	Review of City Improvement	210
Bad Roads	203	Municipal Borrowings	212
Municipal Affairs in British Columbia	204	Repayment of Loan	213
Municipal Affairs in Alberta	205	Simple English Wanted	213
H. J. Ross (Ajax)	206	City Buys its Own Bonds	214
An Appeal from the Red Cross	207	Western Canada Finances	217

MUNICIPAL PATRIOTISM.

The City Council of Toronto have insured the lives of 10,000 of the city's soldiers for \$1,000 each, for which has been paid the huge premium of \$576,000. This splendid act of patriotism on the part of the Council will meet the approval of every citizen in the Queen city, and applauded by the whole of Canada. The list of the casualties amongst our brave boys at the seat of war has brought home to Canada the great price we have to pay for the integrity of our institutions, though let it be said that the news was also the best incentive to enlisting new recruits to the cause. Such is the spirit of the race. But while thousands of our best have crossed the seas to fight our battles, the least that can be done for the families left behind is to see that they will not want if the breadwinner is taken away, and the Toronto City Council have set such an example to our public bodies that cannot help but have an influence.

Another form of municipal patriotism was recently shown in the Kingston City Council deciding to give a high school education to the children of Kingston's soldiers killed in the war. As the city of Kingston has sent many of its citizens to the firing line, this action on the part of the council was a generous one, but not one whit too good for the self-sacrifice of life, so that those left at home might continue to enjoy that sense of security we in Canada had thought unassailable. The actions of Toronto and Kingston are but two recent illustrations of the generous sense of responsibility in this war, as understood by City and Town Councils throughout Canada, and for the benefit of future generations the Journal is collecting the records which will be published in a special number, some time after peace is declared.

CANADIAN RED CROSS SOCIETY.

On another page is published a strong appeal from the Canadian Red Cross Society for more support. This splendid society, because of the tremendous demands on its resources through the war, has had its funds reduced dangerously low, hence the appeal. It requires no words of ours to explain the noble work of the Red Cross Society amongst those fine fellows now fighting in the trenches of France. The name of the society itself is sufficient commendation to Canadians for their loyal support, and as Red Cross branches are in most of our larger cities, we would record the action of the Council of Montreal in their recent contribution of \$5,000 to the local branch as a good example which might be followed by other municipalities.

MOTHER'S DAY.

On Sunday, May 9th, Canada celebrated with all honor and reverence—Mother's Day—and many thousands of roses, both red and white, were worn that day. The beauty and strength of motherhood has had this year the greatest trial in self-sacrifice and though it has cost many silent tears and broken hearts, the mothers have stood the test of sending their boys, aye and their girls too, to the war unflinchingly. Thousands and thousands of these mothers in every part of the Empire and France, have seen the boys they have borne, and raised to manhood, for the last time, and while the nation will mourn the heroes, for a day, the mother-hearts will be with them until they themselves are taken away. On Mother's Day every man in Canada fortunate enough to have "mother," however far away she might be, mentally offered up a special prayer for her preservation and happiness. Our manhood demanded it, and mutual love guided it. A nation with Mother's Day as one of its great days need have no fear for itself. The Mother's influence can only reach upward, and those of us lucky enough to have come within its sphere are indeed to be envied.

The Municipalities and the Unemployed

During the last week in May the Mayors of the cities between the Great Lakes and the Rockies, because of the acute position of the unemployed in their respective communities travelled down to Ottawa to lay before the Federal government the seriousness of the problem. At the capital they met representatives from some of the Eastern cities who had come forward at the request of the Union of Canadian Municipalities so that the delegation to the Government was national in character and determined in its aspect. In the memorial (set forth in another page) eight clauses are included, each one comprehensive enough on the particular direction it touches as to make it impossible to be misunderstood, though the delegation being primarily representative of the West where the problem of the unemployed is largely agricultural the memorial urges that the Government so shape its policy as to bring, in the words of the Mayor of Winnipeg "the idle man and the idle land together."

That the delegation was well received was only to be expected considering the importance of the personnel and the object of the mission, but nothing definite was attained, though it is probable a commission will be appointed. This is the least the Federal Government can do, for the unemployed problem, while it is acute even now in the West will be more so all over Canada this coming winter. Up to now the municipalities have borne the brunt of the burden, which they have taken up splendidly—much better than was reasonably to be expected of them—but before the winter sets in they will have got to the end of their resources, and then will be forced the question, what next? Canada cannot afford to wait for such an avalanche of unemployed to smother her social structure. She must act now if she would keep her self-respect for there is no doubt but that the unemployed problem has been brought about largely by blue funk—by the puerile attitude of the industrial corporations of Canada since the war commenced; many of them using the the war as a pretext to dismiss the major portion of their employees, and reducing the wages of the balance to well nigh impossible living figures. And these men, with their families have become charges on the city. In some of the western cities, for whom the Federal Government is responsible, the alien enemies have affected the situation. The Government grant of 50 cents per week to alien enemies registered only, or the 25 cents per day to those working on Governmental work, is not nearly sufficient to support a man and his family—no provision is made for the family—and the consequence is, an added burden—and very often a menace—to the local community.

In the West the unemployed problem is not so much industrial as agricultural. In the city of Winnipeg (and the other Western cities are similiary placed) a careful survey of the unemployed showed, in the words of the memorial, "that 70.2 per cent of the destitute citizens of foreign birth of that city were owners of land before their departure for Canada, and that 16.8 per cent were farm labourers, making a total of 87 per cent agriculturists." Here again the responsibility rests largely on the Government for though these foreigners were brought

out for agricultural purposes the authorities did not see to it that they were placed on the land, and they too, have, become charges on the city. Economically speaking Canada, instead of gaining by bringing in men whose training should make them invaluable as producers, has lost heavily because of the stupidity of a system which takes no account of the destination of those for securing whom a premium is paid. The memorial urges that these men of the farm be given an opportunity to get back to their natural environment. That the agriculturists now walking the cities be allotted 40 acres each, and that the Federal Government, either direct or indirectly, loan sufficient money to give them a fair start—to buy stock and implements and sufficient food and clothing to last until the produce can be utilized—the advances to be against the land and to be repayable in instalments covering a period of years.

In the minds of some the objections to this solution of the unemployed problem in the West are that it might interfere with the present homestead regulations and that it would inaugurate a species of paternalism not consistent with our spirit of democracy. These objections might be dismissed at once in the fact that the homestead regulations are just as much a species of paternalism as the granting of 40 acres, with the advantage in favor of the latter by reason of the better assurance that the whole of the allotted area will be cultivated. The advances of certain sums of money to ensure each settler becoming self-sustaining, could be made along the lines adopted by democracies like New Zealand, and Australia, where large sums of money have been loaned direct to agriculturalists by the government with good results. Or they might be made through municipalities, or banks, or approved societies giving security, as successfully done in other systems.

Australia has advanced in two years over \$82,000,000 in loans to its farmers, and New Zealand since 1895 loaned \$80,000,000 at 5 per cent. Argentina, by its system of loaning direct to the settlers secured in a little over 6 years 1,200,000 agriculturalists and \$750,000,000 in loans, principally from Great Britain—sufficient evidence that the British investor has great faith in land and its products. The government claims that the British Government has closed down on all loans, even to the Dominion, other than those necessary to prosecute the war, but when it is brought home to the Imperial authorities that by a loan to be used for the utilization of agriculturalists, now idle, on land partially cultivated, but idle too, a better assurance is given for the repayment of the vast war loans to the Dominion, because of the building up of Canada's basic wealth—agriculture—that loan would be secured. Such a loan for such a purpose would have the unqualified approbation of Sir George Paish the eminent economist, who is in the confidence of the British Government.

To put the case of the municipalities in a nutshell: 80 per cent of Canada's population is now centred in the cities; that owing to influences outside the control of the municipal authorities, such as the stoppage of railway construction and the war, a large percentage of the unemployed have been left on their hands. For the last eight months they have been able, by remarkable efforts, to take care of the burden themselves, but this is no longer possible under the present condition of affairs, and in

Union of Canadian Municipalities

A meeting of the Executive and other members of the Union of Canadian Municipalities to consider the unemployment problem was held in the Chateau Laurier, Ottawa, May 25th, 26th, and 27th, 1915. Present: Mayor T. L. Church, Toronto, president; W. L. Lighthall, K.C., secretary; Mayor Porter, Controller Nelson, Ottawa; Mayor Walters, Hamilton; Mayor Dr. H. A. Stevenson, London; Ald. M. Learner, London; Controller F. S. Spence, Toronto; Ald. Leslie Boyd, K.C., Montreal; Mayor Mahoney, Guelph; Mayor Kemp, Woodstock, Ont.; Mayor Hett, Berlin, Ont.; Mayor Waugh, Winnipeg; Mayor Costello, Calgary; Mayor Henry, Edmonton; Mayor Balfour, Regina; Mayor Hawthorn, Medicine Hat; Mayor Harrison, Saskatoon; Mayor Hardie, Lethbridge; Mayor Pascoe, Moose Jaw; Ald. Carnochan, Prince Albert; Mayor Young, Fort William; Mayor Mooney, Port Arthur; Deputy Minister of Agriculture Bedford, Winnipeg; and Minister of Public Works Tom Johnson, Winnipeg, representing the Manitoba Government; Fair Wage Officer T. Malloy, Regina, representing the Saskatchewan government; Hon. Mr. Stewart, Minister of Public Works, Alberta.

W. D. Lighthall, K.C., secretary of the Union acted as Secretary of the meetings. G. S. Wilson, Assistant Secretary.

Tuesday, May 25.

The President, in opening the proceedings, said that all agreed that the first business of the government at the present time is to attend to the war, so that it may be brought to a successful conclusion. However, the fact that there will be unemployment after the war must be realized. There is always an industrial war on in the cities, a war that must be considered. People do not want charity, but work.

He then introduced to the meeting Mayor Waugh of Winnipeg, Third Vice-President of the Union, as having come down to Ottawa at the head of a delegation from the Western Cities to ask the Federal Government for its support to mitigate the evil of unemployment—particularly in the West. Mayor Church invited Mayor Waugh to take the chair.

The Mayor of Winnipeg, after thanking the meeting for the courtesy extended to him, outlined the industrial conditions in the West, which, he said, are no doubt similar to those in the East. He said that the basic cause of the present conditions was undoubtedly the fact that for years Canada has been building railways and cities at an alarming rate on borrowed capital.

Back to the Land.

"We have now arrived at a stage when attention must be diverted from construction to production," he declared. "The idle man has got to be put in touch with the idle land. We must point out to the government that it must give more attention to getting the people back to the land than to building of cities and constructing railways. There are too many people in the cities and not enough on the land. The problem is not for the cities alone to settle, but a national one. Municipalities cannot go on building sewers, etc., indefinitely.

all likelihood the situation next winter will be worse unless proper means are adopted to relieve it. The provincial governments, in one or two cases, have helped somewhat, though very little. The Federal Government as yet has done nothing. Each has its share in the responsibility, but since the question has got beyond the municipal and provincial governments the responsibility of the Federal authorities, under the headings of Agriculture, Immigration and general welfare, must be resorted to. It would seem that a commission would best serve the purpose. As the Union of Municipalities pointed out in the beginning, it should without delay energetically bring together the federal, provincial and municipal authorities, together with representatives of industrial corporations and labor, so that concerted action may result in solving a problem that should have been foreign to Canada.

The Union will be very glad to take any part assigned to it, and render all the aid in its power. It gave the first warning that the present situation would arrive, and will continue to do all it can to soften it.

Not All Due to War.

"Present conditions are not due to the war alone. They would probably have been worse had the war not come. The real cause is over-development in the cities and not enough development of the land. Sir George Paish was right when he said Canada had constructed three times the amount of railway mileage that the business of the country warranted. Most of the immigrants who have come to the country were born on farms, and would no doubt like to get back to the land if offered the right encouragement."

President Church said the problem was one of co-operation between the Dominion, Provincial, and Municipal Governments.

Alderman Boyd, of Montreal, spoke for the Eastern cities, explaining conditions there, and spoke strongly for a united memorial to the Government outlining a scheme of action.

Mayor Walters, of Hamilton, said there were four thousand and unemployed in Hamilton, and he agreed that the back-to-the-land policy was the best solution, but to relieve the present tension he urged that the Government should carry out all public works already provided for.

Mayor Porter told what is being done in Ottawa to encourage people to cultivate vacant lots. He said there were not so many unemployed in the Capital as in other cities in proportion to the population, owing to the large percentage of the population being employed by the government.

Mayor Stevenson, of London, introduced Alderman Lerner, of London, who knows the views of the city. Alderman Lerner suggested a plan for reducing non-employment by organizing a farm loan system to immigrants and other settlers.

A committee of twelve was appointed by the chairman to draft a memorial for the Cabinet, and ex-Mayor Cook, of Ottawa, was requested to arrange a speedy interview with the Cabinet, and kindly undertook to do so.

The meeting then adjourned to meet at 8 p.m.; the Memorial Committee to meet at 4.30 p.m.

During the discussion at the committee meeting Mayor Waugh estimated over 33,000 out of work in Winnipeg.

Memorial Committee.

Controller Spence, of Toronto, stated the city registered 18,000 men out of work, only, say, half of the real number, and not including women. Many of them of foreign origin had considerable savings when applying for aid. Many of British origin are too proud to register.

Mayor Hett, Berlin, urged a well defined scheme to present to the Government.

Mayor Walters, Hamilton, asked some measure of relief for the near future and just after the war.

Mayor Church suggested that the memorial advise the Government what it can do in immigration policy, retention of soldiers in pay, back to the land finances, etc., but not in matters properly municipal or provincial.

Fair Wage Officer Malloy, of Saskatchewan, offered statistics of foreign immigrants to the West.

Mayor Young, of Fort William, read a petition of Ruthenians, stating their people are ninety-five per cent agriculturists, and desire to go to the land.

The meeting then adjourned.

At the meeting of the Delegates as a whole at 8 p.m.—

Mayor Waugh read the statement by the Western delegates on the state of affairs re unemployment.

Mayor Walters read the draft of suggestions for the government by the Eastern delegates.

Mayor Thurber, of Longueuil suggested that the Dominion Government borrow money, and advance to municipalities for public works.

Mayor Hardie, of Lethbridge, said no Western city wants to borrow any more money, our people would refuse it.

Mayor McAnn, of Moncton, N.B., was introduced to the meeting.

Mayor Frink, of St. John, N.B., wired W. D. Lighthall to represent that city.

Mayor Martin, of Halifax, N.S., wired his sympathy and regret at inability to be present.

Mayor Hurlburt, of Preston, Ont., wired regrets at being unable to attend, that enemies of our country should not be employed by our public or private enterprises.

Mayor Rathwell, of Lachine, Que., wired regrets at inability to attend.

Alderman Boyd, having to return to Montreal, requested Mr. Lighthall to represent Montreal.

Controller Spence, of Toronto, said (1st) people have speculated themselves into poverty, (2nd) the land has fallen

UNEMPLOYED PROBLEM—Continued

into the hands of speculators at too high prices, (3rd) public money has been wasted by being spent so as to fall into the hands of contractors, stock-jobbers, and not expended to the best effect for the laborer and farmer.

Principal Tory, of the University of Alberta, said we may be dealing too much in generalities. We should make definite proposals to the Government. He proposed a land credit system, beginning with a responsible local organization, which shall see that the farmers' loan is put to a specific useful purpose.

Mayor Hatt, of Berlin, Ont., related a successful organization of farmers' loans in Waterloo County.

Hon. Mr. Stewart, Minister of Public Works, Alberta, related a similar success near Edmonton. All that is wanted is a little money.

Moved by Controller Spence, seconded by Mayor Walters, that the memorial as drafted be left in the hands of the special committee for further amendments.—Carried.

Mayor Lachance, of St. Boniface, Man., proposed an increase of the local borrowing power.

The meeting adjourned till 9.30 Wednesday morning.

Wednesday, May 26.

Mayor Waugh read the revised draft memorial. After discussion and slight amendment, emphasizing the back-to-the-land idea as the most important of the suggestions, the draft memorial was finally adopted. The delegation then waited upon the Government.

The Memorial is as follows:—

Ottawa, May 25th, 1915.

To The Right Honorable
Sir Robert L. Borden, G.C.M.G., P.C., M.P.,
Premier of Canada,
Ottawa.

Sir,—

We, the representatives of the Government of the Provinces of Ontario, Quebec, Manitoba, Saskatchewan and Alberta, and the Mayors of the Cities of Canada as per attached list desire to lay before you the facts with regard to the unprecedented unemployment of both skilled and unskilled labor in Canada.

In seeking this conference, we have been actuated by no other motive than a desire to improve the conditions of the people to their own and the national advantage.

The rural municipalities are not much troubled with this question. The burden of caring for the unemployed falls almost wholly on the cities. We contend that this is unjust and submit that the problem is now assuming national proportions, having got beyond the possibility of solution by the cities of Canada, and should be solved by co-operation of Federal, Provincial and Municipal authorities.

The cause of the present condition is obvious. During the past ten years the Dominion has passed through a period of great constructive development. The money so expended in public, private and corporate works was expended principally in wages to mechanics and laborers. The latter being largely of European nationality. These now constitute the largest part of the unemployed and they are unable to find work because there is now no railway building, and very little public or private works going on in the Dominion in comparison with previous years. The people of Canada expect their governing bodies to devise ways and means of alleviating to the utmost possible extent the present deplorable and wasteful conditions.

A very large percentage of wage-earners, including both skilled and unskilled laborers as well as men following other pursuits in life, have during the past winter and are at the present time suffering from the lack of employment, through the closing down of industrial enterprises and a cessation of building operations, which conditions are likely to become even more serious during the coming winter.

The following facts will show that while we have received a large number of immigrants from Europe, presumably with the object of settling our vast area of unused land, the end anticipated has largely failed, and the man who was a farmer in Europe and came to us to farm, has become a city dweller and a consumer.

There are in the provinces of Manitoba, Saskatchewan and Alberta and west of the Great Lakes in Ontario no less than 33,000 unemployed, and conditions in the cities of the older portions of Canada are not much better.

That 25,000 of the unemployed in the western section of the country are immigrants of the agricultural countries of Europe.

That 65 per cent of the immigrants brought into Western Canada by the Dominion Government during the last three years have not taken up land.

That the Province of Saskatchewan during the three years 1912 to 1914 inclusive, received 51,041 immigrants from the agricultural countries of Europe and during the same period only 16,310 homesteads were taken by peoples of these nationalities.

A careful survey of the unemployed in Winnipeg showed that 70.2 per cent of the destitute citizens of foreign birth of that city were owners of land before their departure for Canada, and that 16.8 per cent were farm laborers, making a total of 87 per cent agriculturalists.

Another deplorable fact is that unemployment in the West has increased alarmingly in the past three years and in the city of Winnipeg, of fifty cases investigated, the bread-winner in each case had been out of work in 1912 on an average of one and three-quarter months in that year, while in 1914 the bread-winner had been idle no less than five and three-quarter months. This condition is demoralizing, and men willing to work should not be compelled to spend half of their time looking for something to do. We have reason to believe that conditions are similar throughout Canada. Further, that being farmers, these unemployed persons cannot hope to secure suitable work in the cities and being to a great extent dependent upon charity, they are fast losing those characteristics that make the successful farmer, or in fact a desirable citizen.

Therefore we respectfully beg to suggest:

1.—That in as much as it is the opinion of this body that the final solution of the unemployment conditions in Canada must come through placing the idle agriculturalists on the land, and to this end we would strongly urge that immediate steps be taken to select suitable agricultural districts throughout the Dominion where conditions are favorable for settlement, settlers to be allotted not more than 40 acres each and to receive from the Government by way of a loan sufficient money to purchase stock and such implements as are required, and to assist the settlers until such time as they can become self-sustaining, such advances to be a charge against the land and to be repayable in instalments covering a period of years.

2.—That where public works have been contemplated or projected it is strongly urged that the work be prosecuted immediately.

3.—That the Dominion Government confer with the Provinces with the object in view of constructing necessary permanent highways, including a national inter-provincial highway.

4.—That the plan which has proven so effective in the matter of improving agricultural methods by the establishing of experimental farms be extended if possible to industrial pursuits.

5.—That vigorous measures be taken to extend the foreign trade of Canada to those markets formerly supplied by other nations and to encourage the manufacture in Canada of goods formerly produced by countries with whom Britain is now at war.

6.—That the Government establish a system of industrial exchanges throughout the country whereby men can be assisted in moving from a locality where no demand for labor exists to one where some means of employment may be obtained.

7.—That the Government consider the advisability of restricting immigration and to confine it to those especially fitted and intending to become agriculturalists and that steps be taken to ensure the location upon suitable lands of such immigrants as may be admitted, and that they be followed with such supervision and assistance as will make them producers.

8.—And that the Government take such other steps as they, in their wisdom may deem expedient in order that some immediate action may be taken with a view to ameliorating and correcting the present deplorable conditions.

Signed in behalf of the conference.

R. D. WAUGH,

Mayor of Winnipeg.

CHESTER WALTERS,

Mayor of Hamilton.

The Memorial was signed by representatives of 39 cities.

UNEMPLOYED PROBLEM---Continued

Presentation of Memorial.

Besides Sir Robert Borden, Hon. Robert Rogers, Hon. Dr. Roche, Hon. T. W. Crothers and Hon. Martin Burrell, met the deputation, which was introduced by Mayor Waugh of Winnipeg. He and Mayor Chester Walters of Hamilton, Mayor Church, Toronto, Mayor Young, Fort William, Mayor Henry, Edmonton, and Controller Spence, Toronto, emphasized the chief points in the memorial. J. C. Watters, Fred Bancroft, and James Simpson, president, vice-president and executive member of the Dominion Trades and Labor Congress, supported the civic representatives.

Premier's Reply.

The Premier assured them that the Government would do all that is possible to co-operate with the provincial governments and municipalities to solve the unemployment problem. He called attention to the fact, however, that he could hardly be expected to make any very definite statement on some of the suggestions without first giving them serious consideration, as a few were "rather novel" in character.

With reference to the request that public works be carried on in spite of the war, Sir Robert stated that this had been urged from several quarters, especially from various members of parliament. "I hope," he said, "you will realize that Canada and the Empire are facing conditions due to the war, the like of which have never confronted this country or the Empire."

It had been computed that the war is costing the Empire \$150 per second, so that in the time the deputation had been in his presence a liability of about \$500,00 had been incurred.

The Premier called attention to the restrictions connected with borrowing money in London. Foreign countries have been forbidden from this privilege, and the Dominions can only borrow for war purposes. "We must, as you understand, pursue a policy in such times as these that will best safeguard the public interests in this country, as trustees of the people," said Sir Robert.

The highways policy was one the government had always endorsed, but has not been able to do as much in that direction lately as they would like. As far as the expansion of trade is concerned, this had already received consideration and a great deal had been done and was still to be carried on to benefit Canada. The other matters, he said, would be taken up and considered.

The Premier promised to receive the delegation again the following day, when some of the Provincial Governments would be represented.

On the Premier's suggestion, the delegates met at 4 p.m. in the Minister of Labor's office, the Hon. Dr. Roche, Hon. T. W. Crothers and Hon. Martin Burrell, to discuss at greater length the proposals for solving the unemployment situation.

Hon. Mr. Burrell said that in his opinion the responsibility of dealing with the proposals advanced by the mayors rested first with the provincial governments, next with the municipalities and last with the Dominion government. He thought that the deputation would have been strengthened by prominent members of the provincial governments.

"They were invited and several of them will be here tomorrow to wait on the Premier," said Mayor Waugh.

Prof. Bedford, of Winnipeg, urged that something be done either by the Provincial or Dominion governments to assist men to get back to the land. Forty acres with a little money to buy some stock would be sufficient.

Mayor Young, Fort William, suggested that the government consider setting aside 25 or 50 million dollars to finance the back to the land policy. Such a fund could be made a perpetual one.

"There are difficulties in the way," interposed Mr. Burrell. "Not only those now out of work would want to benefit by such a fund, but others too, would feel they had an equal right to benefit, as the money would be public money."

Mayor Waugh said that many men had been lured to Canada from the Old Countries by the alluring picture that adorn the covers of the government immigration booklets.

"Many of the farm laborers," ventured the Mayor, "in the old countries, have, no doubt, thought after seeing the pictures that all they had to do to grow fields of shimmering grain was to cover over her and do so without much labor and no money."

"Haven't the people in the old countries common sense?" asked Dr. Roche.

"No," replied the Mayor of Winnipeg, "not the majority of the agricultural laborers from foreign countries. It is

these men who comprise the majority of the unemployed in the west."

Prof. Tory, principal of the University of Alberta, held that the solution to the back-to-the-land movement lays via local organizations.

The Mayors of Calgary and Edmonton wanted some immediate relief launched without delay to provide work for the idle men until harvest time, when there would be work for all.

Mayor Chester Walters, of Hamilton, wanted to be in a position to go home with the assurance that all public works possible would be prosecuted at present.

The Ministers said they could not speak for their colleagues in the Cabinet, but they personally were in sympathy with the suggestion, the difficulty in the way, however, is whether the necessary money can be raised.

Mr. J. C. Watters, president of the Dominion Trades and Labor Congress, said he urged a conference of all the provincial premiers to discuss the unemployment situation last October, but efforts to get them together failed. The labor party is anxious to have something practical done. Similar suggestions made by the mayors were advocated by the congress at the annual labor convention in St. John, N.B., last fall, he explained.

Thursday, May 27.

The delegates met at 10 a.m. to meet and discuss with the representatives of the Provincial Governments of Alberta, Saskatchewan, Manitoba and Ontario, as to the most practical way in which the Federal Government could be asked to help in the solving of the unemployment problem. As a consequence, the following resolution was unanimously passed:—

"That we request Premier Sir Robert Borden to appoint a commission whose duty it shall be to advise the government as to the best methods to adopt to relieve the unemployment conditions in Canada, the said commission to be instructed to call a conference of representatives of the provincial governments to be held in Ottawa at as early a date as possible to formulate a national movement to relieve the present conditions."

At 12 p.m., the deputation, under the leadership of Mayor Waugh, again waited upon the Premier, who was supported by Hon. T. W. White, Minister of Finance; Hon. Dr. Roche, Minister of the Interior; Hon. T. W. Crothers, Minister of Labor, and Hon. Martin Burrell, Minister of Agriculture.

After Mayor Waugh had read the resolution passed earlier in the day, Sir John Willison, chairman of the Ontario Unemployment Commission, who represented the Ontario Government in the place of Hon. Dr. Pyne, Minister of Education, who originally intended to be present, but was prevented owing to other more important business, said that the reason the Dominion Government was asked to help deal with the problem was so that a commission, say of four or five men, could be named to act in co-operation with the provinces and municipalities, carry out the conclusions arrived at and direct the expenditure of money. Such a commission, said Sir John, would be able to act quickly and would relieve the government of responsibility.

Prof. S. Bedford, Deputy Minister of Agriculture for Manitoba, said that he was authorized by Premier Norris to state that Manitoba would co-operate with the commission in every way.

Hon. Charles Stewart, Minister of Public Works for Alberta, assured the Premier of the desire of the Province he represented to help, and similar willingness was expressed by Mr. T. Malloy, fair wage officer for Saskatchewan, who was empowered to speak for Premier Scott.

Ex-Controller Simpson, of Toronto, speaking for the Labor party, said the resolution was entirely in accord with what was advocated at a convention of labor men in St. Catharines last Monday.

Sir Robert Borden's Reply.

The Premier assured the deputation that the resolution would be considered by him and his colleagues without delay, and at the same time other matters relative to unemployment, suggested recently by representatives of the Dominion Trades and Labor Congress, would be taken up.

He was fully cognizant of the need for action in the matter. He referred to the difficulties surrounding the borrowing of money faced by municipalities and to a greater extent by the Dominion Government. However, the suggestion that a commission be appointed would receive the consideration of the Government at an early date.

The decision of the Government would be communicated to all the parties interested as speedily as possible.

ALL AROUND THE WORLD

BOARD MEETING IN FRENCH TRENCHES

Possibly the strangest company meeting ever recorded was held in a dug-out in the trenches somewhere in France on December 4. It was a meeting of the directors of a firm of English parliamentary printers. All the directors of the firm are in active service. Their accountants sent the chairman, Captain Stanley Low, a summary of the year's accounts, and have now received the minutes of the meeting at which Captain Low and another director, Captain Geoffrey Cox, passed the accounts.

The two directors present at the meeting in the trench dug-out regretted the absence of the third director, Captain Claude Low, "whose whereabouts at the front are unknown" to them.

EX-GERMAN SOUTH-WEST AFRICA.

Should German South-West Africa come under the British flag, the caracul fur industry of that colony is likely to prove an asset of increasing value. Caracul sheep, which those of their original habitat. Prices as high as £2, or even "Persian" lamb fur, were first imported into German South-West Africa from their native Bokhara in 1907, being regarded as specially suited to the sandy soil. Since 1909 there has been a Government farm for the breeding of these sheep near Windhuk. It is now understood, according to the information available at the Imperial Institute, London, that the industry is an established success, the sheep having found on the higher plateaux of German Damaraland and Namaqualand climatic conditions not far removed from more, are obtained for an exceptionally good lamb skin, but the industry can, it is believed, be carried on at a profit if from 10s to 15s is realized per skin.—South African Commerce.

FREE PHONERS.

Whenever an Englishman has a grievance, he writes to the editor of his favorite daily (usually the Times) about it. M. G. G., of London, is indignant regarding "free phoners." He says they constantly enter his office, ask to use the telephone and leave without paying for the call or saying "thank you." He wants to know what to do. His favorite editor says:

"I should try the effect of a card stuck above the instrument, reading thus: 'Telephone call, two pence (four cents). Pay at the desk, please.' If this did not have the desired effect I should ask the telephone people to install an automatic money box, such as is used in public call offices. With this, all calls would have to be paid for in advance and, in your case, the twopence dropped into it, instead of 'forgotten,' should pay for the installation of it in the first year. Of course, you would have to pay for your own calls as you made them, but on the other hand, you would not be presented with a periodical bill for them, which might be an advantage in the long run."—Telephoney.

VACUUM STREET CLEANING.

In Huddersfield, England, recently a demonstration was given of a motor-vacuum street cleaner, the invention of an Italian.

The machine is operated upon the principle of a rotary brush and suction, together with a system of pumps and jets for spraying atomized water on the road surface in front of the brush, thus insuring dustless and hygienic sweeping. The tests were made on various conditions of roadways, some being specially prepared to give the machine a still test. It is stated that the result was excellent, and apparently it will not be long before a much-needed revolution in street cleaning will be brought about by the motor-vacuum system.

Canadian cities and towns are intensely interested in this question, as, owing to climatic conditions, the vacuum system of street-cleaning is particularly adapted to this country.

THE UNION OF CANADIAN MUNICIPALITIES

"The Union of Canadian Municipalities is a body of far greater public usefulness than can be gathered from the history of merely the actual measures it has initiated or promoted. It has been a steady educator of public opinion, of that public mentality which, after all, is at the root of all progress."

CANINE PRISON.

Canines gathered in by Atlantic City's, N. J. official dog catcher will be lodged in palatial quarters if plans submitted by the city architect and approved by Mayor Riddle be adopted.

They provide for the construction of a building, entirely fireproof, sanitary and modern, at a cost of \$3,000, and the pound, if erected, will be the finest of its kind in existence.

Among the features will be a death chamber, a crematory and an infirmary.

A PUNCH JOKE.

Does not "Punch", as a rule, make very shrewd guesses at popular opinion? May, it therefore be considered that the following paragraph in the issue of the 24th ult., is not only the real public opinion, but also prophetic?—

Sir Laurence Gomme, on his retirement as clerk to the London County Council, has been appointed honorary adviser to the council on antiquarian matters. The tramway system will, we presume, now come within his purview.

There is a proverb which says: "There is many a true word spoken in jest." Is not this joke of "Punch" likely to prove true before many years?—"Surveyor".

TOWN PLANNING IN ENGLAND.

In reply to a question in the English House of Commons recently, Mr. Herbert Samuel said the number of town-planning schemes made by local authorities, and finally approved by the Local Government Board, was four. Three other schemes had been made by local authorities and submitted to the Board for approval, and the Board had authorized ninety-one other schemes to be prepared. It might roughly be estimated that the area of land comprised in town-planning schemes approved or in contemplation was equal to about half the area of land already built upon in England and Wales. He had no information with respect to the number of houses built or to be built in connection with these schemes. The schemes did not require the erection of houses, but limited the number of houses to be erected on particular areas. It rested with the owner of the land within the area of the schemes to decide when building should take place, and, subject to the restrictions referred to, what number of houses should be erected.—Garden Cities.

TRANSCAAL MUNICIPALITIES.

Nine municipalities in the Transvaal in December approved of building plans having an estimated value of £24,934 10s, as against £27,333 for November, whilst eight Cape Province Municipalities approved plans estimated in value at £4,723.

LIVERPOOL CORPORATION TRAMWAYS.

The general manager of Liverpool (Eng.) Corporation Tramways, Mr. C. W. Mallins, A.I.E.E., states in his annual report that the total revenue for 1914 amounted to £722,307, the operating costs (including rental of leased lines) to £473,678, and the gross profit to £248,629. The gross profit has been apportioned as follows: Interest, £50,082; sinking fund and repayment of loans, £63,726; reserve, renewal and depreciation account, £34,821; contribution in aid of the general rate, £100,000. The net profit for the year amounted to £134,821, a decrease of £19,341 as compared with 1913. This decrease is due to an increase in rates and taxes of £11,000, an increase in the wages account of about £10,000 (including the allowance to dependents of employees who have joined H.M. Forces), and the supply of 1,750,000 of free passes—representing a value of £8,232—to members of H.M. Forces. Although the profit was decreased, the contribution in relief of the rates was the same as in the previous year. The earnings per car-mile amounted to 12.02d, as against 12.10d for 1913, a decrease of 08d.

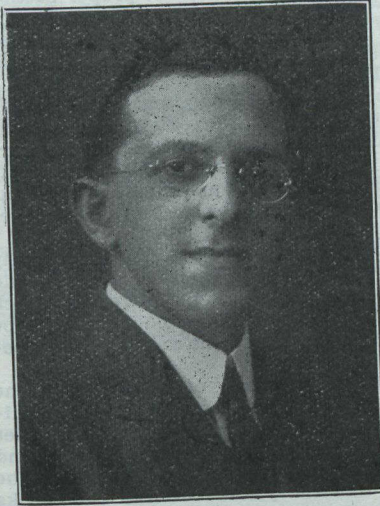
HOW THEY DO IT IN LONDON.

The girl at the exchange, after you have waited fully ten minutes:—

"They don't answer. What number was it you wanted?"—St. James Gazette, London.

A Great Jewish Institute

By DAVID DAINOW



Amongst the various populations which are gradually making up the great Canadian nation of the future, there is a section of people who, wherever they settle in this wide Dominion, bring with them an instinct of good citizenship and a spirit of comradeship towards each other. Jews are a suffering race. Throughout the ages they have been persecuted by the nations. It is this, perhaps, which has caused them to stand so staunchly by each other. It is well known in social and philanthropic circles, that there are none who so wholly and thoroughly look after

their own unfortunates as the Jewish people. Rarely are the general or municipal charities called upon to administer to the relief of Jewish poor. To the Jew, charity is the very essence of his religion.

Perhaps the finest example of this Jewish "protectiveness" in Canada, is to be seen in the existence of the Baron de Hirsch Institute of Montreal. This institution was founded in the year 1863, when the Jewish population of Montreal was exceedingly small. Several young men (many of whom later achieved fame in Montreal business and professional circles, and most of whom are to-day beyond the grave) gathered in a small room on St. James Street to establish a society for relieving poor Jews. It was then called the Young Men's Hebrew Benevolent Association and for many years it carried out educational and charitable work. It was in the year of 1897 that the Baroness de Hirsch donated the sum of Ten Thousand Dollars to the Institution. It was at the time that the Baron and Baroness de Hirsch interested themselves in what was called the Jewish question. The Hirsches spent millions in their attempts to ameliorate the condition of Jews the world over. At first the Baron endeavored to make an arrangement with the Russian Government to educate all Jewish children. The negotiations for this project, however, falling through, the Baron decided that the only solution for the Jewish question, as it then was, lay in agricultural pursuits. The first Jewish colony was established in Argentine, but unfortunately proved a failure. The Baron then set his attention on Canada. Colonies were started in this country, and it is estimated that in 1910 there were 1,410 on farms in the various colonies under the control of the Jewish Colonization Association of Canada. It is estimated that the number of Jews in the agricultural industry in Canada, including those who are and those who are not assisted by this society, is 6,000. The farming activity is now managed as a separate activity of the institute by a Committee appointed direct from the Jewish Colonization Society in Paris.

The Institute has grown in strength as the Jewish population of Montreal increased, and has been the incentive for the establishment of similar institutions in Winnipeg, Vancouver, Toronto, Ottawa, Hamilton and other cities in the Dominion. The institute's work is carefully organized. Its primary purpose is relief and the relief of the body comes first. On account of the severe winter just passed, the applications for help were numerous. Supplying coal, paying rent, supplementing insufficient earnings, tiding over a temporary shortage, keeping in illness and old age, are a few of the many merciful acts performed under the name of relief. Another division of the work is the Immigrants' Aid Association, by which the new comers are established in their new homes. There is a Labor Bureau bringing the jobless man and the manless job together, or helping applicants to start into business in a small way for themselves. The care of the tuberculosis poor is another thing which entails much expense and care. The Mount Sinai Sanatorium assumes the care of the patients of Jewish persuasion, but the institute provides for the families

of the men and women who enter the Sanatorium. The work, which seems the very finest of all, because it is so needful, and is so seldom attempted by other organizations, is looking after men who desert their families. The fact that this is regarded by Jews as a serious offence, should give some hints of the thorough manner in which the work of tracing the offender is carried out. A case has recently been brought to a successful issue where the desertion occurred in Russia three years ago. The aim in each case is to bring about an amicable adjustment, if possible, and restore the home. If not, there must be a weekly payment to the family by the delinquent father.

On account of the War and the trade depression, resulting therefrom, the institute has had to cope with the situation of relieving the Jewish unemployed. There were periods during the winter when thousands of Jewish men could secure no work. The actual amount spent in relief during a period of seven months has amounted to nearly \$20,000. Yet the only subsidy granted by the City of Montreal to an institution dealing with relief on so large a scale was \$500. Fortunately, the Special Relief Committee appointed by the city recommended a grant to the Institute of a few thousand dollars, which helped somewhat to meet the emergency. It was necessary, however, for the Jewish Community to organize a campaign of its own in order to relieve Jewish distress. The Directors of the institution trust to influence the city fathers to increase the yearly grant of \$500. The institute is relieving the needs of a considerable section of taxpayers, and were it not for this medium, the Municipal Assistance Department of the City Hall would be very much taxed.

Perhaps the greatest good the institute is accomplishing is to receive the immigrant arriving from the older country and teaching the spirit of Canadian citizenship. For this purpose classes are held nightly during the winter to teach foreigners and it is truly an inspiring sight to see these men and women, boys and girls, eagerly receiving instruction in the language of the country of their adoption. The institute possesses a library which contains a collection of Hebrew, Yiddish, French, English and Russian books and publications and every encouragement is given for literary, social, and ethical activity in its midst. The President of the Institute is Mr. S. W. Jacobs, K.C., one of Montreal's most brilliant lawyers, and a man who is deeply cognizant of his race's message to the world.

The war now raging in Europe will, upon its cessation, in all probability, bring an influx of immigrants into this country from the devastated areas in Europe. Municipal charitable organizations will be called upon to cope with the social phases of this influx. The Jewish Communities throughout the Dominion may well be trusted to look after and efficiently organize the Jewish groups of immigrants which will land here. Already the matter is being discussed, and undoubtedly a Committee of Jewish citizens will shortly be formed to formulate plans.

OUTSIDE.

Always listen once at least to the man who brings an idea to you from outside your office door. The best stories of battles, places and things have been written by people who were never there. Did you know that John Howard Payne, who wrote Home Sweet Home, never had a home himself?

WOMEN CURE SMELLS.

Chicago's new garbage plant is making a profit of \$2,000 a month for the city over and above expenses. It is also giving good service, under the charge of the health department. Before the women of Chicago got the ballot and tackled the garbage problem, the city had to pay \$4,000 a month for most unsatisfactory service. Then mountains of garbage used to lie in the hot sun, filling the air with stench for a mile around. Now no garbage is unloaded in the open air. It is brought to the plant in iron boxes, which are picked up by big electric cranes and emptied into the top of the concrete and still receiving house, and there it goes instantly to huge dryers. In addition to the enormous saving of health and comfort, there is a money-saving of about \$6,000 a month—thanks to the women.—A. S. B. in "Women's Century."

Creosoted Wood Block Pavements

By ANDREW F. MACALLUM.

For fifty or sixty years, before wood blocks were subject to treatment, many pavements were laid in the United States and Canada for roadways and sidewalks. In this country mostly round cedar blocks were used. These pavements, while satisfactory for a year two, soon decayed and in a comparatively short time were removed. In most of these pavements little care was taken in laying or in the preparation of the foundation which was generally plank laid upon the natural ground. After years of repeated failures, attention was directed to the use of preservatives, which in the first experiments made consisted in placing thoroughly dried blocks in a bath of creosote heated to a temperature of about 270 deg. F., until about three pounds per cubic foot of creosote was absorbed. While these pavements were fairly successful, it was soon realized that the best results could not be secured by dipping the blocks, and the blocks were then treated with creosote under pressure until they absorbed from ten to twelve pounds of oil per cubic foot. Such a pavement laid in Indianapolis in 1898 gave such good results that City Engineers began to appreciate the possibilities of treated wooden blocks, and better results were obtained.

In Boston a wood block pavement, treated with creosote resin process, composed of one half creosote oil and one half resin, was laid in 1898. The writer saw this pavement last October, and it was still in good condition after sixteen years of heavy traffic; and a small piece of similarly treated wood block was laid in Toronto in 1896, and was still in good condition when taken up for a new pavement about two years ago. The writer also examined such pavements in New York, after they had been in use for nine years under the heaviest kind of traffic, and they were still in good condition. In the City of Hamilton probably more treated wood block pavements have been laid than in any other city in Canada and the first pavements laid in 1909 are as good as when laid, and although subject to the heaviest traffic in that manufacturing city, have not to date cost a cent for maintenance.

The wood principally used has been long leaf (yellow) southern pine, which from experience has been found to give excellent results. Most specifications now, however, admit Norway pine and tamarac and white birch as a result of experimental pavements laid in Minneapolis, which showed the suitability of these woods. No doubt other species of wood make satisfactory pavements, but on account of the incomplete knowledge of their value, City Engineers as a rule prefer a wood that has proved satisfactory.

The blocks are from three to four inches wide and vary in depth from five to 10 inches. As for all timber specifications, the blocks should be sound, free from large or loose knots, shakes, worm holes and other similar defects. As to the proportion of sap and heart wood, the present specifications are not very rigid, as experience has shown that treated blocks having both sapwood and heartwood, do not vary in their wearing qualities.

The preservative used is a creosote oil, having a specific gravity of from 1.08 to 1.14, containing a percentage of tar, free from carbon. Coal tar oils are used in preference to water gas creosote, as sufficient experiments have not yet been carried out with the water gas creosote to determine its relative value.

The writer has been corresponding with a number of city engineers with a view of obtaining opinion as to the most satisfactory amount of treatment required per cubic foot of block, according to the experience of each city and in replies from twenty cities in the United States has ascertained that six of these cities use 16 pounds, two of them 18 pounds, and twelve of them 20 pounds, depending to some extent on local conditions.

Laying the Pavement.

The base for wood block pavements should be of concrete from five to six inches deep, having the crown parallel to the finished crown on the blocks. An uneven or irregular base is detrimental to any pavement, as it is liable to cause a depression in the surface to hold water, which the repeated impacts of waggon wheels is certain to increase, giving an uneven surface. Upon this concrete base is placed either a sand or mortar cushion. This cushion is usually one inch deep and has its surface struck by templates to a surface parallel to the contour of the finished pavement. Where sand is used, the sand is such that it will pass through a quarter inch screen, besides being clean. If a mortar cushion be used, some engineers use

a proportion of one of cement to three of clean sand to which sufficient water is added to insure the proper setting of the cement. Other engineers obtain good results by mixing and placing the cement and sand dry. This cushion is simply a means of securing a uniform surface for the blocks to rest upon and distribute the load.

English and French practice does away with this cushion altogether, but the concrete base is finished off as smooth as a concrete sidewalk and to the exact contour of the surface of the pavement. This extra care and workmanship obtain results that are excellent in as much as the finished surface of the blocks has no depression, and consequently the wheels cause no impacts.

In most cities it is not possible to lay the blocks shortly after coming out of the treating plant, and the hot sun and wind during shipment and before laying is apt to check the blocks and cause oil to exude. The blocks should be piled closely when delivered on the street and sprinkled before laying.

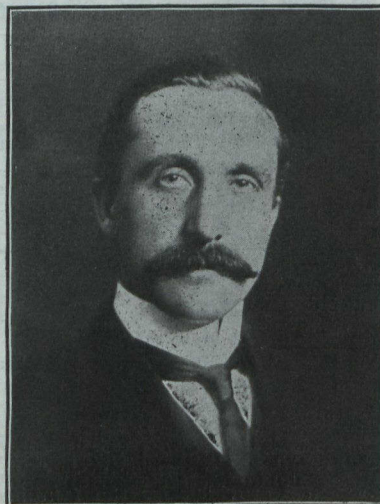
There is diversity of opinion among engineers as to the best joint filler to be used. The American Society of Municipal Improvements recommend a suitable bituminous filler when the blocks are laid upon a sand cushion, and a sand filler when laid on a mortar cushion. It is claimed for the bituminous filler, which fills the joints between the blocks two-thirds their depth (the remaining depth filled with sand), that it makes an absolutely waterproof pavement, and that it eliminates all expansion difficulties as each block is surrounded with an individual expansion joint. Unless the filler is a suitable asphaltic cement with a high melting point and low penetration there is apt to be a sticky surplus left on the surface. This filler will cost about 15 cents a square yard more than a sand filler.

One of the criticisms made of treated wood block pavements is that it is slippery, but in the writer's experience he has found that there is very little difference between these blocks and sheet asphalt pavements. When covered with a light frost or snow, or when the weather is foggy and damp, the pavement may become objectionably slippery.

In traffic observations made at Philadelphia, New York and other cities, the evidence shown by the engineer at these places indicated that where treated wooden blocks and granite blocks were on parallel streets, 70 per cent of the teaming went on the wooden block.

On Stuart Street in the city of Hamilton, the writer laid treated wooden blocks between the street car rails and granite block between the outside rails and curbs, the pavement being on a five per cent grade. Although most of the traffic was of a heavy teaming nature, it was found that fully 80 per cent of the traffic, except on wet days, was on the wooden block.

The first cost of wooden block pavement is undoubtedly higher than that of most of the other paving materials, averaging in the city of Hamilton from \$2.85 to \$3.00 per square yard, exclusive of grading. When its cheapness of maintenance, ease of cleaning, low tractive resistance and durability are taken into consideration, this pavement, with its relatively high first cost will compare favorably and prove ultimately cheaper than one lower in first cost.



Prof. STARKEY

Who is forming a
Sanitary Corps in
connection with
Canada's forces.

PREMIER SCOTT AND CIVIC INSTRUCTION.

Regina, 26th April, 1915.

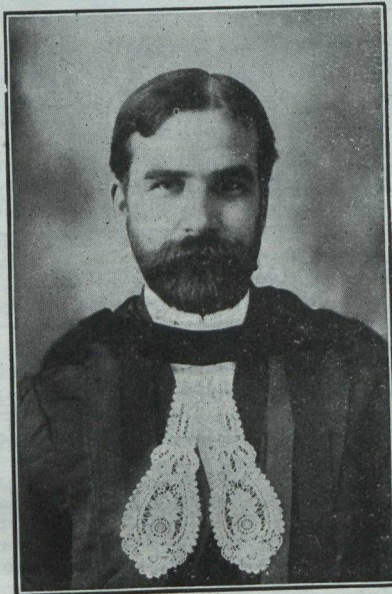
The Editor,—

In February you wrote me asking my attention for an article on Civic Instruction in Schools, appearing in your February number. I was absent at the time. In Saskatchewan Schools, I may say, the matter is recognized as important, as you will see by reference to our Course of Study (pages 4, 6, 24, 27, 31, 35 and 40), which I send you. Civics as related to history has been a subject of study in our schools for years, and in some schools is very practically illustrated. In a Weyburn school, for instance, a mock Municipal Council was formed by the pupils, and a school garden was outlined by section, township and range plan as a Municipality.

I daresay all Education Departments confront the problem—it is certainly true in Saskatchewan—of the flagrant overloading of the curriculum with subjects. Schools ought to develop and inspire minds, which is a purpose frustrated instead of served by attempting to make young minds hold all the facts and information which they will need in after years. Crowd little stomachs as we are trying to crowd young minds and what would be the result?

Very, etc.

WALTER SCOTT.



RECORDER WEIR, OF MONTREAL.

Recorder Weir, of Montreal, who recently retired, during his term on the bench, paid special attention to municipal law, and has written extensively on its historical aspects. He was a member of a special committee named to revise the charter of the city of Montreal. He has published a number of legal works, chief among which may be mentioned the "Insolvency Manual," "The Civil Code," "The Code of Civil Procedure," etc.

YOUR DUTY: TAKE THE PLEDGE.

I want to help make our town a better place to live in, and to this end I promise to comply with the following rules to the best of my ability:—

- 1.—I will help clean up yards, streets and alleys.
- 2.—I will plant flower seeds, bulbs, vines, shrubbery, etc.
- 3.—I will help make gardens, and keep lawn in good condition.
- 4.—I promise not to deface fences or buildings, neither will I scatter paper or rubbish in public places.
- 5.—I will not spit upon the floor of any building or on the sidewalk.
- 6.—I will try to influence others to help keep our town clean.
- 7.—I will always protect birds and animals, and all property belonging to others.
- 8.—I promise to be a true, loyal citizen.

I may not be able to do all these things, but will do as much as I can to help our town and community.

BAD ROADS ARE COSTLY.

The question is often asked, "What do good roads cost?"

If this question were put in another form, viz., "What do bad roads cost?" the answer would bring home to the people of Canada what they are paying as a sacrifice to poor transportation facilities—this, in addition to the discomfort and dissatisfaction of having to travel over them.

One of the chief causes of young people leaving the farm is the lack of good roads. Rough and muddy roads retard social life, especially when, associated with the unpleasantness of driving, is the fact that the equipment becomes mud-bespattered and requires constant washing. To avoid these and other inconveniences, farmers and their families at home, more or less in isolation, and, when the first opportunity arises, many of them leave the farm. There is but one remedy for this isolated condition—by means of good roads, farmers and their families must be placed in touch with the social advantages of the larger communities. Just as soon as this condition is reached, the drain of population from the farm will decrease.

Of the economic losses due to bad roads separating the farmer from his market, that of cost of transportation is most important. A comparison of the load one horse can haul on good and bad roads, respectively, shows that, on a muddy earth road, the amount varies from nothing to a maximum of 800 pounds; on a smooth, dry earth road, from 1,000 to 2,000 pounds; on a gravel road in bad condition, from 1,000 to 1,500 pounds; on a gravel road in good condition about 3,300 pounds; on a macadam road, from 2,000 to 5,000 pounds; and on a brick or concrete road, from 5,000 to 8,000 pounds. In 1906, the Bureau of Statistics of the United States Department of Agriculture, from about 2,800 county reports, deduced an average cost of 22.7 cents for hauling one ton over one mile of unimproved roads. The equivalent cost of haulage per ton over different roads, taking 2,000 pounds over smooth earth roads as a basis, would be as follows:

Class of road.	Load for	Cost per ton
	one horse Lbs.	for hauling. Cents.
Muddy earth road	800	56.75
Smooth earth road	2,000	22.70
Gravel road in bad condition	1,500	28.40
Gravel road in good condition	3,000	15.12
Brick or concrete road	5,000	9.08

From this table it will readily be seen how much bad roads are costing the farmers of Canada.

The farmer served by poor roads is forced to market his crops, not when prices are highest, but when the roads are passable. Moreover, the high cost of haulage imposes a heavy additional handicap in competition.

Good roads not only enhance the value of land bordering on them, by rendering markets more accessible, but also benefit the markets themselves through extension of the radius of supply.

PERHAPS.

When cows fall ill the Government proceeds to take alarm
And sends a veterinarian to sanitize the farm.
The cow herself is put to bed and plied with drugs and pills,
And Uncle Sam comes forward, when she's cured, to pay the bills.

But when a baby falls in need of medicine and care,
The Government contends that that is none of its affair.
When pigs and lambs are threatened by a deadly pestilence.

Their tender lives are guarded at the Government's expense.

They're coddled, nursed and dieted until they're well and fat,
And never reckon of the cost—for Uncle Sam pays that.
But when an epidemic marks the babies for its own,
The Government, untroubled, let them fight it out alone.
Some day, perhaps, when all the pork has lavishly been passed,

When every scrap of patronage is handed out at last,
When all our noble Congressmen have got all they desire
And have attained whatever heights to which they may aspire,

To unknown heights of common-sense the Government will leap,

And do as much for mothers as it does for cows and sheep.
—Chicago Examiner.

PART OF THE DELEGATION OF MAYORS WHO PRESENTED A MEMORIAL TO THE FEDERAL GOVERNMENT ON THE UNEMPLOYED PROBLEM



Back Row: 1, Controller Champagn, M.P., Ottawa. 2. G. S. Wilson, Assist.-Sec. U.C.M. 3. Controller Nelson, Ottawa. 5. Mayor Lachance, St. Boniface. 6, Mayor Hawthorn, Medicine Hat. 7. J. C. Watters, Pres. Dominion Trades & Labor Congress. 8. Alderman Larner, London. 9, Alderman Evely, Verdun. 10, Mayor Balfour, Regina. 11, Alderman Kernaghan, Prince Albert. 12, Frederick Wright, Editor Canadian Municipal Journal.

Front Row: 1, 2. Mayor Hardie, Lethbridge. 3, Alderman Boyd, K.C., Montreal. 4, Mayor Stevenson, London. 5, Mayor Church, Toronto. 6, Mayor Waugh, Winnipeg. 7, Mayor Porter, Ottawa. 8, Mayor Hett, Berlin. 9, Mayor Costello, M.D., Calgary. 10, Mayor Thurber, Longueuil.

Municipal Affairs in British Columbia

By COUNCILLOR J. LOUDET

A disastrous fire occurred on the Connaught Bridge in Vancouver early last month, damage estimated to be upwards of \$100,000 having been done. One span collapsed after the metal work had buckled with the heat, and it will take some time to put the bridge in shape for traffic. A smaller blaze started the same day on the Granville Street structure, but was quickly extinguished, and a day or two later another small fire occurred about the same place.

It is thought quite possible that this last big fire was of incendiary origin, and the police are investigating the matter.

The recent great increase in motor traffic over the bridges and the evidence of leaking carburators may have more to do with the fires than anything else, as a match dropped from a moving car would quickly ignite the gasoline and carry the flames to scupperholes, where the fire evidently started.

These scuppers become clogged with refuse mainly of an inflammable nature, and a fire there quickly causes the creosoted blocks and sidewalk to catch fire.

With sawmills on either side of the bridges extra precautions will have to be taken to prevent further damage.

The Georgia-Harris viaduct, now nearing completion, besides being of reinforced concrete, will have a pavement practically fire-proof.

The unemployment question is still giving trouble in Vancouver, and work under the recent government appropriation is likely to cease soon. Both in Vancouver and Victoria, the councils have decided in future to handle the unemployment question themselves instead of through some semi-charitable organization.

Victoria Sewerage Problem.

In Victoria much interest has been taken in the recommendation of Engineer Rust, that sewer and water laterals should not be laid prior to laying a permanent pavement where the laterals in question are not likely to be used immediately or in the near future.

He points out that while in theory it is a desirable practice to lay the laterals as it obviated opening up the roadway later on, in reality the advantage was offset by the increased cost resulting from laying and paying interest on laterals which may not be required for many years, and some of which may never be required at all.

In the case of water connections not put into immediate use, many developed leaks hard to detect and were also subject to electrolytic action. He blamed the present method for the increased cost of paving in Victoria over other cities.

On business streets he favored the present plan.

The system of giving a few days work to all applicants has been tried in Victoria and the engineer reports has resulted in a considerable increase in the cost of work done.

He states that a permanent qualified gang would give more satisfactory results. This has been a general experience throughout the Province.

The Jitneys.

The jitney competition has at last stirred the B. C. E. Railway Co. to action. Until last month they contented themselves with appeals to the public to patronize their system, but the public waited for arguments of a more solid nature.

The innovation is accompanied by a word competition for several cash prizes along lines popular with magazines in England about fifteen years ago, and is something which seems beneath the dignity of a corporation such as the B. C. Electric Railway Company.

No reduction in the fare takes place in North Vancouver, and while the company may be justified from a strictly business point of view, the resentment caused by the discrimination may be damaging to the company. All the company's troubles seem to arise from a failure to understand the public and not from the service given, which is absolutely good.

Finance.

In South Vancouver, suspensions and rumors of suspensions still fill the air, but conditions are not so electrical as a month or two ago. New Westminster has completed its financial arrangements, and for the present will sell no more treasury certificates. North Vancouver City has intimated that it cannot pay the annual membership fee to the Union of British Columbia Municipalities. This action is much to be regretted, and is likely to do much harm to North Vancouver. It seems hardly possible that an ambitious city such as North Vancouver cannot afford the fee, and in view of the splendid results achieved by the Union the City would do well to reconsider their decision. This is the wrong kind of economy—penny wise and pound foolish.

Municipal Affairs in Alberta

S. B.

Since last writing you about municipal matters in this Province our Provincial Legislators have completed their labors for another year. While quite a number of new Acts were placed on our Statute Books, probably the most important piece of legislation dealt with was an Act which, while dealing with a number of matters which are not in any way connected with municipal affairs will, it is expected, do a great deal for our municipalities in saving them from going too deeply into debt and in assisting them in handling their public utilities. I refer to the Act providing for the establishment of a Utilities Commission. Under this Act a Commission will be appointed to deal with all public utilities within the Province and to pass upon all municipal loans. This Act becomes effective on proclamation and after it becomes law any Municipality within the Province desiring to issue debentures will have to apply to the Commission for permission to submit the money by-law to a vote of the burgesses. Before giving this permission the Commission will, of course, go into all matters which will have any bearing in any way on the proposed loan and unless it can be shown that the proposed expenditure is necessary and advisable and that the Municipality is financially able to carry the loan, it will be impossible for them to obtain the necessary permission.

A number of amendments were made to the different municipal Acts and to the different city Charters. None of these were of any great importance, with the exception of the amendment to the Charter of the City of Edmonton, whereby the citizens of that city are given what is practically universal suffrage. The wisdom of this move appears to be a very debatable question, and it is noted that quite a number of the electors of that city are of the opinion that the results will not be in the best interests of the city, and I think that a good deal can be said in support of this contention. It is rather difficult to see why a man who has no interest in any taxable property in the city, and who may not be contributing in any way, even very indirectly, to the expense of carrying on municipal business of the city, should have any right to dictate as to how such business should be carried on.

The experiment may be rather dangerous, as it may make it possible for electors without any particular interest in the city to put an administration into office who will lead the city into extravagant expenditures that the people paying the taxes will have to bear, although the expenditures were undertaken without their sanction.

Possibly the most outstanding feature in connection with municipal work in the City of Calgary, has been the agitation for the recall of the Mayor and one of the Commissioners elected at the last general municipal election.

The source of this agitation appears to have been the scarcity of public work, the amount for the expenditure of public works evidently not having materialized in accordance with the hopes of many of those interested. It does not appear that this agitation is going to accomplish its object, although it caused quite a commotion in certain circles in the southern city for some time.

In the Capital City, business seems to be going along smoothly, although very little new work is being undertaken, the quietness in connection with municipal matters being a decided contrast to the stormy times of the last two or three years. However, this condition may not last as it is noticed that the everlasting question of a supply of gas is again to the front, and a by-law in regard to a gas franchise is to be voted on at an early date. Ventures in natural gas has caused many of our urban municipalities to spend a great deal of money with practically no results in most cases, and it would probably be a good move on the part of the city to give a franchise rather than to endeavor to procure a supply of their own by the doubtful procedure of borrowing money and sinking wells.

Many of our smaller urban municipalities have foolishly burdened themselves by large debenture indebtedness trying to obtain a supply of natural gas. They evidently could not or would not see the risk they were taking or the foolishness of expecting that gas wells would make them "Birminghams" or "Manchesters" no matter what their location might be. I trust we have seen the last expenditure of money by municipalities in this way, and I have no doubt after the Utilities Commission takes office they will see to it that no debenture indebtedness is obtained for this purpose in future.

On the whole, the business in the different municipalities throughout the Province appears to be progressing steadily and quietly. In most cases the expenditure in the extension of public utilities will, of course, be very limited this year on account of existing financial conditions making it difficult to realize on outstanding taxes or to make further loans on good terms. This should make the year 1915 a year of careful financing, and while the present experiences may be rather hard, yet the results of the municipalities having to be forced to take stock of their conditions will be of benefit in future.

BRITISH DELEGATION TO SECURE SKILLED LABOR

At the morning session of the Union of Canadian Municipalities, Messrs. Barnes, M.P., and W. Windham, were introduced as representing the Imperial Government in trying to secure the services of 28,000 skilled mechanics in this country for governmental work in the Old Country. The work of the British delegation is along the following lines:

The immediate object of this mission is to conduct a preliminary enquiry into the prospects of obtaining the services of such skilled workmen as may be out of employment under the general category of Engineering, Shipbuilding and Moulding.

It is particularly to be understood that no applications will be entertained from persons over fifty years of age or who may be already engaged in any of the following occupations:—

Machinists, including
Fitters,
Turners,
Millers,
Millwrights, etc.
Riveters,
Drillers,
Shipwrights, including Ship Carpenters,
Boilermakers and Boilermakers' Helpers,
Sheet Iron Workers,
Coppersmiths,
Blacksmiths and Blacksmiths' Helpers,
Moulders.

The procedure will be for applicants to fill up a printed form at any of the centres below:

Ottawa—Office of the Deputy Minister of Labor.
Montreal—Office of the City Clerk.
Toronto—Office of the City Clerk.

Hamilton—Office of the City Clerk.
Fort William—Office of the City Clerk.
Port Arthur—Office of the City Clerk.
Winnipeg—Office of the City Clerk.
Regina—Office of the City Clerk.
Moose Jaw—Office of the City Clerk.
Saskatoon—Office of the City Clerk.
Edmonton—Office of the City Clerk.
Calgary—Office of the City Clerk.
Vancouver—Office of the City Clerk.
Victoria—Office of the City Clerk.

These applications will be scrutinized as soon as possible. If it should appear that a sufficient number of suitable mechanics are available, technical foremen will be summoned by cable from England to come over at once to Canada to select the applicants, who will be required to pass a practical test in the nearest workshop at the Mission's disposal. The general conditions of engagement will be:

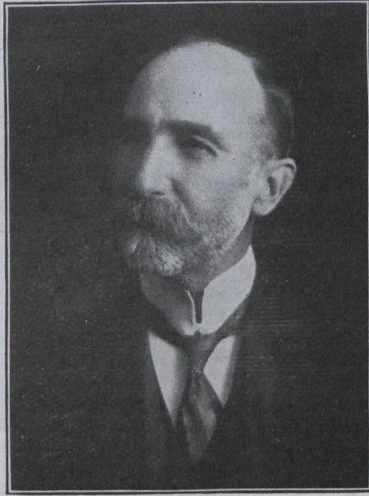
- 1.—Standard British rates, including war bonus, etc.
- 2.—Minimum engagement of six months if suitable. If not required for any work in his trade on munitions of war in any of principal centres and he wishes to return at once, fare back paid by Government.
- 3.—If Government transport not available, fares to be paid to the United Kingdom. Fares in the United Kingdom payable in any case.
- 4.—Fares to be paid back if men stay as long as wanted for Government work during the war.
- 5.—Subsistence on authorized scale from date of leaving home after selection to date of starting work.
- 6.—No families will be brought at Government's or employer's expense.
- 7.—Undertaking to stay for six months if suitable work is available.

SOME BIG MUNICIPAL MEN

(By AJAX.)

H. J. ROSS, L.I.A., Montreal.

What might be termed a continuous setback to the progress of Canada's municipal life is the apparent lack of interest displayed by men of calibre in the affairs of our cities and towns. The municipal sphere would seem to be divided between temporary holders of the public offices and permanent officials. The interest of the one only fleeting, and the other circumscribed. So that



when one does know of a man whose interest in the municipal welfare of Canada is neither circumscribed by self-interest nor limited by any particular municipality or district, it should be recorded in plain language. And such a man is H. J. Ross, of Montreal, whose persistent fight for fifteen years to get uniformity in municipal accounting is sufficient guarantee of not only an unselfish but a consistent spirit. Year in and year out, Mr. Ross has taken every opportunity to advocate his scheme, and though its consummation is not yet a fact, in the interests of good civic government, it is bound to come. As member of a special committee of the Union of Canadian Municipalities on Uniform Accounting and Statistics he prepared a well nigh perfect form of classification—a copy of which will shortly appear in this Journal. This form has already done much to simplify municipal bookkeeping, it having been adopted by many city and town clerks and treasurers. If good financing is largely a question of book-keeping then, indeed, one might say that the future financial credit of municipal Canada will be largely due to H. J. Ross's single-minded and civic patriotism.

Mr. Ross, as his name denotes, is a Scotch Canadian, being born in Montreal 52 years ago. After receiving a good education at the local high school he entered the accounting profession, which he took seriously. That is, he recognized that true accounting meant more than mere book-keeping. Being appointed auditor to a number of municipalities he soon realized the necessity of a uniform system for civic statistics and finance for not two of his municipal clients gave the same meaning to what should be common definitions and no two thought alike in financial matters. The statements being so local and misleading that even Mr. Ross himself, a qualified auditor, had great difficulty in getting at the true position, so that it might be said his reform scheme was thrust upon him. But it is the passing along of his scheme where the big man comes in. He did not copyright his classification to which he had given much time and thought, but took every opportunity to explain it to the civic world. He

talked to mayors and clerks, he spoke at the conventions of the Union of Canadian Municipalities, and to-day he is never tired of teaching "UNIFORMITY" to all and sundry.

Though in municipal affairs Mr. Ross may be thought to be a one idea man, when it is recognized that that one idea is the base upon which must be built the superstructure of respected Canadian Finance, we will appreciate him the more. Personally Mr. Ross is one of the most courteous of men to meet; of a quiet disposition, he has the genius of getting at the heart of things quickly and creating confidence in those who have business with him. A continuous reminder of his sporting days is his life membership of the M.A.A.A., the great local athletic association. A number of societies claim his membership, he acting in most as secretary. The list is as follows:—Board of Trade; First Vice-President Institute of Accountants and Auditors, Province of Quebec; Governor Montreal General Hospital; Numismatic and Antiquarian Society.

In his business, Mr. Ross has been signally successful, and though only in middle age, he is in a position to take a holiday more often than in his struggling days; he being happy in his partner son, who is a good pro-type of the father.

"CLEAN UP WEEKS."

Montreal has just gone through an annual "clean-up" week for the second time. In last year's report of the sponsors (which appears in another part of this issue) they claim to have done much good, and no doubt they will claim the same again for this year, but the point brought to our mind is why the necessity, if the municipal bye-laws are properly carried out. The idea emanated in the United States and was brought to Canada by some well meaning persons who were evidently impressed by the American statistics, but who did not enquire as to the adaptability of the idea to Canadian cities, which have the reputation of being amongst the cleanest in the world—and this includes Montreal. Of this we speak with some authority, having seen cities in other parts. While "clean up" weeks can certainly do no harm, and give employment to a few people, there is the danger of too much of it giving an impression abroad that we in Canada are not particularly clean. To those citizens who take a pride in the cleanliness of their homes, including the garden and backyard, it is somewhat disconcerting to receive a visit from some busybody and instructed in almost official tones what to do and what not to do. They naturally object to be put in the same category as those whose home should receive more frequent visits from the sanitary inspector.

THOSE JITNEYS.

The latest statistics on the subject indicate that jitneys have been established in 138 cities on the American continent. Only 8 cities in Canada, however, have felt the lure of these illusive vehicles. In 32 places the jitneys commenced operations, but were later discontinued, either through poor revenues or unfavorable public sentiment.—Journal of Commerce.

AN APPEAL FROM THE CANADIAN RED CROSS SOCIETY.

To the Editor—

The record of the deeds of the Sailors and Soldiers of the Empire during the present war, has aroused in us all a just pride and admiration of their courage and endurance, sorrow at their sufferings and hardships, and also heartfelt sympathy for the friends and relations of those who have been wounded or have given their lives for our security and freedom.

We all feel that they have nobly played their part and fully deserve our unstinted gratitude and praise. We, who have stayed at home, and taken no place in the battle line, have also a part to play and a duty to perform which may be set forth in a few words. First of all to honor the dead, then to succour the sick and the wounded, and lastly to care for those who are, by reason of wounds or disease, rendered incapable of earning their daily bread. Nor is this all, for those who were dependent on them in times of peace—the mother, the widowed wife and the orphan children—can justly claim their share of our gratitude and help, and not in vain. Much has already been done in these directions by the people of Canada through the Patriotic League and Red Cross Society and we cannot fear that the springs of generosity will dry up before we have fulfilled our duty.

The recent list of casualties, more especially of the Canadian Expeditionary Force, clearly indicate to those who administer the funds and supplies of the Red Cross Society, that the available resources at present in hand will speedily disappear, and can only be maintained in the future by a steady flow both of money and supplies; and not by spasmodic appeals made too late to be really effective.

To secure the supply of funds so much needed, there seems to be only one way, namely, that every one should be called upon to practice some self-denial, and set aside a monthly contribution of money or material as may be required.

Where branches of the Red Cross are established such contributions should be forwarded by the Executive of such Branches at least monthly to the Headquarters of the Society at 77 King Street East, Toronto, and in the absence of such branches they may be sent direct—bearing in mind that no contribution is too small to be gratefully received and recorded.

Any other method than the above causes a loss of power to do good, and this has been clearly established by past experience. Surely, no one who realizes his debt to the men who are defending his liberty, and has a heart and a conscience, will fail in such a duty, a duty in which even children may share.

It is estimated that if each head of a family throughout the Dominion contributed but five cents a month during the duration of the war, sufficient money for all purposes would be obtained, and few are too poor to be unable to do so.

It is therefore to secure a wider publicity of the needs of this deserving work, that you are asked to publish this appeal in your paper, and to draw attention to it, editorially as to their privileges and duty in helping the Red Cross in its work of mercy and charity.

Signed on behalf of the General Council, C.R.C.S.

NOEL MARSHALL, Chairman.

Officers.—President, Col. G. Sterling Ryerson; Chairman of Executive Committee, Noel G. L. Marshall, Esq.; Treasurer, Col. The Hon James Mason; Corresponding Secretary, Mrs. H. P. Plumptre; K. J. Dunstan, Esq.; Sir John Gibbon, K.C.M.G.; Lieut.-Col. A. E. Gooderham; Mrs. A. E. Gooderham; F. Gordon Osler, Esq.; John T. Small, K.C., Hon Solicitor; Col. G. A. Sweny. Commissioner in England—Colonel Hodgetts.

REASONS FOR TOWN PLANNING.

The need for town planning in Canada is greater to-day than ever before because of the: (1) General tendency to urban growth; (2) Growing size of large cities; (3) Separation of intimate connection between manufacturer and worker; (4) Increased rates of cost of shelter to income, due to haphazard growth; (5) Changing methods and increased use of means of transportation; (6) Need for better arterial roads; (7) Danger of congestion and unhealthy density of building.

The employer's interest in safety is rapidly transmitted to the workman to the advantage of both.

MARITIME PROVINCES TAKE THE LEAD IN TOWN PLANNING.

Nova Scotia.

A Town Planning Act has been passed into law in Nova Scotia which will revolutionize the methods of developing real estate and controlling building operations in that province. The Act is to a large extent compulsory and is in advance of anything of the kind in the world.

Under the Act a Local Town Planning Board must be appointed in every urban and rural municipality, and a town planning controller has to be appointed for the whole province. No street can hereafter be laid out, nor any subdivision made unless the plans are approved by this Board. Within three years every Board must either prepare a town planning scheme or a set of town planning by-laws with the following minimum requirements:—

- (1) The distance between buildings to be not less than 60 ft. and up to 100 ft. on opposite sides of existing streets, both in respect of new buildings and reconstructed buildings, and to be not less than 80 ft. on new main thoroughfares, whatever the width of the street.
- (2) Land to be reserved for new main thoroughfares not less than 60 ft. in width, and provision made for allowing narrow streets of from 24 ft. to 40 ft. where not required for through traffic.
- (3) The number of dwellings to be limited on each acre, all windows of dwellings to have adequate light and air, separate areas to be prescribed for dwellings, factories, stores, etc.

Property is not to be deemed to be injuriously affected for purposes of compensation by reason of the following restrictions on its use, if the Commissioner of Public Works is satisfied that they are reasonable for the purpose of securing amenity:—

- (1) Prescribing space about buildings.
- (2) Limiting the number of buildings to the acre.
- (3) Limiting the height of buildings.
- (4) Prescribing the use or character of buildings, i.e. whether the land shall be used for dwellings, factories, etc.

It is an essential part of the Act that there shall be cooperation between municipalities and owners and between adjacent municipalities. Ample safeguards are provided to prevent any person erecting buildings or sub-dividing land so as to contravene a proposed scheme or by-law, while either is being prepared. The Local Board has power to buy land up to 200 feet in depth on the frontages of new roads or reconstructed roads. The price of any land to be expropriated must be the market value and no extra allowance is to be made for compulsory purchase. The Act has been drawn up in consultation with the Commission of Conservation and immediate steps will be taken to put it into force in the province.

New Brunswick.

Although Nova Scotia has now the most advanced Act, New Brunswick is likely to give birth to the first statutory town planning scheme in Canada under its Act of 1912. The city of St. John has appointed a Commission to prepare a scheme and steps are being taken to deal with an area of 10,000 acres.

FREDERICTON EDUCATION.

The Fredericton Board of School Trustees are considering the question of advanced mechanical work and practical work for a class of pupils who cannot take advantage of a regular school course. This is the result of Professor Sexton's address to the Board of Trade of this city, a short time ago. It seems to this Journal that the trustees would be enhancing the value of the work if a course of civics—particularly as it refers to the municipal life of the country—was given to the pupils.

"MISTAKES" OF THE FATHERS.

With what a sense of shame and humiliation must the militarists look upon the founders of this government, when they view the three-thousand-mile boundary between the United States and Canada. Not a fort along the whole line; not a battleship on the Great Lakes; and here we sit supinely, a nation of mollycoddles, not knowing what moment the Canadians may rush in upon us. And what a stimulus to business it would have been, had the frontier, like that between France and Germany, been fortified. We could have spent billions of dollars in forts and battleships, and employed hundreds of thousands of men. All these blessings are denied us simply because the Fathers of the Republic cravenly agreed with the British to leave the international boundary unfortified.—The Public.

CLEAN-UP WEEK AND ITS MESSAGE.

Cleanliness—Is the Cheapest Form of Life and Fire Insurance.

It is a first right and prerogative of every community to be Sanitary. The enjoyment of good health has ever been regarded as the greatest material asset of mankind; hence the most valuable asset of a community is the possession of those conditions that tend to promote and protect its health. Nevertheless, thousands of deaths occur annually from a preventable cause—lack of cleanliness!

Safety in life depends to a large extent upon the proper exercise of care and order within the home. Fire prevention authorities are a unit, however, in declaring that fully one-half of all fire-waste is due to neglect of these functions. The accumulation of rubbish and combustible materials is said to have caused a fire loss of over \$300,000 in Philadelphia alone in 1914.

The attractiveness of a city is enhanced by cleanliness of surroundings—a mark of distinction in which its citizens may take just pride. To abuse vacant lots and open areas by making of them common dumps for all manner of trash and refuse tends to lower the standards of civic pride.

Consequently the elimination of such unnecessary evils as affect the health, safety and attractiveness of Philadelphia is the mission of Clean-up Week.

What then is necessary for the success of this campaign for better living conditions? Your individual help and co-operation. Get rid of the accumulations of discarded personal and household articles that cram the closets, attic, cellar and the numerous out-of-the-way places, occupying space that might be better utilized. It is of vital importance for you to know that such conditions, where they exist, are a constant menace to the health and safety of yourself and your family.

The fly must be swatted in its breeding places—filth and dirt—if this crusade against one of the commonest disease carriers is to mean anything. The mosquito is likewise an active agent of disease, a most annoying pest, and harder to swat than the fly. But once more go to the source of trouble and "Prevent the Mosquito" by filling in the depression where water is likely to remain undisturbed for eight to fourteen days. Eliminate all standing water and you have solved the mosquito problem.

We have heard lately of the existence of Bubonic Plague in this country. It was brought here from abroad by a plague-infected rat. "Bat the Rat" which seeks habitation only in filthy and secluded surroundings by the direct method of cleaning-up.

The spirit of Clean-up is abroad in the land. It is estimated that 2,500 cities and towns on this Continent are conducting their own campaigns against dirt and filth this spring. We cannot afford to be derelict in carrying on this good work. We have made an auspicious beginning, and our record of last year should be bettered if necessary. What is most essential is that we should profit by the lesson of Clean-up Week, which is to acquire the habit of cleaning-up as a personal obligation and to make it continuous the year around.—Bureau of Municipal Research, Philadelphia.

MAKING A TOWN.

The receipt for the making of a "heavy dragoon" is to be found in "Patience." The receipt for the making of a good old English town is after the same pattern. You begin with the Roman which is the orthodox beginning, unless your town is of still older lineage, and has a British origin. Next, you have the Saxon, the builder generally of the castle that guarded the town. To the Saxon you must add the Dane, and his part seemed to be to stir things up and make a little liveliness. After the Dane, the Norman, and long centuries of wars and sieges, and growth in spite of them, and so down to Charles I. and his own particular siege. With Cromwell your town was finished; after that there was peaceful progress, and commercial prosperity.—Christian Science Monitor.

CONCERT ON TELEPHONE IN WAR ZONE.

"We have a concert on the telephone every night," says Bombardier McCausland, of the Royal Field Artillery, who is back in Flanders again. "We buzz each other up beforehand and announce the program. There are seven different persons on our lines and we don't half let it go. When we finish someone else has a go. We give the infantry in the trenches and the chaps at headquarters a little harmony with mouth organs and vocal contributions. Sometimes our telephone concerts are broken off abruptly when the enemy makes an attack."



GEORGE WASHINGTON STEPHENS,

THE STUDY OF MAN.

The greatest of all studies is that of man himself as he is to-day. A scientific investigation of man must be based primarily upon the individual, who is the unit of the social organism.

If we are ever to have sufficient definite knowledge of living human beings that may become a science, it can only be done by the careful study of large numbers of individuals. The more thorough the study and the larger the number, the more useful such investigation can be made to society.

As in machinery we must first repair the wheels out of gear, so in society we must first study the criminal, crank, insane, inebriate or pauper, who can seriously injure both individual and community. Thus a worthless crank, by killing a prominent citizen, can paralyze the community. The injury from such action is often beyond calculation. Governments pay out millions to catch, try, and care for criminals, but give very little to study the causes that lead to crime.

The study of man, to be of most utility, must be directed first to the causes of crime, pauperism, alcoholism, degeneracy, and other forms of abnormality. To do this the individuals themselves must be studied. As the seeds of evil are usually sown in childhood, and youth, it is here that all investigation should commence, for there is little hope of making the world better if we do not seek the causes of social evils at their beginnings.

The most rigid and best method of study of both children and adults is that of the laboratory, with instruments of precision in connection with sociological data. Such inquiry consists in gathering sociological, pathological, and abnormal data as found in children, in criminal, pauper, and defective classes, and in hospitals. Such experiments or measurements should be made as are of interest not only to sociologists, psycho-physicists, and anthropologists, but also to physiologists and pathologists.

—Arthur MacDonald.

LOW FIRE LOSS.

Regina's remarkably low fire loss since the introduction of motor fire fighting apparatus has attracted widespread attention. The report of the fire chief covering 1914 shows the per capita fire loss to be 90c, and this figure is based on an estimated population of 43,000, although the official city estimate is 50,000. It will be seen from these figures that Regina holds a unique place from the point of fire loss and can compare favorably not only with Canadian and American cities, but even with those of the British Isles.

Civic Patriotism

By GEORGE WASHINGTON STEPHENS.

If we are to understand our obligations of citizenship in Canada to-day, we must, first of all, know Canadian history, for through the struggle, sacrifice, devotion and loyalty of the French and English pioneers, the Canada of the 20th Century was made possible. To know the facts of Canadian history and understand them, means the removal of almost every misunderstanding and narrowmindedness that exist between the two dominant races. I propose, therefore, very briefly, to review the fundamentals of our historic past, particularly the relationship of the great rival nations toward the close of the 18th Century.

To consider for a moment at what was happening at that time on the North American Continent and in Europe, England had just lost the Southern half of the North American Continent through the War of Independence; the French Revolution was just breaking out in France; the rise of Napoleon who, in a few years, was to dominate the entire Continent of Europe, was then just beginning; this was also the hour of the birth of the United States—our great neighbor to the South; and the Canada of that day consisted of isolated units—Nova Scotia, New Brunswick and Quebec.

Quebec extended from the Saguenay in the East to the Ohio River in the west, and the furthestmost Western habitations were on the shores of Lake St. Francis, just west of the Island of Montreal.

At this time the population of Quebec consisted of 80,000 French and 400 English. The French had already been in the country for nearly a century and a half, and as yet the Province of Ontario was unborn.

The problems of governing a community composed of 80,000 French and 400 English, from the Colonial Office in London, was as impossible then, as it would be now; far more so, for England at war with France and the United States, had no time to consider the problem of government in Canada, and the lack of swift ships made international relationship clumsy and unworkable. By the Quebec Act of 1774, however, a way was thought to have been found to give to the population of that day, residing within the limits of Quebec, a satisfactory administration. Equality of religion, language and customs had already been accorded to the French, but self-government was still unsolved.

A compromise in the Quebec Act took place, whereby the Government was practically in the hands of a nominated legislative body. This, however, could be but a temporary expedient, as it left the population quite helpless as to self-government, the nominated council practically did as it chose, without regard to the feelings of either the English speaking or the French speaking population.

With the closing of the American War of Independence occurred the coming of the United Loyalists to Canada, and the emigration from the States of North Carolina, Virginia, Pennsylvania, New York and Vermont, of all those who determined at any cost, to seek a home under the protection of the British flag.

Some of these people, as we know, settled in Nova Scotia, but we are interested for the present only in the group who came, through hundreds of miles of virgin forest, along the trails of the Indian, to the shores of Lake Ontario, suffering untold privation and hardships, but bringing to Canada a race of sturdy citizens, whose descendants have contributed in no uncertain manner to her greatness and integrity. To this movement we must credit the founding of the Province of Ontario. So filled with loyalty were these United Empire Loyalists, that fifteen townships in the Province of Ontario were christened after the fifteen children of George Thrid of England.

Then came the Constitutional Act of 1791, which gave to Quebec a Parliament of her own choice, with the right of appeal to the Crown, still, leaving, however, the whole question of Government dominated by a non-elective Council. Later on the War of 1812, between Great Britain on the one hand, and France and the United States on the other, broke out.

The history of Canada shows that from 1790 to 1841 the French-Canadians of Quebec were doing what the English-Canadians of Ontario were doing—fighting for representative government—for the very same thing that England fought for in 1663; what France fought for in 1792, and, in fact, what every nation has fought for, in the breast of whose people has burned the love of liberty, from one end of the world to the other.

In 1841 came the Act of Union, which brought together in national wedlock, Upper and Lower Canada, under an

agreement, which gave to them representative Government, control of the public revenues, and equality of language, religion and customs. The preliminary representation of that day consisted of forty members from Quebec and forty members from Ontario, notwithstanding the fact, that the population of Quebec was 200,000 more than the population of Ontario. It is significant to note here, that the French Catholic majority of Quebec, had already conceded separate schools to the Protestant minority of Quebec, before the Union. The English Protestant majority of Ontario granted to the French Catholic minority of that province separate schools, twenty years after the Union.

We must not forget that in the rebellion of 1837, which preceded the Union of Quebec and Ontario, the fight was not a fight of English versus French-Canadians, but a fight of the English and the French-Canadians of both Provinces of Quebec and Ontario against the Mother Country, for representative government hitherto denied them by the Mother Country, and which came to them under the Act of Union in 1841.

Then followed a period of administrative construction, joined in loyally by French-Canadians and English Canadians, and out of which came the possibility of Confederation, which took place in 1867.

The French-Canadians, led by that distinguished man, Sir Etienne Cartier, decided to choose the greater destiny of a united Canada, instead of an isolated Quebec—surely a broadminded point of view from their standpoint. Again in 1868, when the Northwest Territories were added to the Dominion of Canada, the French-Canadian showed his broader view and generosity, and helped in their acquisition. Again in 1871, when British Columbia was taken in, out of the 67 in the Canadian Parliament, who voted against it, only 15 were French-Canadians.

I cite these cases of national importance where, in the history of Canada, the French-Canadians have shown a broad spirit of generosity and citizenship, in order to dissipate the wrong impression one meets so frequently, which seems to imply that the French-Canadian is narrow-minded, ungenerous in the consideration of public questions, and extreme in his religious views. The French-Canadian is loyal to his language and his religion. He would not be worth much if he were not, any more than should we Canadians of English descent, forsake the ideals of our race.

It is that very loyalty to religion, to language, to ideals, that makes the presence in Canada, of these two great races, possessing these strong national traits, a matter of national pride and satisfaction.

The race question exists in one form or another the world over. Great Britain has it, and there in the home of the greatest freedom in the world, the Welsh people have preserved their language, the Irish people have preserved their language, and the Scotch have preserved theirs, without causing anything more than a healthy rivalry, which, perhaps, has contributed more than would appear, to the greatness of our mother country. Germany has it. Italy has it. The United States has it. Russia has it, but nowhere does there exist a finer example of race development than is to be witnessed here in Canada, where the descendants of two races, each group a pioneer, each contributing equally to the development and the destiny of the Great Dominion, are working hand in hand toward a common destiny.

I have used the mantle of civic patriotism as an excuse to explain what I believe to be the starting point of citizenship in our country, for it is essential that all Canadians should be familiar with, and understand the origin of, the citizenship of to-day, in order that the citizenship of to-morrow may be worthy of the sacrifices made by our forefathers, and the destiny of a great country.

Canadian citizenship implies, therefore, a just recognition of the two great languages belonging to the joint founders of Canada.

Canadian citizenship implies a just respect of the race ideals possessed by English and French alike, a respect that leads to the admiration of the good, and not the condemnation of the bad qualities we each possess.

Canadian citizenship implies an individual effort on the part of each individual French and English-Canadian to understand the other.

Canadian citizenship implies a duty to learn and speak the two languages of our country, if only to promote a better understanding between the two great races, upon which alone can be built a Dominion worthy of the past.

(Continued on page 221.)

REVIEW OF CIVIC IMPROVEMENT

Conducted by

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

CITY IMPROVEMENT LEAGUE OF MONTREAL

Past President:

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

President:

Hon. J. J. Guerin, M.D., LL.D.

Hon. Vice-Presidents:

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

Vice-Presidents:

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

Hon. Treasurer:

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

Hon. Secretaries:

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

Executive Secretary:

W. H. Atherton, Ph.D.

221 Coristine Building. Phone Main 4362.

The following are the rates of subscription:

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

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

SIXTH ANNUAL MEETING OF THE CITY IMPROVEMENT LEAGUE.

The Chair was taken by the Hon. J. J. Guerin in the absence of Dr. J. G. Adami, the President, on service at the front.

Dr. W. H. Atherton was then called upon to present the Sixth Annual Report for the season of 1914-15. The Report is in part as follows:—

The Annual Meeting for the season of 1913-14 was held in the rooms of the Architects Association of the Province of Quebec on April 23rd, 1914. On that occasion resolutions were passed to the following effect:—

(1) That the adoption of the Canadian Municipal Journal as the Official Organ of the League having proved a success the same methods should be continued.

(2) That the City Improvement League welcomes the advent of the Montreal Publicity Association into City Improvement affairs, and that it be asked to become the publicity committee of the League.

(3) That the League approves of the movement for the formation of a Canadian Municipal League, or an association of such name on the lines of the National Municipal League of America, with the object of organizing a central clearing-house of Canadian Expert civic thought and operations.

(4) That delegates be appointed to the City Planning Congress to be held in Toronto on May 25th, 26th, 27th, under the joint auspices of the Dominion Commission of Conservation and the International City Planning Congress.

(5) That the League welcomes the action of the Quebec Government in the recent housing legislation, affording facilities for co-operative companies to build workmen's model dwellings and also for the Provincial Government's latest act empowering the Montreal Metropolitan Park

Commission to obtain funds to commence a plan for the City and Island of Montreal.

(6) That delegates be appointed to present petition to the Quebec Legislature to establish a Domestic Relations Court—a movement initiated by the Charity Organization Society of Montreal.

The action taken in conformity with these resolutions may be thus reported.

(1) With regard to the Domestic Relations Court, while the preliminary hearing of the movement was well received at Quebec, the event of the intervening war has temporarily caused the cessation of progress.

(2) With regard to the Official Organ this has been sent to each of the members at the expense of the League during the past twelve months. A certain amount of space in the Canadian Municipal Journal has been reserved to movements and reports of the League, and in the other pages general information has been provided such as would be likely to interest the student of civic affairs of Montreal and other Canadian Cities.

(3) The co-operation with the Montreal Publicity Association has been very close; it having become largely identified with the League, under the title of the Montreal Publicity Association City Improvement Campaign, and has acted as the Central Committee in the City for the promotion of the Annual City Clean-Up Week, which occurred early in May last.

The movement was particularly successful last year—all classes of the community joining in it, the Mayor and Corporation and its departments, the clergy of the city, the manufacturers and merchants and the chief public corporations and sociological associations.

The result in the betterment of public health especially in the diminution of infantile mortality, and also in the decrease of fires has been officially noticed by City Hall officials. The same movement will be repeated this coming month by the same joint committee—the special week to conclude the campaign being appointed by the Mayor for May 16th to 22nd.

It is high praise for the clean-up movement to say that already on April 29th, of this year few remember having seen the city so clean and healthy looking before.

(4) The progress of the movement for the promotion of a Canadian Municipal League and the Toronto City Planning Congress may be reported conjointly.

At a large gathering of Canadian delegates to the Congress the above movement introduced by your Executive Secretary, was warmly approved as a much needed vehicle for the intercommunication of Canadian Civic endeavor. Before its inauguration, however, it was thought necessary as the first step to petition the Dominion Government to form a special bureau of Housing and City Planning in connection with the Commission of Conservation, which should act as the official bureau to assist and co-ordinate all the City Planning and Housing movements being initiated by the civic organizations and municipalities of the Dominion.

Your Secretary was one of the two delegates appointed to approach Sir Clifford Sifton to this end, with the result that the Central bureau has now been organized under the able directorship of Mr. Thomas Adams, the English City Planner, who has come to Canada especially for the purpose.

The City Improvement League of Montreal, which has taken especial initiative in the City Planning propaganda, Montreal may look to this new development as one likely to be very valuable, even to the situation in Montreal.

The formation of the Canadian Municipal League of unofficial students of civic problems is all the more desired to supplement the official bureau just created. Steps are being taken and the promotion of this has been carried on by the League during the last twelve months in its official organ.

In the matter of local city planning and housing reform, the interest of the League has not abated. It has collected information on what is being done in Europe and elsewhere.

Naturally, little has been done anywhere during the war, and consequently the local situation represented by the Metropolitan Parks Commission of Montreal, which was brought into being through the League, has received very little modification. Nor have the special facilities given by the Quebec Government for co-operative companies desiring to build model workmen's dwellings, been much utilized, if

at all, for the same reason of the crisis caused by the war, still unhappily pending.

During the year the League has co-operated in several public movements.

The Report of the City Improvement Campaign Committee was then presented by Mr. F. A. Covert, of the Montreal Publicity Committee:—

In presenting a report of the work of this Committee, last Spring and outlining our present campaign, I wish in beginning to convey to your body, the thanks of the Montreal Publicity Association for the assistance rendered in counsel and work, by so many of your officers and members.

To my mind the support received from the City Government, and the hearty co-operation of city officials, the members of your organization, and others, with the M. P. A., was and is what is making the "Clean-up" movement successful. No one body is entitled to all the credit, although a great deal of credit must be given to the members of the City Improvement League, because the hard work done by them helped to a great extent to make the movement a success.

The tangible results of last Spring's campaign, may be briefly summed up as follows. For May, 1914, 34,420 tons of garbage were removed by the Incineration Dept., which was 8,798 tons more than removed in May, 1913, and this constituted a record month for the department.

The year 1914 saw a decrease in deaths of children, under five years of age, of 373 as compared with 1913. This, in face of an increased birth rate. The Medical Health Officer, Dr. Boucher, says there were two causes for this. One, the Pure Milk Stations, and the other, the "Clean-up" campaign, and he is willing to give half the credit to each. In doing this, I feel he is perfectly safe, because up to May the death rate increased over the previous year, and it was during the eight months effected by the "Clean-up" movement that the decrease took place. This being so, while all credit must be given to the great work done by the Milk Stations, I feel we can safely believe that the saving of these 187 children was due to the cleaner state of the yards and lanes, brought about by the Clean-Up campaign.

From the standpoint of Fire Prevention, Chief Tremblay says it is difficult to put it in figures, but although January, 1914, was an abnormal month for fire calls, owing to the water famine, the total calls for the year were practically the same as for 1913. And that May, 1914, the number was the least in years. This being so, he thinks the campaign has done a good deal along the lines of Fire Prevention.

Another result which we must not lose sight of, was the greater awakening of a feeling of citizenship responsibility on the part of the great mass of the citizens. This is in evidence this spring, as we find that many are already cleaning up, and therefore showing that they are willing to do their part toward civic betterment.

There is one other feature of this movement which I want to bring to your attention, and one which I feel has great possibilities for the future. That is the spirit of co-operation growing between the City Government and the citizens, whereby they are joining forces for the better well being of the city. If this co-operation can achieve so much for the cleaning of the city, surely the same co-operation can be used for other purposes of city work and city government. And if this is carried into other phases it will mean great benefits not only to our city, but to other cities which will follow Montreal's example.

To these tangible results must be added the cleaner aspect of the city generally, and especially of the yards and lanes. It is a fact admitted by all that these were cleaner last summer than ever before.

Coming to the present campaign, the main features of our work will be beginning next week, the distribution of 50,000 educational booklets, and 50,000 "Health Helps" and "Fire Prevention" cards, in both languages. The distribution of these will be by the Fire Department. The showing of three special picture films in the moving picture theatres. And the holding of ten mass meetings, under the patronage of aldermen, throughout the city. The programme of these meetings will be a lantern slide lecture, and a few short speeches, which will, we trust, place very clearly before the citizens the benefits of cleaning-up. Then on the 15th all priests and pastors will, we trust, preach on the "Clean-up" idea. The results of this campaign we expect will be much greater than last year's, and will make our city much more healthy and more beautiful than ever before.

F. A. COVERT, Chairman.

The Report of the "Garden" Committee was presented by Dr. Atherton, in the absence of Mr. Ware, as follows:—

At a meeting of the Executive of the City Improvement League recently Mr. A. B. Ware proposed that a Garden Committee to promote the Employment of Vacant Lots for Vegetable Gardens. After hearing Mr. Ware, the elected the following as Executive Committee: Mr. U. H. Dandurand, Chairman; Dr. W. H. Atherton, Hon. Treasurer; and Mr. A. B. Ware, Hon. Secretary. The Chairman, Mr. U. H. Dandurand, donated the use of offices free of charge in his building, corner St Denis and St. Catherine Streets. Dr. Atherton immediately sent out letters appealing for funds with results as follows: Hon. Ls. Beaubien, \$25; Hon. Senator Dandurand, \$25; Hon. S. Fisher, \$25; J. L. Perron \$25; Mr. Bartlett McLennan, \$25; Miss A. McLennan, \$25; Miss I. McLennan, \$25.

Meetings of the Executive were held daily up to the present time, and the Press was appealed to, which resulted in a vast amount of publicity, bringing into the movement numbers of others, and enlarging the scope of organization. Mr. Joseph Watson, a practical gardener and vegetable grower, for a number of years, and who is also editor of "Garden Life" was added to the Committee, with the result that an appeal was made to the Mayor and the Board of Control for a plot of land for a demonstration Vegetable Garden, which was given, the site being Baldwin Park, corner Fullum and Marie Anne Streets, of which Mr. Watson will have charge, the seeds being donated by Messrs. Dupuy and Ferguson. There are two schools in the neighborhood, the scholars of which will be brought to the Garden and shown and instructed as to the manner of seeding and cultivating, and when the schools gather again in September, there will be shown the results of said cultivation.

The Backyard cultivation movement is going very well for the first year, and to encourage the same, the firm of Geo. Tanguay, Ltd., of Quebec has donated \$50 money prizes, 5 prizes of \$5 each and 25 prizes of \$1 each, to be given to those securing best results by using their "International Fertilizer," 20 pounds of which and 12 packages of seeds are sufficient for 10 garden beds, 12 x 5. It is also applied to those using their Fertilizer for the cultivation of vacant lots.

Of course, the full report of the operation of this Committee we are not giving at the present time, but this will be issued in the following year to the members of this League.

More lots have been donated than the League can make use of, and a number of them have already been apportioned to applicants, and further applicants are awaiting approval.

Mr. J. F. Boulais, N.P., Honorary Treasurer, reported as follows: Balance over from 1913-14, \$281.00; receipts, 1914-15, \$721.00; expenses, 1914-15, \$767.07. Balance \$155.28.

Before preceeding with the election, a letter was read from the President, Dr. Adami, resigning nomination to presidency, owing to absence on military duty. This drew a number of encomiums on the services rendered by Dr. Adami during his six years of office.

The officers elected were as follows:—

President, Dr. J. J. Guerin, ex-mayor of Montreal; past-president, Dr. J. G. Adami; honorary vice-presidents, the presidents of the Board of Trade, and the Chambre de Commerce; vice-presidents, Mr. Farquhar Robertson, Harbor Commissioner; ex-Ald. U. H. Dandurand and Victor Morin, LL.D., and Mrs. J. B. Learmont; hon. treasurer, Mr. J. F. Boulais, N.P.; Hon. secretary, ex-Ald. J. U. Emard, K.C., and Mr. C. H. Gould; executive secretary, Dr. W. H. Atherton.

In this list there is a goodly representation of men who have already been in municipal life, and who wish still to work for civic reforms.

The new President, Dr. Guerin, ex-Mayor, then thanked the meeting for the honor it had conferred on him. The following new movements were then discussed, and were reported next day in the Montreal "Gazette" as follows:—

"To get the trees in the city parks and on the public streets ticketed with their botanical and common names, and to secure the passing of such a by-law that in future no misguided individual can erect an unsightly building on a street where the other houses conform to a certain standard of architectural beauty, are two improvements to which the Civic Improvement League gave its sanction at the annual meeting last night by delegating members to bring influence on the city administration and government to legislate and order accordingly.

(Continued on page 221.)

Municipal Finance

JAMES MURRAY.

LIMITING THE BORROWING POWERS OF THE MUNICIPALITIES.

In last months' Journal we reported the introduction of a bill in the Ontario Legislature to limit the borrowing powers of the municipalities of that province. The bill passed the first reading but was turned down in Committee. So that our readers may get an idea of its reasons and purposes, we got into communication with one of the promoters with the object of getting some data. In reply we received a statement, part of which is given below, and without offering any comment, we would commend our readers to follow closely the arguments set forth as, no doubt, the measure will be brought up again and if successful in Ontario it will be introduced into the other provincial legislatures, so as to get a uniform law on the borrowing powers of Canadian municipalities.

MUNICIPAL BORROWINGS.

"There has been a growing feeling throughout Canada, England, and the United States that quite a few of the municipalities in Canada have been borrowing too freely. The municipalities in question would reply that it was not so, for they are well within the limits of safety as set by the Government of the Province in which they are situated. Unfortunately, the municipalities have been right in this contention. In fact one of the biggest sinners in this respect has already borrowed over \$300 per head, yet this municipality is not much beyond half of their limit of borrowing power. This is typical of many other cases which could be mentioned.

"It would appear absurd that any municipality should be permitted to have a total debt per capita four times as high as the total debt of the City of Toronto stands at the present time and yet such is the case with one municipality in Canada. And quite a few municipalities will not reach their limit of borrowing power under present laws until they borrow from three or four times the amount of the total debt per capita that the City of Toronto has already borrowed. The seriousness of this absurdity lies in the fact that the invested savings of many of our most conservative institutions and individuals are unduly risked, and if losses come to such they will be very heavy indeed. The pity of it will be that they could have been prevented by legislation which would effectually limit a municipality from borrowing beyond the point of safety.

"The basis of limitation of municipalities to-day lies, in almost every province, in the assessed valuation for taxation. Now it so happens that the assessment of any municipality reflects the selling value of the properties assessed. Wherever real estate values are unduly inflated a municipality can hardly avoid having an unduly inflated assessment. Many who do not intend to hold property are only too glad to have it assessed at a high figure, in order that the property can more readily be sold for a good price. As a consequence we find assessments unduly inflated wherever there is a real estate boom.

"Coupled with these conditions, you nearly always find a spirit of optimism among the people which does not hesitate to borrow against the future, just as much for present improvements as they possibly can. As a consequence boom conditions which inflate assessed valuation for taxation also tend to excessive debenture debts. Such real estate booms have recently hit not only one municipality but many, and as a result a great deal of criticism has been levied against some Canadian municipalities on account of their excessive borrowings. The regrettable part of this fact is that the borrowing powers as set by the Government does not begin to approach the margin of safety, but it is left rather to the fear of the investor to limit municipalities from borrowing further. Unfortunately, there are so many investors who buy without even understanding how to analyze a municipal debenture security that a great deal of damage can be done before the public generally wake up to the danger.

"It is necessary, therefore, for some method to be devised

which would prevent inflated assessments from being the basis of borrowing power. The Bond Dealers' Section of the Board of Trade had a committee work upon this problem, and the committee came to the conclusion that a municipality could afford at a pinch to pay a net debt of 20% of a conservative assessment. A tax rate of 14½ mills on the dollar would pay off such a debt at 6% in 30 years. It should be kept in mind that a municipality has considerable other expenses to pay for out of taxes than the interest and principal payment on their debentures, so 14½ mills for debenture purposes alone is quite stiff enough and should be the outside limit. Therefore, it was concluded that a 20% debt basis on a conservative assessment would be the logical limit.

"The problem was to discover a conservative assessment, but upon analyzing many figures it was concluded that in municipalities of 10,000 or over, an assessment of \$1,000 per head is conservative; in cases of municipalities of over 2,000 and under 10,000 an assessment of \$750 would be conservative; in the cases of municipalities smaller than 2,000, an assessment of \$500 per head would be conservative.

"A 20% debt of such an assessment resulted in a debt limitation in a per capita basis of \$200 in the case of municipalities of \$10,000 or over; \$150 per capita in the case of municipalities between 3,000 and 10,000 population, and \$100 per capita in the case of municipalities under 2,000 population. This limitation would help considerably in avoiding the dangers incidental to inflated assessment, but it would not avoid the danger of a municipality whose assessment was very much below the average. Therefore, it was felt advisable to retain the present legislation as to borrowing power which prevails in the Province of Ontario, and which provides that municipalities shall stop borrowing with a tax rate exclusive of schools and local improvements which exceeds 20 mills on the dollar. In this way we have the limit of borrowing power guarded against assessments which are unusually high, on the one hand, or unusually low assessments on the other.

"It will be noted that the bill does not speak of per capita assessments for it was felt that it would be a sheer impossibility to limit the assessments in any way. The assessed valuation must necessarily follow the selling value of the property, and no legislation has ever yet been devised which will prevent prices from soaring beyond fair average values at times. The bill, however, by limiting the debt at so much per capita, really takes into consideration, as explained above, a conservative uninflated assessment, and allows the municipality to borrow up to about 20% of such assessment.

"As the per capita basis is adopted in this bill, it follows that a census must be taken at least annually. Surely this is only as it should be. The number of people in a place have a very direct bearing upon the question as to whether a municipality should borrow further or not. Furthermore, investors are entitled to know, and they invariably demand to know what the population is before buying the bonds of a municipality. While it might be extremely difficult to take a census on a given day in each year, it was felt that if a census were taken by the assessor at the same time that he strikes the assessment roll, there would be considerably more accuracy obtained thereby than at present prevails, and the figure compiled by this kind of census would furnish a fair basis for municipalities to figure out just what their per capita assessment and per capita debt really is.

"In conclusion, I would again remind your readers that this legislation will disturb the present borrowing power of only two municipalities in the province, in so far as my figures show, and it will be no hardship on these municipalities or any other municipality which may at a later date be similarly situated, if they can show their public utilities are sufficiently self-sustaining that their net debt is on a conservative basis.

"The bill, if passed in its present form, will for all time eliminate the danger of Ontario municipalities borrowing on the basis of sheer optimism alone. If the Province of Ontario passes this bill, it will probably lead other provinces in Canada which need the correcting influence much more, to pass the same sort of legislation, and as a consequence the credit of municipalities generally throughout the entire Dominion will be greatly enhanced, and the municipalities will be able to borrow money at more reasonable rates."

REPAYMENT OF MUNICIPAL LOANS IN AMERICAN FUNDS.

The "payment in United States funds" clause, which appears in the recent issue of \$6,100,000 City of Montreal three years five per cent bonds that was sold to a syndicate composed of C. Meredith and Co. of Montreal, Wood Gundy and Co. of Toronto, and N. W. Harris and Co. of Montreal and New York, seems to have raised the ire of some patriotic Canadians, who cannot understand why Canadian loans should not be paid back in Canadian money. This sentiment one would commend if the bulk of Canadian municipals were sold in this country, but as a matter of fact they are not. Before the war British investors took up the bulk of our securities, but since the war started, owing to the British government not allowing any money to go out of country, the larger Canadian municipalities have sold their securities in the American market. The investor there, by insisting that the interest and repayments be made payable in American money saves change—which of course has to be paid by the at least one half of one per cent—the rate of ex-borrowers. The smaller municipalities still place their loans amongst Canadian investors, and consequently save this half per cent, but as the only market at present for the securities of the large cities is that of the United States, it is only reasonable that the wishes of this market be met.

"SIMPLE ENGLISH WANTED IN MUNICIPAL FINANCE."

Mr. R. L. Jones, of Insurance fame, in a recent address before the Insurance Institute of Toronto, made an appeal to use simple English in the wording of insurance policies. He said in part, "The policy should be drawn up in every day language; all verbose and lengthy wordings should be avoided, and legal or semi-legal phraseology entirely shunned." This common sense advice need not be confined to insurance policies, but if followed in municipal finance—in the preparing of annual statements and reports—a better understanding by the average alderman of what it means would be the result. Many of the annual financial statements of municipalities that have come to this office are hardly understood by our own accountant, and it is absurd to expect members of councils to follow intelligently their contents. One dare venture to say that if there was an exchange between municipal officials of the financial statements for 1914, one half would not be understood at all, and probably three-fourths of the statements only understood by a few. Mr. H. J. Ross in an article in last month's Journal in urging uniformity in accounting gave a number of instances where technical words had different meanings in different localities, which article, because of its importance, the Journal has reprinted for the use of municipal clerks and auditors. A copy will be mailed to anyone desiring same.

GALT, ONT.

The issue of City of Galt \$15,000 5½ per cent twenty-year bonds was sold to Messrs. Martens and Company, Toronto. 18 bids were received.

MIDLAND, ONT.

There were nine bids for the \$40,000 Midland School Debentures, which were awarded to Messrs. Wood, Gundy and Co., Toronto.

Municipal Financing

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

Wood, Gundy & Company

Head Office:—Toronto

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

A. E. AMES & CO.

ESTABLISHED 1889.

INVESTMENT BANKERS

UNION BANK BUILDING
TORONTO

—PURCHASERS OF—

GOVERNMENT AND
MUNICIPAL ISSUES

CORRESPONDENCE INVITED

MUNICIPAL DEBENTURES

BOUGHT AND SOLD

SPECIAL FACILITIES IN THE
UNITED STATES AND ABROAD

COMMUNICATIONS FROM
- MUNICIPALITIES SOLICITED -

R. C. Matthews & Co.

Standard Bank Building,
TORONTO

Cable address: "MATCO."

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

W. L. McKinnon & Co.

DEALERS IN

Government and Municipal Debentures

McKinnon Bldg., Toronto, Ont.

PHONE ADELAIDE 3870

Cable Address: "MAKINOPET," Toronto.

Codes Used: "FIFTH MONTGOMERY,"
"LIEBERS,"

"WESTERN UNION."

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

A CITY BUYS ITS OWN BONDS.

The wisdom, or otherwise of a city buying its own bonds from its sinking fund at an interest rate of $3\frac{1}{2}$ per cent only, was discussed last month in the City Council at Ottawa. The discussion rose over a 10-year debenture issue of \$240,000, the funds being required to meet an issue of debentures falling due May 1st. The point at issue was the $3\frac{1}{2}$ per cent rate, and its pros and cons are best illustrated in the discussion between Controllers Fisher and Ellis, given below.

Controller Fisher, who looks after the finances of the city, objected to the rate as being too low. In moving a 5 per cent amendment, he said that he has sought the advice of men in high standing in the financial world and all condemned the investment of sinking funds in $3\frac{1}{2}$ per cent debentures at par. The Controller said, in part:—

"In Cities like Winnipeg and Westmount, where they had sinking fund trustees, when they bought their own debentures they were bought at the market rate.

A sinking fund serves two purposes. The first purpose is to provide a means of meeting debentures when they become due. The ratepayers pay a certain sum each year, and these sums are put out at interest. The amount paid in, together with interest, must make up the amount borrowed, when it becomes due. The higher the rate of interest earned on money paid in annually the less the ratepayers have to pay.

"There has never been a time since I have known anything about business when money could not earn $4\frac{1}{2}$ per cent at least. Notwithstanding this, the city of Ottawa has for years been estimating the yearly payments to be made by ratepayers on an assumption that the money paid in will only earn 3 per cent. Each year the ratepayers are paying thousands of dollars more than would be necessary if the sinking funds were invested in a businesslike manner, and made to earn all that they can earn consistent with safety.

"What we have done in Ottawa is to put a large amount of our sinking funds in the bank at $3\frac{1}{2}$ per cent. We have been allowed by the bank to borrow at $3\frac{1}{2}$ per cent an amount equal to the sinking fund. In practice, though not in theory, we have borrowed our own sinking funds at $3\frac{1}{2}$ per cent.

"So far as general sinking funds are concerned, that is the sinking funds to which all the ratepayers contribute, it may be argued that no harm is done if the city borrows this money at a small rate of interest. If the ratepayers generally only get a small rate on their sinking funds, they pay only a small rate of interest. The answer to this argument is: Neither does it make any difference if you pay a high rate of interest. All the money you pay in interest goes to the benefit of the ratepayers. The more the sinking funds earn, the sooner the ratepayers stop paying on the debentures.

"As regards local improvement debentures, the matter is different. If you ask the ratepayers on a street to pay for a pavement by instalments they are entitled to credit for every cent their annual payments can earn to reduce these payments. We have no right to make a group of ratepayers pay more for a pavement, or any other work, in order that the city generally may borrow its money at a rate less than it would bring if loaned to other parties.

"But the sinking funds serve another purpose. They are a security for the debenture holder—the person who lends the money—for the payment of the debt when it becomes due. He has a right to know that the money required to pay his debentures is being accumulated and that the accumulations are being properly invested.

"Any municipality that gets a reputation for looking after its sinking funds in a businesslike way attains a strong financial position. For this reason some of the best managed cities have appointed sinking funds quite independently of the other civic finances. On the other hand, if the impression gets abroad that the sinking funds are used for financing the city generally, the credit of the city suffers.

"There is, in the long run, no advantage in borrowing sinking funds at a rate so low that it cannot be justified. If you pay less out of one pocket, you pay more out of another. By affecting the general credit of the city this course may result in large losses. The city of Ottawa will in the next few months have to borrow two million dollars. Anything that would affect the sale of these debentures to the smallest extent would be a serious matter. One point only means \$20,000 lost or made by the city."

Controller Ellis, an ex-Mayor of the city of Ottawa, who for many years has taken a keen interest in municipal finance, and who was the father of the lower rate scheme answered in part:—

"That 3½ per cent was a reasonable rate, because it was proposed to invest the debenture in the interest and sinking fund of debentures already issued on which the estimated earnings had been based on three per cent. The 3½ per cent rate not only did not prejudice the security for these debentures but enhanced it. With the 3½ per cent rate the interest and sinking fund would be fully matured before the due dates of the debentures. The only reason that there might be for the rate suggested by Mr. Fisher was in case the city sold debentures. There were two kinds of investments of the city's debentures in its own interest and sinking fund. If the city was going to take a debenture with fifteen years to run and invest a twenty year debenture in it, in fifteen years the city would have to sell the investment debenture. In that case he would agree with Mr. Fisher. The rate of interest should be high enough for the debenture to sell at par at any time. But this was not the case. The city was investing a ten-year debenture in the sinking fund of debentures none of which matured for fifteen years at least. There would be no occasion to sell the invested debenture.

"If, by accident, the city had to sell the invested debenture, the Municipal Act provided that the city might, with the consent of the Ontario Railway and Municipal Board, increase the rate of interest to the figure required to bring par. Before the debenture was invested the city would get the approval of the Ontario Railway and Municipal Board. If it did not approve of the 3½ per cent rate it could be increased to whatever the board required."

SOME BOND SALES DURING MAY.

Preston, Ont.

Messrs. C. H. Burgess and Company purchased during the week 28,775 Preston, 6 per cent, 30-instalment debentures. The price paid by the successful bidder works out at 107.42.

Windsor, Ont.

Messrs. W. A. Mackenzie & Company secured the Windsor issue of \$244,000, which includes \$100,000 30-instalment 5's for school purposes, and \$144,098 5½, 20 instalments, for street lighting purposes.

Listowel, Ont.

Dominion Securities Corporation purchased \$17,000 5½ Listowel, 20-instalment debentures. The price paid was 100.76.

Rochester.

Messrs. W. L. McKinnon & Company purchased Township of Rochester \$2,387 6 per cent, 5 instalments, and \$1,783 6 per cent 10 instalments.

Dauphin, Man.

Messrs. Wood, Gundy & Company purchased \$11,000, 20-instalments, 5½ per cent, and \$25,000, 30-instalments, 5½ per cent Dauphin bonds.

Regina, Sask.

A syndicate, including the Dominion Securities Company, Meredith & Company, of Montreal, and Wood, Gundy and Company, of Toronto, secured 6 per cent three-year Regina notes to the extent of \$959,000.

Truro, N.S.

The issue of \$36,000.00 of Town of Truro Bonds authorized by the ratepayers were recently sold to Messrs. J. C. MacIntosh & Co., brokers of Halifax, at 99.30.

TORONTO.

The sale by public tender of \$4,533,000 city of Toronto 4½'s, maturing in 30, 33, 34 and 40 years, attracted widespread attention, inasmuch as the loan represented the first long-termed financing on a large scale since the commencement of the war. The highest tender—that of A. E. Ames and Co., Osler and Hammond and Wood, Gundy and Co., all of Toronto—netted the city 90.67 and interest. At this sale price the city is paying approximately 5.10 per cent for its money. Three other syndicates bid for the issue.

ÆMILIUS JARVIS

A. D. MORROW

ÆMILIUS JARVIS & CO.

MEMBERS TORONTO STOCK EXCHANGE

GOVERNMENT
MUNICIPAL
—AND—
CORPORATION
SECURITIES

JARVIS BUILDING - TORONTO

THE DOMINION SECURITIES CORPORATION LIMITED

ESTABLISHED 1901

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

Service to Municipalities

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

Correspondence Invited.

CANADIAN GOVERNMENT MUNICIPAL
AND CORPORATION BONDS

MUNICIPAL DEBENTURES BOUGHT

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

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

WM. C. BRENT.

HAROLD BRENT.

BRENT NOXON & CO.

DOMINION BANK BUILDING,
TORONTO

DEALERS IN

MUNICIPAL DEBENTURES

Highest Market Prices Paid

Correspondence Solicited

Nova Scotia.

The Nova Scotia Legislature at the recent session passed the following borrowing bills:—

Town of Shelburne..	1,500
Town of Pictou, buildings and plant ..	12,000
Town of Pictou, waterworks..	5,000
Town of Pictou, electric light..	5,000
Cape Breton, Belgian relief	15,000
Cape Breton, jail, hospital..	5,000
City of Sydney, maturing bonds	12,000
Town of New Glasgow, waterworks	15,000
Town of New Glasgow, market building	5,000
City of Halifax, miscellaneous	317,700
Town of Truro, general	36,000
Town of Bridgetown	3,000
Town of Westville	65,000
County of Cumberland, Belgian fund..	2,000
Town of New Glasgow, school building.	5,000
Town of Dartmouth, refunding	160,000

British Columbia.

The municipal department of the Province of British Columbia from April 19th to May 5th authorized loans which amounted approximately to \$1,000,000. Of this sum, \$630,000 are in the form of treasury certificates for South Vancouver. They are for three years, and will bear 6 per cent interest. North Vancouver for general purposes received authorizations approximating \$100,000.

MUNICIPAL DEBENTURE BY-LAWS APPROVED.

Recent by-laws approved by B. C. Inspector of Municipalities, Mr. Robert Baird, are as follows:—

Armstrong Schools, \$2,500, 10-year 6% debentures, certificated April 28.

South Vancouver Treasury Certificates, \$310,000, 3-year 6% notes, certificated May 3.

South Vancouver Treasury Certificates, \$320,000, 3-year 6% notes, certificated May 3.

North Vancouver City Local Improvements as follows:—
\$17,470, 30-year 6% debentures, By-law 171; \$8,825, 30-year 6% debentures, By-law 172; \$795, 30-year 6% debentures, By-law 176; \$3,780, 10-year 6% debentures, By-law 178; \$4,840, 10-year 6% debentures, By-law 179; \$2,365, 10-year 6% debentures, By-law 180; \$815, 10-year 6% debentures, By-law 181; \$6,445, 30-year 6% debentures, By-law 173; \$9,950, 30-year 6% debentures, By-law 174; \$3,955, 30-year 6% debentures, By-law 175—all certificated May 5.

REGINA'S CAPITAL EXPENDITURE.

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

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

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

Mayor Balfour and Commissioner Thornton, of Regina, were successful in negotiating the sale of about \$1,000,000 worth of debentures in Eastern Canada. The money secured through the sale of these debentures will be sufficient to finance the city for the balance of the present year, and it is not likely that the additional \$500,000 worth of debentures which the city still has on hand will be sold. A portion of the funds thus secured will be used in the construction of local improvements of a nature that will provide considerable employment. It is intended that these improvement works be completed prior to August 1st in order that all labor possible may be available to harvest this year's grain crop.

TILBURY TOWNSHIP, ONT.

The recent issue of \$23,320.95 5½ per cent 15-instalment bonds of Tilbury North Township, was sold to the Dominion Securities Company, Toronto. The price obtained being \$101.18.

WESTERN CANADA'S MUNICIPAL FINANCING.

The Toronto Monetary Times in a recent issue takes upon itself the task of advising Western Municipalities re their financing. In giving the article in full we would ask the municipalities to understand that the writer represents the investing public only—particularly the American buyer—but that public at the present moment is necessary for our municipal existence, and consequently its ideas and wishes must be considered.—Ed.

To date this year Canadian municipalities have sold about \$16,000,000 worth of their securities in the United States. According to authorities well posted on the situation, an excellent demand exists there for good Canadian municipal bonds. Several reputable houses, engaged for many years past in selling municipal securities, would, under certain circumstances, purchase the bonds of towns and cities throughout Western Canada, being able to dispose of them without trouble to clients in the United States. A market is ready and so are the proper intermediaries. Western municipal financing, however, as a whole, has been such as to fail to make attractive to United States investors, Western Canada's municipal bonds. Some have been sold in the neighboring market, but an analysis of the situation indicates that only a small part of the available market has been tapped. Western Canada knows well that free and easy municipal financing has been in vogue during the past few years. Some of the troubles resulting from that policy are already being met. "The Monetary Times" has criticized these methods, and does so now, not to harm Western credit, but to point the way to better credit, to increased facilities for the marketing of bonds and to an extension generally of the present market for Western bonds.

For many years to come, the civic rulers of Western Canada will have a heavy volume of municipal securities to sell. For the time being, the English money market is closed to their applications for funds. After the war the English market will be busy with war loans and probably will be flooded with applications for capital, for other purposes, from all quarters of the globe. Canada will take its chances with other borrowers. Through force of circumstances, there may be less funds subscribed there for Canadian municipal applicants. Canadian banks can finance the civic authorities only to a certain extent. The Canadian investment purchasing power is limited. Therefore for the United States, which has vast wealth and is rapidly becoming an important lending nation, should prove to be a valuable market for Canadian securities.

The power of that market to absorb our bonds has been demonstrated in a striking manner during the current year. During the first four months of 1914, Great Britain took 73 per cent, and the United States 10 per cent of our securities. During the corresponding period of the current year, Great Britain has taken 30 per cent (only one loan of \$25,000,000) and the United States 55 per cent of the total securities sold, and representing 29 loans. But, broadly speaking, the United States is picking and choosing its Canadian bonds with great discrimination. Bond houses could sell a much larger volume of our securities in that market if those securities appealed to their clients. They do not appeal. The United States investor has gone through the municipal development "boom" in various states. He has seen municipalities fail. He knows what a municipality should and should not do. From practical experience he knows a good municipal bond when he sees it. He has been educated to a certain standard of municipal financing which he believes makes for safety in investment. In examining the bonds of many Western Canadian cities and towns, he finds that standard lowered to what he believes is a dangerous point.

The question therefore arises for our Western municipalities, whether or not they think it worth while to institute and to assist reforms in municipal financing which will appeal to United States investors. "The Monetary Times" thinks that Western Canada should not hesitate one moment in initiating those reforms. From the dollars and cents viewpoint alone, such a policy will be well repaid. If the West wishes to sell its bonds in the United States it must do what it is always telling the British manufacturer to do, make its goods suitable to the market.

There are many points in connection with our municipal financing which are the subject of criticism by United States investors and bond houses. Two of the principal are in regard to the net debt and the assessment. As was pointed out in "The Monetary Times" two weeks ago, Canadian cities showing inflated valuations, excessive debts, etc., are not looked upon with favor by the United States investor. Mr. W. E. McGregor, a prominent bond expert

H. O'HARA & CO.

MEMBERS TORONTO STOCK EXCHANGE.

**STOCK & DEBENTURE
BROKERS**WESTERN CANADIAN MUNICIPAL,
SCHOOL DISTRICT AND RURAL
TELEPHONE DEBENTURES
SPECIALIZED IN.BONDS SUITABLE FOR INVEST-
MENT OF SINKING FUNDS, ETC.,
ALWAYS ON HAND.*Correspondence Invited***Royal Bank Bldg., King & Yonge Sts.,
TORONTO**

AND LONDON, ENGLAND.

THE

**Canada Bond
Corporation**

Limited

59 Yonge Street Toronto

—BUYS—

MUNICIPAL DEBENTURESAND ACTS AS FINANCIAL AGENTS FOR
MUNICIPALITIES

CONSULT THEM

**Government and Municipal
Securities**

BOUGHT and SOLD

◆◆◆◆◆

W. A. Mackenzie & Company,

CANADA LIFE BUILDING,

TORONTO

BONGARD, RYERSON & CO.

MEMBERS TORONTO STOCK EXCHANGE

—PURCHASERS OF—

GOVERNMENT AND
MUNICIPAL BONDS

TORONTO GENERAL TRUSTS BUILDING
TORONTO - - - CANADA

LOANS MADE TO:
BONDS BOUGHT FROM:

MUNICIPALITIES

A. P. LESPERANCE, Manager

City and District Savings Bank
MONTREAL

A. H. MARTENS

W. W. BALDWIN

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

A. H. Martens & Co'y

MEMBERS TORONTO STOCK EXCHANGE

and
Dealers in

Government and Municipal Debentures

Highest market prices paid
for this class of securities

Correspondence Solicited

C. P. R. Building, Toronto, Ont.

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

of a New York investment house, writing in "The Monetary Times Annual," 1914, said: "Whenever a United States investor, who is educated to analyze a financial settlement of a city, is offered an issue of Canadian municipal bonds, about the first criticism he offers is to the financial statement. The net debt is usually so large in proportion to the assessed valuation that he hesitates very much even to consider the purchase of the security. On further analyzing the debt statement, as to the assessed valuation per capita, he is very likely to find that this ranges from \$1,500 to \$3,000 (showing inflated value).

"It is generally considered in the United States that an assessment of \$1.00 per capita is about as high as it is conservative to figure on, a great many of our cities averaging even lower than this, though actual value is more. The total debt per capita is also from his viewpoint excessive. The net debt, that is after deducting the waterworks debt and sinking funds, from the total debt, figures 10 per cent to sometimes 20 per cent of the assessed valuation (which assessment may be admittedly high), and the net debt per capita is also large. He compares these figures to cities in the United States where the total debt and net debt average much lower. In fact, many states have debt limitations of 5 per cent."

There are three movements which "The Monetary Times" thinks would have the desired effect in improving the credit of, and the markets for, Western Canadian municipal bonds. The money raised for local improvements should be a debt upon the property improved only and not a debt upon that of the whole community. In other words, the funds would be raised as money is on a mortgage. Paying for local improvements in this way would tend towards economical civic financing. It would curb the activities of real estate sub-division promoters, who have managed in the past to burden cities with the debts of local improvements in various sub-divisions; debts which have not properly belonged to the town or city. The suggested principle has been tried for many years in the United States. Indeed, the municipalities of the Western States were practically built on this plan.

The second suggestion is that the debt per capital should be limited to, say, 10 per cent of the assessed valuation. If further money is wanted, the current tax rate should be increased. Too much Canadian municipal financing has been thrown on to future generations. The taxpayer of today should carry his proper share or otherwise cease to borrow his millions in the fashionable, care-free style.

The third proposal, which has been made several times previously in these columns, is the direct supervision of municipal financing in each province by a central authority armed with proper powers and free from political considerations. Saskatchewan has made a good start in that direction.

"The Monetary Times" feels that this question of municipal financing will be one of the most important in Canada during the next few years. Bond market conditions have changed entirely since the outbreak of war, and those conditions are not likely to revert entirely to the place they occupied before the war. Many municipalities are already exercised in regard to their financial problems. A new market for municipal bonds must be cultivated. The provincial governments and civic authorities of Western Canada are the people to set about the task. To whatever authoritative source they turn for counsel, the general ideas expressed above will find, we think, strong confirmation. "The Monetary Times" suggests that the provincial governments and the civic authorities of the West take up this question immediately. Some time must elapse before a feasible plan can be formulated and set in motion, but it is not too early to commence.

CITY OF QUEBEC DEBENTURES.

The \$2,125,000 City of Quebec 5 per cent debentures which Aemilius Jarvis and Co., recently purchased jointly with New York bankers, are now being offered to yield the investor 5½ per cent.

BERLIN, ONT.

The City of Berlin has awarded to Aemilius Jarvis & Co. of Toronto, bond dealers, who were the highest tenders, \$6,000 Berlin debentures due in 10 annual installments and \$6,000 due in 15 annual installments.

The assessment of the City of Berlin is over \$11,000,000 assessed at 65 per cent of actual value. The net debenture debt is \$672,000. The population is 19,000 and the municipality's assets \$2,656,000.

TELEPHONE RATES TO BE REDUCED IN NORTH TORONTO.

The Board of Railway Commissioners of Canada has recently issued an order compelling the Bell Telephone Co. of Canada to make its telephone rates in North Toronto the same as those in the rest of the city. This order ends a two-year fight for city rates by the residents of North Toronto. The order will go into effect on January 1, 1916. The new rates will be \$30 per year for residence telephones and \$50 for business telephones, becoming effective January 1, 1916.

WOODSTOCK'S ASSESSMENT.

The assessed value of city property in Woodstock, Ont., according to the assessors' figures, given out by City Treasurer Down and City Clerk Morrison, from the assessors' books is \$4,448,614.

YORK TOWNSHIP, ONT.

The Canada Bond Corporation purchased by tender on May 15, 1915, \$71,248.75, 5½% Serial Bonds, of the Township of York, Ontario, \$52,297.84, 10-years, and \$19,248.75, 5-years.

POWER HOUSE STILL MAKING MONEY FOR CITY.

Notwithstanding the reductions in the rates for power and light, and the falling off in the revenue, a surplus of \$1,500 for the power house is shown by the monthly report. An interesting feature of the report is that the cash collections last month were approximately \$4,000 greater than the revenue, which shows that the amount of outstanding accounts is being rapidly reduced.

GREATER WINNIPEG BONDS.

Wood, Gundy & Co.'s (of Toronto) offerings of \$1,000,000 Greater Winnipeg Water District, 5 per cent gold bonds, due 1st April 1920, yielding 5.40 per cent, at the price of 98.27 and interest, has been well taken up, considerably more than half already being sold.

THE
BANK OF OTTAWA

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

HEAD OFFICE - OTTAWA, ONT.

Board of Directors:

Hon. George Bryson, President.
John Burns Fraser, Vice-President.
Sir Henry N. Bate David Maclaren.
Russell Blackburn Denis Murphy
Sir Henry K. Egan Hon. George H. Perley
E. C. Whitney.

GEORGE BURN, General Manager.
D. M. FINNIE, Assistant General Manager.
WM. DUTHIE, Chief Inspector.

Branches in the Provinces of
Quebec, Ontario, Manitoba, Saskatchewan,
Alberta and British Columbia.

Interest bearing Deposits of One Dollar and
upwards received at all Branches.

MUNICIPAL LOANS

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

We invite correspondence

N. B. STARK & COMPANY

Montreal New York
Toronto Boston

MURRAY, MATHER & CO.

IMPERIAL BANK OF CANADA

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

DIRECTORS:

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

HEAD OFFICE - - TORONTO

BRANCHES:

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

SAVINGS DEPARTMENT:

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

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

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

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

Agents in France: Credit Lyonnais; Germany: Deutsche Bank

BANK OF MONTREAL

(Established 1817)

INCORPORATED BY ACT OF PARLIAMENT

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

HEAD OFFICE - - - MONTREAL

BOARD OF DIRECTORS:

H. V. MEREDITH, Esq., President

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

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

BRANCHES:

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

IN NEWFOUNDLAND:

ST. JOHN'S CURLING GRAND FALLS

IN GREAT BRITAIN:

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

IN THE UNITED STATES:

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

The Canadian Bank of Commerce

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

HEAD OFFICE - TORONTO

BOARD OF DIRECTORS.

Sir Edmund Walker, C.V.O., LL.D., D.C.L., President

Z. A. Lash, Esq., K.C., LL.D., Vice-President

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

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

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

Montreal Main Office: H. B. WALKER, Manager

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

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

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

THE ROYAL BANK OF CANADA

Capital Authorized.....	\$ 25,000,000
Capital Paid Up.....	11,560,000
Reserve and Undivided Profits.....	13,174,000
Total Assets.....	180,000,000

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

Sir Herbert S. HOLT, President.	E. L. PEASE, Vice-President
E. F. B. JOHNSTON, K.C. 2nd Vice-President	
Wiley Smith	Hon. W. H. Thorne
Hon. D. MacKeen	Hugh Paton
Jas. Redmond	T. J. Drummond
G. R. Crowe	Wm. Robertson
D. K. Elliott	
A. J. Brown, K.C.	W. J. Sheppard
C. S. Wilcox	A. E. Dyment
C. E. Neill	

OFFICERS

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

Branches in every Province of the Dominion of Canada and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; GRENADA, St. Georges; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH GUIANA, Georgetown and New Amsterdam; BRITISH HONDURAS, Belize.

LONDON, Eng., OFFICE—Princes St., E.C.
 NEW YORK AGENCY—Corner William and Cedar Streets

Savings Department at all Branches

The Merchants' Bank

OF CANADA

HEAD OFFICE - - - MONTREAL

Capital Paid-up.....	\$7,000,000
Reserve Fund and Undivided Profits.....	7,248,134

BOARD OF DIRECTORS:

SIR H. MONTAGU ALLAN, C.V.O., President

K. W. BLACKWELL, Vice-President

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

E. F. HEBDEN, General Manager

T. E. MERRETT, Supt. of Branches and Chief Inspector

A GENERAL BANKING BUSINESS TRANSACTED

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

211 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: 62 and 65 WALL STREET

STRENGTHENING THE MACADAM ROAD TO MEET MODERN TRAFFIC.

For many years the navies of the world have seen a contest between the maker of armor plate and the gun. It began when the Merrimac sailed out before the fleets of the United States and let the cannon balls bounce off its iron-plated sides, whereupon all the naval guns in the world became obsolete.

So guns of higher power were created which punctured the armor plate of that day with neatness and dispatch. Thereupon the armor maker produced heavier and stronger steel; whereupon the gun maker produced more powerful guns.

A similar contest, as old as man, has been waged between the vehicle and the road. Thanks to the genius of MacAdam, there was a long period in recent history when the road easily withstood the vehicle. The smooth, hard macadam road, however, invited the development of the automobile, and still more recently the motor truck, and macadam roads then went to swift and general destruction.

Now, however, the road is getting the better of it again, thanks to the development of the modern, bituminous binders of which Tarvia is the best known in the Dominion.

Tarvia is a coal tar product of great viscosity. It is made in various grades or densities to suit different road conditions. It can be introduced into the macadam road during construction; this is the most thorough process, and the result is a tough, tenacious tar concrete, and the extra expense is very slight. Most old macadam roads do not require rebuilding, and so there are also less elaborate processes for applying Tarvia to old surfaces, with or without the use of resurfacing material.

All the Tarvia processes have been used at various points in the Dominion and highly satisfactory results are reported.

Waterloo, Ont., for instance, has been using Tarvia construction quite extensively in its residential section for the last three or four years. Foundry Street, which was paved with Tarvia in 1912, is a good example of successful work.

Beaconsfield, P.Q., adopted Tarvia construction for one of its most heavily travelled roads in 1912, and it seems little the worse for three years of heavy traffic. The improvements over the old conditions there are so great that a team now draws four tons, where one ton was a load before.

Collingwood, Ont.—Collingwood and Tillsonberg, Ont., have used Tarvia since 1913 to preserve the surface of the macadam on their business streets. In each case a very broad avenue running through the town.

Wolfville, N.S., has been paved with tarviated macadam since 1911.

Islington, Ont.—Eaton Road has been surface treated with Tarvia since 1913. Another case is Queen Victoria Park Boulevard, where several miles have been treated very successfully in this manner.

Berlin, Ont. has used Tarvia on many of its best residential streets, having to date about five miles. The first work was done in 1910.

One of the handsomest stretches of tarviated macadam in the Dominion is the Lady Grey Road at Ottawa—a handsome boulevard that follows the edge of the river, while another conspicuous case is the Champs de Mars at Montreal, where there is an expanse of 20,000 square yards.

Montreal and Toronto in the suburbs have both used large quantities of Tarvia year after year, usually in the residential sections where the dustlessness and superior quality of the tarviated surface was appreciated. This is especially true of the City of Westmount, a high-class residential section, adjacent to Montreal, where over eighteen miles of streets are paved and maintained with Tarvia, giving great satisfaction with their clean, dustless surfaces.

Undoubtedly the use of tarvia-bonded roads is still only in its infancy. The automobile has already spread over the continent and the motor truck is fast following. The latter is already a serious problem in England and in some of the more congested centres of the United States.

The more efficient the motor truck becomes, the larger loads it will carry, and the greater will be the burden it imposes on the roadway. Still another factor will be the motor bus and jitney, which threaten to become a serious competitor of the street car, inasmuch as the public maintains the right of way, gratis.

Accordingly, it is easy to prophesy that plain macadam without bituminous treatment will become a thing of the past everywhere as it is already in many localities. Unfit for modern traffic it must be discarded in favor of roads that are firmly united by some plastic bituminous binder like Tarvia.

CIVIC IMPROVEMENTS. (Con. from page 211.)

In proposing the ticketing of the trees Rev. Dr. Robert Campbell stated that in other cities municipal authorities had done a great deal by such a simple device not only in education of the children and the citizens, but in the stimulation of a civic spirit in the realization of the value of trees to a community. Mr. C. H. Gould and ex-Ald. Victor Morin, strongly supported this idea, and acting president, Dr. J. J. E. Guerin, asked Rev. Dr. Campbell to confer with the secretary, Dr. W. H. Atherton, and such other members as he cared to select to bring the matter properly before the Mayor, Commissioners and aldermen.

Ex-Alderman Morin was given similar instructions with regard to his strong plea that something should be done to protect citizens who have built fine houses on city streets from having the whole effect spoiled by the bad taste of some one man. There should be reference to the community in which a house would be built by the architect.

CIVIC PATRIOTISM. (Con. from page 209.)

Canadian citizenship means a higher conception of public duties which can be acquired, first of all by the development of civic patriotism.

By Civic Patriotism, I mean love of your village, town or city, that moves you to make a sacrifice, to promote more healthful, happy, and prosperous conditions of life, a sentiment that leads you to consider the great living problems which concern those whose daily labor is absorbed in the struggle for existence, problems of home, environment, fresh air, education, health, moral and physical, cost of living, pure water, personal happiness.

The efficiency and industrial prestige of the nation are directly dependent upon these conditions?

Until we realize that a man ought to be given a fair chance to express his opinion by his ballot in a free and independent manner, we are doing very little to improve the situation.

Let us either create a civic holiday on the day of elections, so that each will be free to cast his vote in peace, or let us adopt the method of older countries, and have the elections occur on Sunday. A man might do worse on that day, than to walk in a calm, respectful, dignified manner and cast his vote.

There is another thing which I think we should not forget.—Standing on the threshold of a new century, it is impossible not to look forward, and it is impossible not to look backward. Looking backward we pride ourselves on the work this country has achieved.

We point to our native country extending from the mouth of the St. Lawrence across the entire continent, to the golden waters of the Pacific, and we pride ourselves on our possessions.

But who achieved all this, we who pride ourselves upon it? We not alone we personally. Have not our fathers and our forefathers had something to do with this?

From the day upon which Jacques Cartier first turned the prow of his little vessel into the St. Lawrence, down through the centuries, till his great-great-grandson, Sir George Etienne Cartier, looking far into the future, counselled his fellow-countrymen, to make possible the great Canadian FEDERATION.

From the days upon which the United Empire Loyalists and refugees who were banished from their homes, landed on the desolate shores of Nova Scotia and Lake Ontario, down to the ACT OF UNION in 1841, when Upper and Lower Canada embraced each other, the great country we call Canada, to-day, has been peopled by the descendants of the two greatest nations of Europe.

We are the children of this inheritance, and each of us owes not alone a huge debt to the French discoverers of Canada, to the English pioneers whose centuries of work and sacrifice, made possible the country we call our own to-day; but we owe to each other, the debt which many of us forget to recall—the debt of respect for all that each of us holds dear—the debt we owe to the French language, French ideals and French achievements, the debt we owe to the English language, English ideals and English achievements,—the debt we owe to character, to devotion and to principle, to the blood characteristics which cannot be legislated away.

Let us pay our debts like men.

Mountains of unjust prejudice would then disappear, and in their place will arise a nobility of citizenship, that will command the respect and admiration of the world.

WINNIPEG CALGARY VANCOUVER
THE JOHN GALT ENGINEERING CO., LIMITED
Consulting Civil Engineers
**SPECIALISTS IN ALL KINDS OF MUNICIPAL
 ENGINEERING WORK**
 Waterworks, Sewerage, Electric Lighting, Steam and Water
 Power, Concrete Construction
JOHN HADDIN E. L. MILES

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.

EDWARD C. CLEMENT
 ATTORNEY AND COUNSELLOR AT LAW
 Solicitor of Patents
 ELECTRICAL EXPERT
McGILL BUILDING - - WASHINGTON, D.C.

CHARLES BRANDEIS, C.E.
 A.M. CAN. SOC. C.E.
 CONSULTING ENGINEER to Provincial Government, Municipalities, &c.
 Estimates, Plans and Supervision of Hydraulic and Steam
 Electric Light, Power and Railroad Plants, Waterworks
 and Sewers. Arbitrations, Reports and Specifications
 4 PHILLIPS PLACE - - - - 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

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.

BURNETT & McGUGAN
 (Successors to GEOFFREY K. BURNETT)
 Civil Engineers and B.C. Land Surveyors
 Plans, Surveys, Reports
NEW WESTMINSTER,
 P.O. Box 886 British Columbia

BAYFIELD & ARCHIBALD
 Consulting and Constructing Engineers
 Plans, Reports, Estimates for Machinery
 Plants for Electric Light, Water Works, Road
 Making, &c.
Molsons' Bank Building - VANCOUVER, B.C.

Engineers—And what they are doing

NATURAL GAS.

46 cities and towns in Canada are using natural gas, and the average price per 1,000 cubic feet is 33 1-3 cents. Edmonton is at present considering an offer of 27 cents per 1,000 cubic feet. Medicine Hat and Redcliffe, Alta., are the only two cities where natural gas is cheaper than 27 cents.

WHAT IS THE TREND OF ROAD CONSTRUCTION.

What is the trend of modern road construction at the present time? Is it towards a thin carpet of artificial asphalt, as some road engineers contend, or is it still in the direction of some form of tar-macadam, including, of course, tar-slag? Is it a fact that "tar" grouting is going out of favor because with this process the amount of grouting used must be excessive if anything like a successful result is to be obtained?—Surveyor.

COMMUNICATION BETWEEN VANCOUVER AND SAN FRANCISCO.

Telephone communication has been established between Vancouver, B.C., and San Francisco, Cal. A satisfactory conversation was also carried on recently by telephone between that city and Denver, Colo. The circuit will be extended in the near future down the Pacific coast from Vancouver as far as San Diego. It is also believed that it will not be long before communication is established between Vancouver and the Atlantic coast.

REPAIRING BRICK PAVEMENTS.

A large part of pavement maintenance in most cities consists of relaying pavement over excavations made to reach or lay sub-surface structures. To do this so as to secure a patch which will conform to the general surface of the pavement and remain so, and will not be evident to the eye, is difficult but is very desirable—as desirable as to secure a smooth surface in original construction. It can be done, but it requires expert work. Just how it is done in the case of brick pavements in Cleveland is described in this issue.

In some cities it is required that the pavement, including the concrete base, be removed 6 inches back from each edge of the excavation, in order that the new concrete may be supported by the undisturbed ground in case of slight settlement in the backfilling. It also is a precaution against retaining in the pavement any concrete or wearing surface which has been disturbed and its bond with the pavement weakened during the operations in the trench. Apparently the thoroughness of compacting the backfilling is relied upon in Cleveland to make unnecessary the support of the undisturbed ground referred to.

Next to the compacting of the filling, probably the most important point is the compacting of the sand cushion, under the old brick as well as where the new are to be laid; although perhaps fully as important is keeping all traffic off of the new pavement for at least a week or ten days. An effective method of doing this is to place bricks or stone blocks at intervals of about two feet in each direction over the entire surface to be protected, in addition to the customary wooden guard at each end.

JITNIBUS.

And now another new word has been coined and is in use in Eastern newspapers, promising to become permanent. It is jitnibus.

The terminal syllables have a Latin finish that may make the work acceptable even in Boston.—Sacramento Bee.

VACANT LOTS.

In addition to the cultivation of all vacant lots in Regina the Vacant Lot Gardeners' Associations aims to cultivate 50 acres of land owned by the city, on a co-operative basis. The various movements, such as "Patriotism and Production," "Produce Something," etc., have all given a stimulus to this particular movement, and business men as well as artisans, are attending the free courses of instruction in market gardening, in order to give material assistance to the movement.

YORK COUNTY.

About \$120,000 will be spent by the York County Highway Board this year on about 30 miles of roadway. Since undertaking the work in 1911 about 70 miles of road have been improved, the cost being about \$48,000. If 30 miles are reconstructed this year there will be a remainder of 15 miles still to improve before the county highway project of 1911 has been completed.

OTTAWA AND ITS WATER.

The Consulting Engineer of Ottawa, Mr. John B. McRae, has submitted plans for the Lemieux Island overland pipe project for supplying the city with water for fire protection. These plans call for high-lift pumps, affording a pressure of 120 pounds.

AERIAL TREATMENT OF SEWAGE.

Mr. R. O. Wynne-Roberts, consulting engineer to Regina, is advocating the installation of an experimental plant for the aerial treatment of sewage with a view to adopting the new method in the existing sewage disposal plant. It is stated that this may be done at little cost, and would preclude the addition of numerous costly filters to meet future demands.

BROKEN STONE.

Broken stone, as an aggregate for concrete, should be nearly cubical in form, as thin, flat particles will not pack well. The shape of the fragments has an important effect on the proportion of voids in the mass.

PLACING CONCRETE.

In placing concrete, in floor slabs, girders and beams, the work should, if possible, be carried along in a straight line from the section of the building which is being concreted. Unless adjoining masses of concrete of different depths, like adjacent girders and slabs, have the puddling or ramming operation carried down as thoroughly through one as the other initial setting cracks are likely to form between the masses of different depths.—(Ex.)

LAYING PAVING BLOCKS DIAGONALLY.

A few years ago there was more or less discussion as to whether it is better to lay paving blocks and bricks at an angle of 45 deg., 67½ deg. or 90 deg. with the curb. Although a few adopted and still employ diagonal courses, the large majority of cities have always laid at 90 deg.

Since the time when the discussion referred to was most active, the character of some kinds of block pavements have changed, especially stone and wood block, and even brick pavements are made to continue smoother than then. What effect this development of a smoother pavement with closed joints and wearing more uniformly may have upon the effect of angle of courses is a subject which it may be worth while to consider. Tests of wood pavements made indicate that with a modern wood block pavement of Norway pine, the angle of courses has a very considerable effect upon wear. Nothing is said as to the effect on smooth riding or foothold for horses. If 10 to 30 per cent of the wear can be eliminated by laying in diagonal courses and there are no offsetting disadvantages, the subject is deserving of at least a thorough investigation.

POLISHING CONCRETE

The amount of polish which can be given to the surface of concrete depends upon the density of the mixture, and the nature of the aggregate used. After the surface has been smoothed down on a rubbing bed, or by the use of rotary rubbing stones, as applied in terrazzo floor work, the procedure is somewhat similar to that used in polishing granite or marble. The aggregate exposed on the surface by the rubbing process takes the polish, the appearance of the surface being dependent upon the percentage of aggregate exposed.

Engineers estimate that the smoke nuisance costs the United States 500 million dollars annually.

Wm. O'Halloran has been appointed engineer of the waterworks and electric light system of the town of Newmarket, Ont.

T. I. Clarson, industrial engineer of the light and power department of the city of Winnipeg, has severed his connection with the city to join the flying corps of the British army.

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

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

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

Walter J. Francis, C.E., 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

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

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

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

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



TELEPHONE NEWS



OFFICIAL INFORMATION
OF THE
CANADIAN INDEPENDENT TELEPHONE ASSOCIATION
& C, & C, & C,

TELEPHONE CABLES

EUGENE F. PHILLIPS **ELECTRICAL WORKS**
LIMITED

MONTREAL, TORONTO, WINNIPEG,
CALGARY, VANCOUVER.

