

PAGES

MISSING



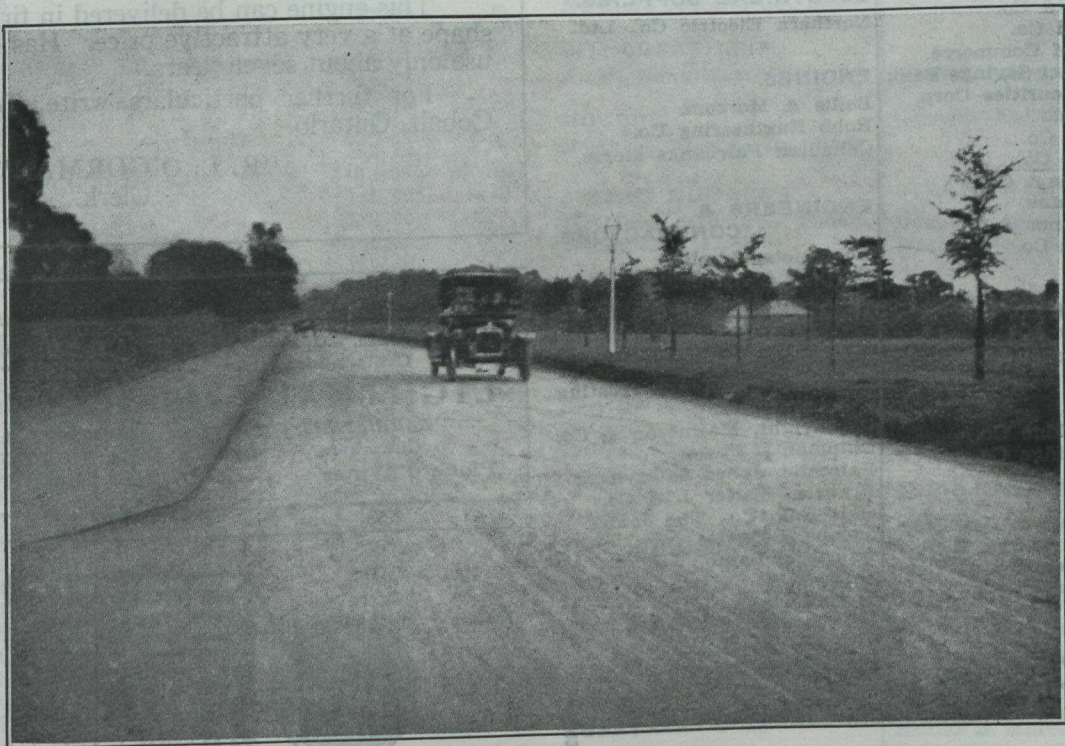
“The Premier Road Dressing & Binder”

Fluxphalte

“FLUXPHALTE” is a heavy road oil containing 80% of solid pure bitumen combined with sufficient liquid to bring it to a proper consistency for road dressing. It is absolutely free from greasy oils.

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

“FLUXPHALTE” is spread on roads by our special “FLAPPER” Machine which is highly efficient. This machine is loaned to municipalities using our product.



An Example of an Ordinary Macadam Road Treated with “Fluxphalte.”

“FLUXPHALTE is as easily applied as any binder, and gives far better results

NEW ILLUSTRATED BOOKLET ON REQUEST

THE
ASPHALT AND SUPPLY COMPANY, LIMITED

Sole Canadian Agents for the Mexican Eagle Oil Company, Limited

BOARD OF TRADE BUILDING - MONTREAL



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 Nixon & 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.

LOANS MADE TO:
 BONDS BOUGHT FROM:

MUNICIPALITIES

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

FOR SALE

600 Gallon Waterous Steam Fire Engine

This engine can be delivered in first class shape at a very attractive price. Has been in use only about seven years.

For further particulars write, Town of Cobalt, Ontario.

'R. L. O'GORMAN'
 Clerk.

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

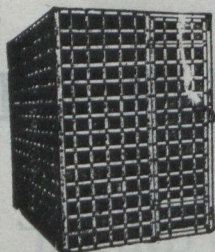
LIGHTHALL AND HARWOOD

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



A VENDRE
"TAMCO" Pierre Concassée,
 de toutes dimensions. Gravas pour couvertures. Pierre artificielle "Roman." Briques pressées "Milton." Concasseurs de pierre. Pompes à incendies, etc.
T. A. MORRISON & CIL,
 204 Rue St-Jacques,
 Tél. Main 4532. Montréal.

Jail Cells



We are Headquarters for all Classes of

PRISON WORK

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

Inquiries Solicited

Canada Wire & Iron Goods Co.

HAMILTON, Ont.

H. J. ROSS

ACCOUNTANT TRUSTEE

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

Municipal Audits a Specialty
 Municipal Bonds Negotiated
 Estates Managed

180 St. James St., Montreal

DATA AND COST FOR ROAD WORK.

The following tables have been compiled by the Board of Highway Commissioners of the province of Saskatchewan for the use of municipalities engaged in road work. By their aid it will be easy to ascertain very closely what any particular piece of road grading should cost, and also the sizes and capacity of the culverts necessary.

Table of Cost Data for Roads.

1½ to 1 side slope and 16 feet road bed.				
Fill in feet	Cost per cubic yard cents.	Number of cubic yards per 100 feet length.	Price per 100 feet.	Lenth of culvert
1 foot	18 cents.	65 cubic yards	\$11.70	19 feet
"	20 "	"	13.00	"
"	25 "	"	16.25	"
"	30 "	"	19.30	"
"	35 "	"	22.75	"
2 feet	18 cents.	141 cubic yards	\$25.38	22 feet
"	20 "	"	28.30	"
"	25 "	"	35.28	"
"	30 "	"	42.30	"
"	35 "	"	49.35	"
3 feet	18 cents.	228 cubic yards	\$41.04	25 feet
"	20 "	"	45.60	"
"	25 "	"	57.00	"
"	30 "	"	68.40	"
"	35 "	"	79.80	"
4 feet	18 cents	326 cubic yards	\$58.68	28 feet
"	20 "	"	65.20	"
"	25 "	"	81.50	"
"	30 "	"	97.80	"
"	35 "	"	114.10	"
5 feet	18 cents.	435 cubic yards	\$78.30	32 feet
"	20 "	"	87.00	"
"	25 "	"	108.75	"
"	30 "	"	130.30	"
"	35 "	"	152.25	"
6 feet	18 cents.	556 cubic yards	\$100.08	36 feet
"	20 "	"	111.20	"
"	25 "	"	139.00	"
"	30 "	"	166.80	"
"	35 "	"	184.60	"
7 feet	18 cents.	687 cubic yards	\$123.66	39 feet
"	20 "	"	137.40	"
"	25 "	"	171.75	"
"	30 "	"	206.10	"
"	35 "	"	234.45	"
8 feet	18 cents.	830 cubic yards	\$149.40	42 feet
"	20 "	"	166.00	"
"	25 "	"	207.00	"
"	30 "	"	249.00	"
"	35 "	"	290.50	"
9 feet	18 cents.	983 cubic yards	\$175.94	45 feet
"	20 "	"	196.60	"
"	25 "	"	245.75	"
"	30 "	"	294.90	"
"	35 "	"	344.05	"
10 feet	18 cents.	1,148 cubic yards	\$206.65	48 feet
"	20 "	"	229.60	"
"	25 "	"	287.00	"
"	30 "	"	344.40	"
"	35 "	"	401.80	"

Culvert capacity table for corrugated iron pipe, assuming a maximum daily rainfall of 2½ inches and a slope of one in one hundred:—

Area of Land to be drained.		Size of Culvert required,		
Square miles	Acres	Diameter (inches)	Cross sectional area (in square feet)	Capacity (cubic feet per second)
.02	11	8	.349	.768
.03	20	10	.545	1.44
.05	34	12	.785	2.36
.10	61	15	1.227	4.35
.16	104	18	1.767	7.42
.35	226	24	3.142	16.67
.65	415	30	4.909	30.43
1.08	691	36	7.068	50.20
2.34	1,494	48	12.566	109.27
4.14	2,649	60	19.630	200.30
6.85	4,386	72	28.270	322.40
10.80	6,914	84	38.484	500.30

BUYERS' DIRECTORY—Continued

ENGRAVERS.
Amer. Bank Note Co.

FIRE ALARMS.
Northern Electric Co., Ltd.

FIRE BRICK MASONRY.
Ideal Incinerator Co.

FIRE DEPT. SUPPLIES.
Northern Electric Co., Ltd.

GENERATORS.
Northern Electric Co., Ltd.

INCINERATORS.
Ideal Incinerator Co.

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

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

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

LIGHTING.
Northern Electric Co., Ltd.

LITHOGRAPHERS.
Amer. Bank Note Co.

MOTORS.
Northern Electric Co., Ltd.

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

ORNAMENTAL IRON.
Can. Wire & Iron Goods Co.

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

POLES.
Northern Electric Co., Ltd.

POLICE SIGNAL SYSTEMS
Northern Electric Co., Ltd.

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

PUBLICATIONS.
Imperial Year Book.

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

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

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

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

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

SEWER PIPE MOULDS.
London Concrete Machy. Co.

STAIRCASES.
Can. Wire & Iron Goods Co.

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

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

STONE.
Roman Stone Co.

SHEET METAL.
Pedler People, Ltd., The

STONE CRUSHERS,
Canadian Fairbanks Morse Co.

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

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

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

TELEPHONES.
Northern Electric Co., Ltd.

TURBINES.
Belliss & Morcom.
Robb Engineering Co.

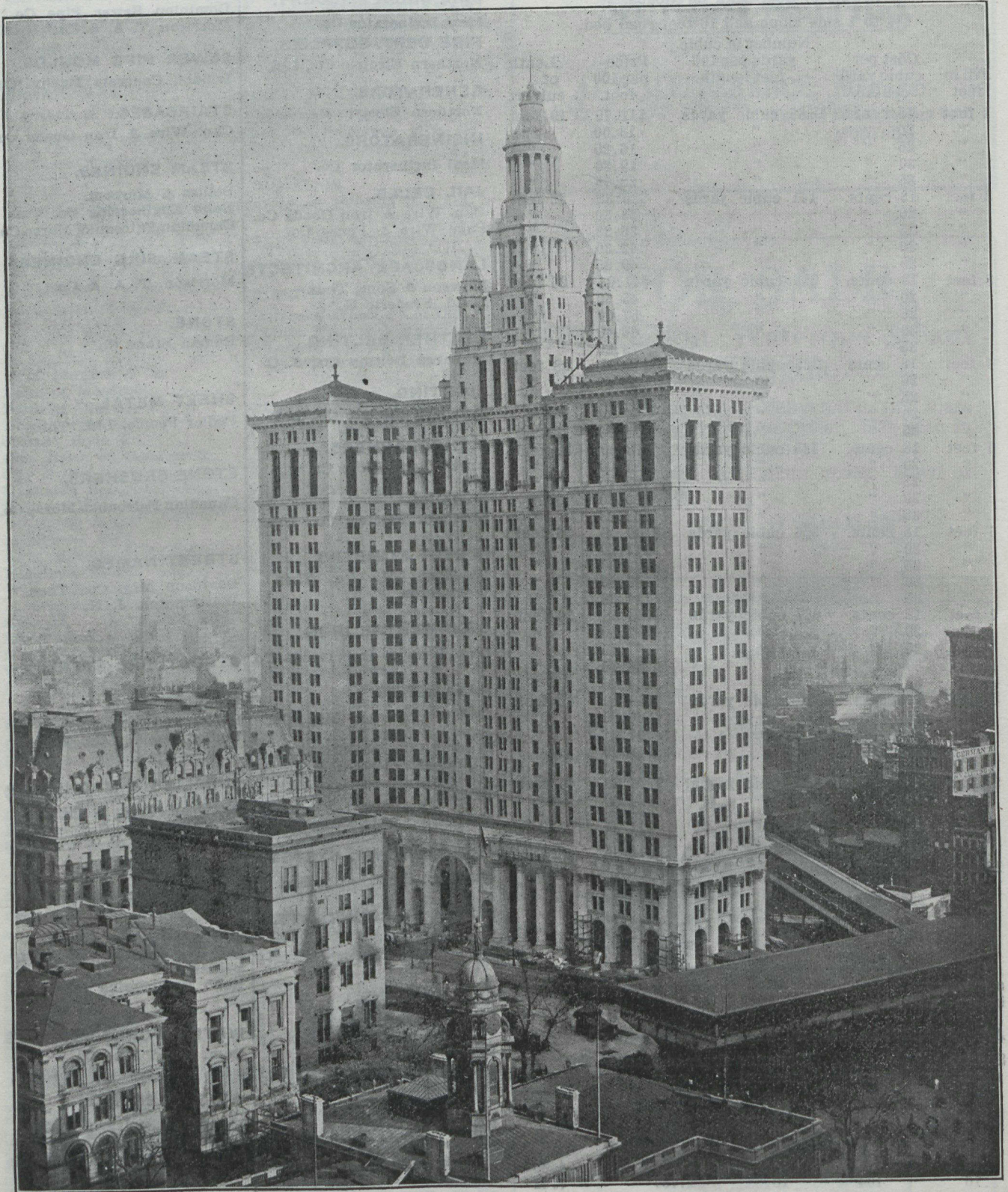
WATER WORKS SUPPLIES
Dom. Wood Pipe Co.

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

WINDOW GUARDS.
Dom. Wood Pipe Co.

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

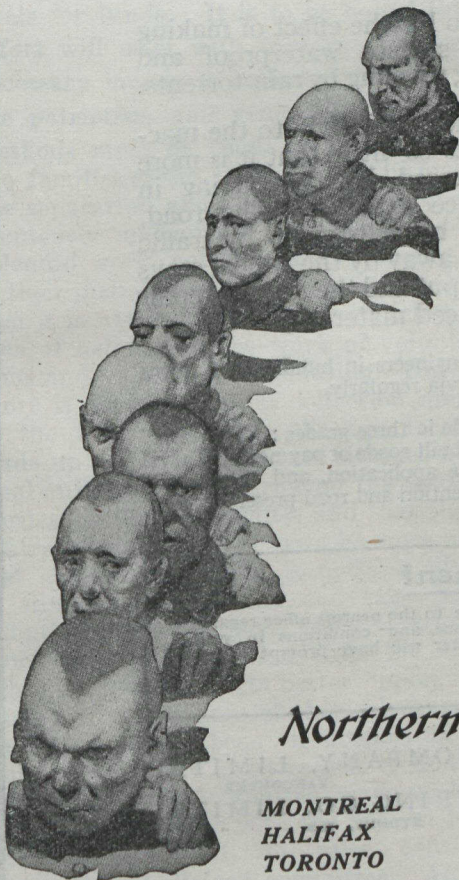
A GREAT CITY HALL



THE CITY HALL OF NEW YORK

ALPHABETICAL INDEX OF ADVERTISERS

	PAGE		PAGE		PAGE
Asphalt and Supply Co.	337	Fairchild, Jones & Taylor.....	371	Northern Electric Company.....	341
American Bank Note Co.....	362	Francis, Walter J. & Company....	371	O'Hara & Co., H.....	365
Ames, A. E. & Co.....	361	Galt Engineering Company, The John.....	294	Paterson Manufacturing Company. Limited.....	342
Bank of Montreal.....	367	Hanson Bros.	366	Phillips Electrical Works, Eug. F..Cov. 1	
Bank of Ottawa.....	308	Ideal Incinerators	Cover 2	Page Wire Fence Company, Limited	Cover Page 3
Bayfield & Archibald.....	370	Imperial Bank of Canada.....	367		
Brandies, Charles.....	320	Imperial Year Book.....	Cover 2		
Burnett & McGugan.....	370	Jacob & Davis.....	371		
Belliss & Morcom.....	Cover Page 2	Jarvis and Co. A.....	362		
Burgess, C. H. & Co.	364	Kahn Concrete Steel Company	Cover Page 2		
Brent Noxen & Co.	364	Lighthall & Harwood.....	338		
Canadian Bank of Commerce.....	368	Laurie & Lamb.....	Cover Page 2		
Canadian Bridge Co., Limited C'r Page 3		Lea, R. S. & W. S.....	371		
Canadian Inspection and Testing Laboratory.....	379	Lesperance, A. P.....	338		
Carritte-Paterson Manufacturing Company.....	342	London Concrete Machinery Company.....	Cover Page 4		
City & District Savings Bank.....	338	Mawson & Sons, Thos. H.....	370		
Clement, E. C.....	370	McLaren Belting Company.....	Cover Page 4		
Canada Bond Corporation.....	365	McCulloch, A. L.....	370		
Canada Wire and Iron Goods Co. ...	338	Merchants Bank of Canada.....	368		
Davidson Manufacturing Company, Limited.....	Cover Page 3	Morrison & Company, T. A.....	338		
Dominion Bridge Company Limited.....	Cover Page 4	Marten & Co., A. H.....	366		
Dominion Securities Corporation....	362	McKinnon, W. L. & Co.....	362		
Dominion Sewer Pipe Company	Cover Page 3	Mackenzie & Co., W. A.....	365		
		Murray, Aird & Lowes	370		
		Matthews & Co., R. C.	362		
				Robb Engineering Company.....	Cover Page 4
				Ross, H. J.....	338
				Ross & Company, R. A.....	371
				Royal Bank of Canada.....	368
				Roberts-Wynne, R. O.	371
				Standard Underground Cable Company of Canada.....	Cover 4
				Stark & Company, N. B.....	367
				Tarvia.....	342
				Trussed Steel Concrete Company...	Cover Page 2
				Thomson, Chase.....	371
				Warminton, J. N.....	Cover Page 2
				Wood, Gundy & Company.....	361



THE PRICE OF SAFETY AGAINST THUGS
IS THE LOW COST OF INSTALLING

Northern Electric GAMEWELL POLICE SIGNAL SYSTEMS

We have doubled the efficiency of police protection at one stroke. With our improved system the patrolman not only calls the station—but the station calls all the patrolmen (at any and all times). General alarms get to every man on duty a few seconds after received. While the clues are "hot" and the criminal still in the immediate vicinity the net is drawn around him, and his chance of escape reduced to a fraction.

Thugs shun cities protected by the new Northern Electric Gamewell Systems. And police records show a big increase in efficiency that earns public and newspaper commendation.

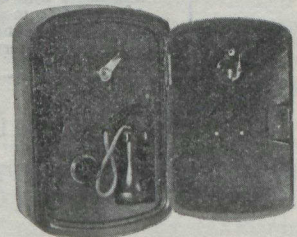
Up-to-date municipalities should investigate this new system now. Write our nearest house for complete information.

Northern Electric Company
LIMITED

MONTREAL
HALIFAX
TORONTO

WINNIPEG
REGINA
CALGARY

EDMONTON
VANCOUVER
VICTORIA



"Made in Canada"



*Galt-Preston Macadamized Road, Waterloo County, Ont.
Treated with "Tarvia B," 1914.*

Dust costs money—

DUSTY roads are expensive, for the presence of dust means that costly road material is being cast away to the four winds of heaven. Sooner or later it must be replaced at great expense.

Ordinary water-bound macadam is not sufficiently bound to resist modern traffic. A stronger binder is needed. That is why modern engineers are turning to Tarvia—a coal tar preparation of great adhesive power, which is used to cement the stone together.

Under heavy loads a tarviated road is somewhat elastic—not brittle—and traffic wears it smoother. The

Tarvia also has the effect of making the road surface waterproof and preventing raveling by rain torrents.

The addition of Tarvia to the macadam costs so little that it is more than balanced by the saving in maintenance expense. The road, instead of being torn up by traffic and blown away by the winds, stays where it is put and the annual repair bill is reduced materially.

Progressive engineers in hundreds of towns are using Tarvia regularly.

Tarvia is made in three grades: "Tarvia X" for new or rebuilt roads or pavements, "Tarvia A" for surface application, and "Tarvia B" for dust prevention and road preservation.

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

G. S. WILSON President
 FREDERICK WRIGHT Editor

All communications to be made to Canadian Municipal Journal

CORISTINE BUILDING, MONTREAL
 Telephone Main 4382

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

"Municipal from cover to cover"

Circulates in every city, town and village

Vol. XI

OCTOBER, 1915

No 10

CONTENTS.

The Unemployed	344	Unemployment—Charity—Health (R. O. Wynne Roberts)	353
Canada's Mayors and Recruiting	344	Controller F. S. Spence ("Ajax")	354
Paving Inspectors	345	Toronto's Civic Employment Bureau (D. Chisholm)	355
Municipal Life in India	345	Signs of the Times (S. Baker)	356
Traffic Statistics of Great Bridges	347	Population Figures	357
How Cleveland Handled Unemployment	348	Concrete and Streets (H. S. V. Scoyce)	359
Meeting of Ontario Municipal Association	349	Some Notes on Municipal Finance (T. Bradshaw)	360
Castell Hopkins Annual Review	350	Causes of Municipal Finance (J. Morley Wickett)	362
Engineers and City Government	351	Assessment and Taxation in Ontario (K. W. McKay)	369
British Columbia (Jack Loutet)	352		

The Patriotic Fund

The Patriotic Fund has just sent out further appeals for funds. It is to be hoped that the special effort will meet with success. In fact, unless the necessary money is collected through appealing to the patriotism and generosity of Canadians other methods must be used, as two things are certain, the families of the soldiers must be looked after and the separation allowance from the government is ridiculously inadequate. The Fund has already done splendid work, not only in the raising of funds but in their distribution, so that in our making a suggestion it is not in any spirit of criticism but with the idea of helping on the work of voluntary contributions and voluntary distribution. Our suggestion in short is that the actual collection and distribution of the fund should be through local committees, made up not only of private citizens, but of those in local authority, thus throwing the responsibility and burden on the community, and that the work of the central committee at Ottawa be more of a propagandist character. There is nothing like local pride to stimulate enthusiasm and raise voluntary contributions, and we don't know of any one who can touch that pride quicker than the elected Mayor. While in some districts better opportunities for the raising of money present themselves, and though recruiting has not been in proportion to the local populations, there is no reason to doubt the ability of a strong local committee, made up of the municipal council together with the present local representatives of the Fund, to raise considerably more money than a distant committee. An especial reason for our suggestion is that the Patriotic Fund, at its best, could only be of a temporary character. Though adequate for a short campaign, it is over

twelve months since the war started and the end is not by any means in sight, with the consequence that the demands on the fund are growing so rapidly because of the increased recruiting, that it will soon be exhausted. Meaning that larger sacrifices must be made by those of us who are staying at home. The people must be made to realize their personal responsibility. So far, outside the large donations of the wealthy corporations and individuals, the only people who have subscribed are the employees of a small number of firms, who were asked to give a day's pay to the fund, and this kind of donation has been given in too many cases grudgingly, because the sense of personal responsibility has never properly been brought home to the givers. The average worker had an idea that he was contributing something to keep another man's family, and the only way, to our mind, to eliminate this false impression, is for every community, be it a village, town or city or even rural municipality, through its elected council, to take up the burden of devising ways and means of supplementing the present fund, and we venture to say that so much success would attend such an innovation that not only would enough money be raised to provide for the families of those fighting our battles, but sufficient would be left over to help those poor wounded soldiers who are already coming home and for whom, from all accounts, no provision has been made.

The City of Stratford is a good illustration of the efficacy of local responsibility, for although the city has already contributed \$60,000 by taxation to the war, the city fathers, on a memorial from the leading citizens, are considering the advisability of raising another \$50,000 by the same process. This sum was suggested by the Patriotic Fund.

The Unemployed

In this war of many nations Canada's responsibility does not end in sending the best of her sons and daughters to the firing line, and in the full utilization of her factories for the supplying of the necessary munitions of war, so that she, as part of the Empire, may maintain the supremacy of her free institutions of which she is so rightly proud. She has a burden that she must shoulder, not perhaps so essential in some respects, but equally important for her self-respect—the care of her unemployed. This Journal, as the Official Organ of the Union of Canadian Municipalities, has urged at every opportunity this phase of the national responsibility. It has been proved conclusively that whosoever may be the responsibility, the municipalities have borne the burden, of keeping alive the families of the men, who, through no fault of their own, have been thrown out of work. The city and town councils have been the scapegoat, as it were, of the shifting responsibility made possible by the British North America Act on the one hand, and the selfishness of private interests on the other. This one-sided burden must cease, and the sooner those responsible, directly or even indirectly, for the employment of labour, realize the situation, the better it will be for the Dominion. Unemployment there always will be, even in the most prosperous of countries and under the most ideal conditions, but the situation in Canada, as far as unemployment is concerned, is probably worse than in any other progressive country at the present moment, and what makes the position inexcusable is the fact that Canada has such vast and wonderful resources, that there should be no unemployment problem at all. Concerted action requires to be taken at once to control the situation.

The war has been made the excuse for too much shirking of this problem, and we say as emphatically as we can that if the different authorities responsible had handled their different ends with the proper spirit, much of the distress of last winter would have

been eliminated, and to-day would not have been possible. We go further and state that one of the authorities responsible—to wit: the large corporations employing labour in place of carrying their due share of the burden, were at the outset of the war prone to cry wolf as an excuse to dismiss and reduce their men wholesale, so that they might keep up their dividends—too often on stock made valuable only by the franchise given them by the people. While another set of the authorities responsible—the provincial governments—have done nothing at all of their share. We also question whether the share of the financial men of Canada has been properly met.

If this is a time for personal sacrifice on the part of Canada's sons and daughters on the firing line, it is also the time for sacrifice on the part of those left at home, whether as individuals or private or public corporations. We have reiterated these things not for the purpose of criticism but rather to emphasize the fact that winter is coming, when the distress of last winter will be increased tenfold unless proper steps be now taken to relieve it. The municipalities are not and will not be in the same position as they were last winter, to take up the burden by themselves. And why should they attempt to carry more than they ought or can?

In order that all those responsible may have an opportunity to do their part, the Union is calling for an immediate conference or conferences of representatives of the Federal, Provincial and Civic authorities, together with representatives of the employers and employees and the banks, with the distinct object of bringing about by co-ordination a practical solution of the unemployment situation. What the whole *modus operandi* will be cannot be said as yet, but the bringing about of such a conference or conferences and properly distributed action, will be in itself a big step in a solution, and at least the country will know how really patriotic each of those claiming the virtue, and can act accordingly.

Canada's Mayors and Recruiting

The other day we were the guest of Hamilton, when we had the opportunity of listening to that ambitious City's young mayor giving one of the most inspiring addresses it has been our pleasure to hear. The occasion was the "sending off" to a draft of Hamilton's citizen soldiers and the Mayor gave the official word. At least it was supposed to be official, but it was not officialdom talking, for every word uttered went straight to the heart of that vast assembly of citizens, and particularly to the young fellows who will shortly be on the fields of Flanders. The event was a memorable one. And yet, solemn and inspiring as it was, it was but one of many that have already taken place in Canada's cities. It would be hard to find a Canadian Mayor who has not taken such part as that of Mayor Walters, and it is fitting that the Chief Magistrate should give public encouragement to the citizen soldiers, particularly in a country where the spirit of democratic endeavour and collaboration is predominant. No one has worked harder in the raising of the thousands of

men and means to bring the war to a close than the mayors of the Dominion.

Canada has a specially fine recruiting sergeant in Mayor Church of Toronto, who gives every minute of his spare time to the work. Recently he gave a message in Italian to some Italian reservists who were about to embark for the front. When a public man goes to the trouble of learning a message in a language foreign to himself, he is doing much in cementing the *entente cordiale* of the Allies. And we might go on giving instances of the devoted work of Canadian mayors for the great cause for which the country is fighting. As with the mayors so with councils. We hear of councils of small towns competing with each other as to which can raise the more recruits. One council recently voted a machine gun—the council of the next municipality voted two, and so the work is going on. In fact, the municipal councils have been larger factors in raising and equipping our army than the military authorities are aware of.

PAVING INSPECTORS.

The other day we saw the following item in the report of a certain American city:

"Our paving inspectors informed us that a large amount of paving work (concrete) had been carried out satisfactorily by contractors who had kept to the letter of the law in regard to the specifications. Despite this assurance it was found that, within a year's time, forty per cent. of the pavement of some blocks, to one hundred per cent. of the area of other blocks, had to be re-surfaced. This demonstrates just how much reliance can be placed on the average work of municipal paving inspectors."

On the face, it hardly seems possible that there were men receiving salaries for work for which they were either negligent or incapable. But on enquiry we find that such is the fact even in Canada, though, we believe that in most cases it is because of incapacity. This is proven because in the smaller municipalities, where the engineers are their own inspectors, the concrete pavement is comparatively of a much firmer character than in the large cities, where many of the inspectors have no more idea of the relative values of cements and their proper mixing, than the man in the street. There is no form of pavement that better lends itself to fraud than concrete, and to our mind, where the paving is let out to private contractors, the only really safe assurance to municipalities to get what they pay for is to keep part of the payment back for at least twelve months, or if this be considered too drastic, a guarantee be required. In private buildings such a guarantee is given and we don't see why a public body should not demand the same.

CONVENTION OF NOVA SCOTIA MUNICIPALITIES.

The annual meeting of Nova Scotia municipalities was held this year at Pictou, August 25-27, under the presidency of Deputy Warden J. W. McKay, of Pictou. Over eighty delegates listened to addresses of welcome from Warden Thompson, of Pictou County; Mayor Grant, of New Glasgow; Mayor Primrose, of Pictou; Mayor Macdonald, of Stellarton; Mayor Strickland, of Trenton, and Mayor Munro, of Westville, and replies from Mayor Fuller, of Yarmouth; Councillor Shepley, of Amherst, and Solicitor R. H. Butts, M. P. P., of Sydney Mines.

One of the features of the meeting was an address from Sir Frederick Fraser, of the School for the Blind, Halifax.

ALBERTA MUNICIPAL CONVENTION.

The Executive of the Union of Alberta Municipalities has decided on October 20th and 21st, as the dates of the annual Convention of the Union for the year 1915. This year's Convention will be held at Bassano, and from the interest already manifested by the various municipalities involved, promises to be, not only very largely attended, but exceedingly interesting and instructive. The programme has not yet been definitely framed, but will likely follow along the lines of last year's Convention in dealing with the financial problems that have had to be faced by practically every city, town and village in the Province, owing to the changed conditions respecting valuations, assessments, sub-divisions, etc., that have arisen during the past two years. The Mayors of the four principal cities, of Calgary, Edmonton, Medicine Hat and Lethbridge (the latter of whom, Mayor Hardie, is President of the Union) have already signified their intentions of being present, and the Executive is now bending every endeavour to secure the presence of delegates from every urban municipality that it is possible to get. Among the attractions of attending this Convention, apart from purely municipal matters, will be an opportunity of viewing the famous Horseshoe Dam erected near the town by the Canadian Pacific Railway, in connection with their irrigation scheme, and which is the largest undertaking of its kind on the American continent.

NEW SECRETARY TREASURER OF MAISON-NEUVE.

It is with deep regret that we record the death of M. G. Ecrement, for many years secretary-treasurer of Maisonneuve, P.Q. Mr. Ecrement, who had been ill for some time, was one of the best known municipal men in Quebec. He was not only a faithful servant of the city, but was behind many movements for the uplifting of the community. His successor, Mr. Joseph Hinton, has been in the service of Maisonneuve for over twenty years, and is well qualified for the position, which he deserves.

MUNICIPAL LIFE IN INDIA.

We give below part of a letter to this Journal from the Editor of the "Local Self-Government Gazette," Madras, India, which goes to show the benefit of a Union to the municipalities of this country. The extract speaks for itself:—

"There are about 67 municipalities in the Madras Presidency, and there is the 'Madras Corporation' in the Presidency Town. The former are governed by the Madras District Municipalities Act and the latter by the Madras City Municipality Act. No such institution as a Union of Municipalities exists in this or other Provinces. At the instance of the Government a Conference of the Chairmen of the municipalities was held in January last. The object of the Conference was to discuss municipal questions generally, but the Conference could not be said to have been a success."

CONVENTION OF UNION OF B. C. MUNICIPALITIES.

The annual convention of the Union of British Columbia Municipalities was held September 23-24 at Chilliwack, too late for a report to be used in this issue of the Journal. We have arranged for a full report of the proceedings to be published in our next (November) issue.

UNION OF NEW BRUNSWICK MUNICIPALITIES.

The tenth annual convention of the Union of New Brunswick Municipalities was held in Fredericton during the week of August 23, under the chairmanship of Mr. J. K. Kelley, of St. John. The note that dominated the conference was that of optimism, in spite of the war. It is very evident, too, that the municipalities of New Brunswick are determined to have no distress from unemployment this coming winter, if energetic means to meet the problem now can relieve it.

NEW OFFICERS OF CANADIAN PUBLIC HEALTH ASSOCIATION.

At the closing meeting of the Canadian Public Health Association which was held last month in Toronto, the following officers were elected: Dr. C. J. O. Hastings, of Toronto, president; Dr. P. H. Bryce, of Ottawa, honorary president; Dr. Hutchinson, vice-president; Dr. Geo. B. Porter, treasurer, and Dr. O. C. J. Withrow, secretary.

The following provincial vice-presidents were elected: Ontario, Dr. F. A. Dallyn; Manitoba, Dr. Douglas; Saskatchewan, Dr. McMillan; Alberta, Dr. Revell; British Columbia, Dr. Underhill; Nova Scotia, Dr. Hall; New Brunswick, Dr. Warwick; Prince Edward Island, Dr. Johnston. The next convention will be held in Quebec.

BRANDON MAYOR SUCCEEDS TO LEGISLATURE CLERKSHIP.

J. W. Fleming, former mayor of Brandon, has been appointed clerk of the legislative assembly of Manitoba, in place of Major Corelli, who resigned to go to the front. Mr. Fleming's appointment took effect at the end of September.

ALL AROUND THE WORLD

LET THE BUYER BEWARE.

The City of Chicago is resorting to billboard advertisements to sell an issue of four per cent. bonds. The advertisement, signed by the Mayor and City Comptroller, states that these bonds are exempt from federal income tax. But the writer of the advertisement forgot to state that they are subject to the general property tax, and that this tax, if enforced, as the law requires, will leave little of the four per cent. income to investors. Considering that State's Attorney Hoyne has been using the power of his office to uncover and punish evasions of the personal property tax, it is only fair that intending purchasers be warned.

WHAT WOULD SHE DO IF SHE WAS A REAL MAYOR.

Los Angeles (Cal.), has recently had the opportunity, through the absence of the Mayor and Deputy, of seeing how a woman can handle the position. The Council elected Miss Estelle Lawton Lindsay an alderman to act pro tem.

Acting Mayor Lawton, in an interview, expressed herself as follows:—

"If I were the real Mayor of this city, and I could do what I wanted to do, I would have every business house and rooming house tagged, so as to let everybody know who owned the property. We have quite a few persons here who call themselves respectable, who are receiving rent from saloons and immoral places.

"I would have the city do its own paving; I would abolish the city jail and substitute a misdemeanor bar; establish a black list for drunkards and see that it was enforced; establish the single tax system; have a school for mothers; abolish the loan sharks and place free milk stations all over town."

TELEPHONE DEVICES.

A Dutch inventor, P. de Lange, residing in the Amsterdam consular district, has invented a simple little instrument that seems to be a decided improvement over the present-day telephone, according to Cousul D. I. Murphy at Amsterdam. The receiver and transmitter are so small they may easily be carried in the vest pocket, taking up no more space than the ordinary watch. The cost of manufacture is estimated at thirty American cents.

Notwithstanding its diminutive size, the "thermaphone"—for so the inventor has named it—appears to have the advantage over the telephone of transmitting messages with perfect clearness and distinctness, vocalization being especially good, and there being no confusion of vowel sounds, letters, or figures. In the "thermaphone" the magnet and diaphragm of the telephone are eliminated, there being substituted a loop of exceedingly fine platinum wire, within a small aluminum cover pierced with minute holes. Currents passing through the wire cause changes in temperature, alternating from heat to cold with great rapidity, the consequent expansions and contractions of the surrounding air becoming evident as sound.

The receiver is so small (being not more than an inch in length and about the thickness of lead pencil) that it may be placed in the ear, connection being maintained by a thin wire. Either a single or double receiver may be used, and the hands are left free to make notes of any messages transmitted.

"I was present," says the consul "at a demonstration of the invention recently at the University of Utrecht, where, by permission of the Netherlands authorities, the wireless telegraph was brought into requisition in connection with the thermaphone with entire success. Subsequently, at the inventor's laboratory, I had the opportunity of transmitting and receiving messages to and from a distant room in the building over the ordinary wires, all the tests proving most satisfactory."

Among the advantages claimed for the thermaphone are compactness, reliability, simplicity and cheapness of construction, and clearness of enunciation. It is claimed, too, that because of the peculiar character of the receiver and the fact that it can be placed close to the drum of the ear, the thermaphone may be of advantage in ameliorating certain forms of deafness.

DELIVERY OF PORTABLE TELEPHONES UNDER FIRE

The delivery of telephones under fire seems to be a bit more exciting than the prosaic delivery of the same type of article in neutral countries where the instrument is used, not to pave the way for the decimation of an infantry brigade or an artillery battery, but to facilitate the transportation of a hogs-head of sugar or reserve a box at the theatre. A correspondent writes that deliveries out in France and Belgium are made "on the run."

"I suddenly got an imperative order," said the sapper of the signal section of the Royal Engineers. "It was in an envelope. There were 50 portable telephones to be distributed to the various army corps and I was put in charge of the job. I had a driver and two other men of the A. S. C. Besides the telephones there were four miles of wire on drums and a packing-case full of instruments. We started out full pelt in the motor lorry. We crashed and bumped in and out of towns, charging through hedges into fields and back into the roads again to avoid unpleasant encounters. In one of the semi-Flemish towns I delivered some of my telephones and took a receipt under fire. From this place we went on to another town, taking short cuts across meadows and parks and leaving our instruments and wire where specified.

Then we got the order to go 'like blazes' to the next town. The stuff was urgently wanted—the Germans were shelling the roadway and the British were unable to direct their own artillery. We made it all right, although I had to sort myself out from field telephones and yards of wire and telephone apparatus before we could make our final delivery. The telephones connected up right away and the British began to make things warm for the German batteries before we left. The enemy tried to cut us off on the way home but we returned all right and were complimented for our work. But I'd hate to be some of those soldier-linemen who sometimes have to lie on their stomachs to make their telephone connections or dig themselves into the earth like groundhogs."

FREE EMPLOYMENT BUREAUS.

Through the efforts of the committee on unemployment of the Youngstown, (Ohio), Chamber of Commerce, a branch of the Free State Employment Bureau, which is maintained jointly by state and city, was secured for Queenstown. There are seven other such bureaus in Ohio, which are operated under the supervision of the State Industrial Commission, and are located at Cleveland, Columbus, Akron, Cincinnati, Toledo and Dayton. These labor exchanges make no charge for services, either to applicants for work or to applicants for workers. Every effort is made to supply the employer with the best help available, and the applicant with the best position which can be secured.

The following will illustrate the volume of business which is being done by the seven Ohio agencies. During the month of July of this year Cleveland placed 2,897 persons; Toledo, 1,793; Columbus, 1,011; Cincinnati, 799; Youngstown, 606; Akron, 541; and Dayton, 507, a total of 8,154 persons. This is an increase of 147 per cent. over July of 1914, which is partly accounted for, no doubt, by the fact that three new agencies were established during the year.

The following are figures which were given to the Chamber recently by the superintendent of the local branch, giving an idea of the work done by him in Youngstown since the establishment of that branch four months ago:

Number of new registrations	3,010
Number of requests for workers	2,504
Number of applicants referred to positions	2,467
Number of applicants reported placed	2,074

PAUL L. HARVEY.

A MUNICIPAL BUREAU.

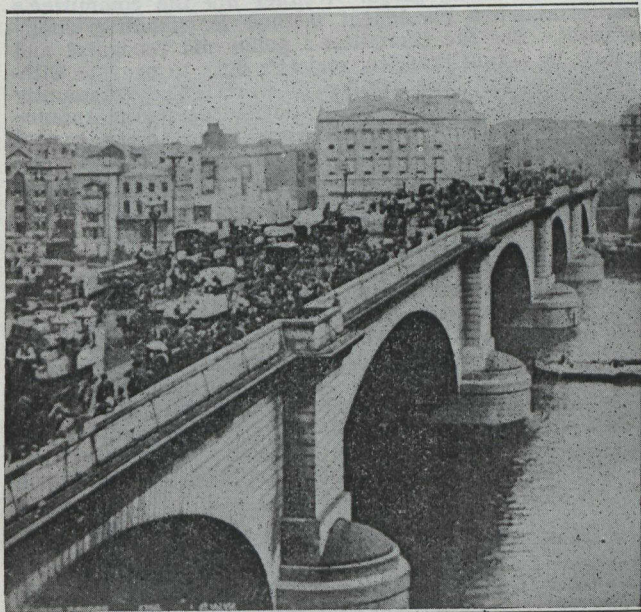
The State Bureau of Municipal Information established by the New York State Conference of Mayors and Other City Officials, has opened headquarters at Albany and engaged W. P. Capes as director. The purpose of the bureau is to supply information on all municipal subjects to officials in all cities of the state and to act for cities before any state body at Albany, including the legislature. It is in direct charge of a committee of five mayors, elected at the annual mayors' conference.

Traffic Over Some of the World's Busy Highway Bridges

In a paper recently presented before the Western Society of Engineers, Charles M. Spofford gave the following statistics concerning the width of roadway and traffic over some of the important bridges of the world.

Brooklyn Bridge.—Width of roadway. Two roadways at 16 ft. 9 in. each between curbs, with single street car track on each.

Traffic in 1909. Surface cars, round trip, 1,489,364; average per day, including Sundays, 4,080 single trips. Other vehicles, 1,525,262; average per day of twenty-four hours, including Sundays, 4,179.



LONDON BRIDGE.

Manhattan Bridge, N.Y.—Width of roadway. One roadway at 35 ft. without street car tracks.

Total roadway vehicle traffic in 1910, 918,535; average per day, including Sundays, 2,516.

Total roadway vehicle traffic in 1909, 1,673,333; average per day, including Sundays, 4,584.

Queensboro Bridge.—Width of roadway. One roadway 33 ft. 1½ in. clear with space for street car on either side, giving a total width of 53 ft. 2½ in.

Waterloo Bridge, London.—Width of roadway in the clear, 27 ft. 6 in. 10,192 horse and motor vehicles. No street cars.

Blackfriars Bridge.—Width of roadways in the clear, 73 ft. 6 in. 14,067 horse and motor vehicles, including 1,829 electric tram cars.

The following figures are from the 1911 Report of the London Traffic Branch of the Board of Trade and refers to traffic on one day in 1911 between 8 a.m. and 8 p.m.

Westminster Bridge, London.—Width of roadway in the clear, 54 ft. 14,618 horse and motor vehicles, including 2,975 electric tram cars.

London Bridge.—Width of roadway in the clear, 37 ft. 13,771 horse and motor vehicles. No street cars.

Tower Bridge, London.—Width of roadway in the clear 35 ft. 9,552 horse and motor vehicles. No street cars.

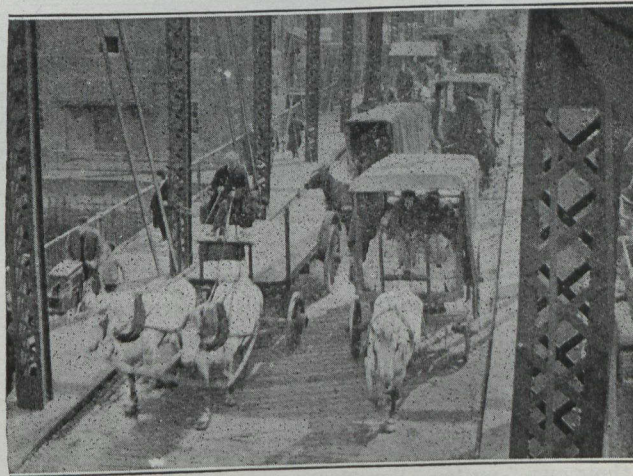
Northern Avenue Bridge, Boston.—Width of roadway. Two roadways each 18 ft. 9 in., and one roadway at 18 ft. 6 in. between curbs, without provision for street cars. Traffic on February 27, 1913, between 7 a.m. and 6 p.m., 3,644 vehicles.

Congress Street Bridge, Boston.—Width of roadway. One roadway 44 ft. between curbs on fixed spans; 31 ft. 4 in. between curbs on draw-span. This bridge, including draw-span, is used regularly by three lines of vehicles. No street cars. Traffic on September 11, 1908, 7,362 vehicles.

Malden Bridge Draw-Span, Boston.—Width of roadway. Two roadways each 19 ft. 6 in. between curbs, with street car track on each roadway.

Roadway Bridge, Boston.—Width between curbs 40 ft., with double track street railway. Traffic on March 8, 1915, from 6 a.m. to 10 p.m., 398 cars, 1,925 other vehicles. Four lines of traffic.

Meridian Street Bridge, Boston.—This bridge is a comparatively narrow structure, having a distance between trusses of 25 feet and between curbs of 21 ft. 3 in. The traffic across this bridge on Sept. 10, 1912, between 6 a.m. and 10 p.m., consisted of 1,145 vehicles, including street cars.



NORTHERN AVE. BRIDGE, BOSTON.

SERVICE TESTS OF MANITOBA GOVERNMENT TELEPHONES.

The results of service tests of the Manitoba Government Telephones in the provincial exchanges made during the year 1914, show that 95.4 per cent. of the calls were answered by the operator in 15 seconds or less; 90.0 per cent. in 10 seconds or less; 62.4 per cent. in five seconds or less; and 3.7 per cent. in two seconds or less.

The time required to complete the connection from the time the operator answers until the subscriber answers was 60 seconds for 88.5 per cent. of the calls; 30 seconds for 60.3 per cent.; 15 seconds for 12.9 per cent. and 10 seconds for 6.1 per cent. But 11.5 per cent. of the calls required over 60 seconds for completion. 93.5 per cent. of the calls were disconnected in 30 seconds; 70.8 per cent. in 10 seconds; 3.2 per cent. in two seconds and 6.4 per cent. over 30 seconds.

The average number of complaints per day was 10.3. The average number of complaints per 1,000 stations per annum was 10.

In the Winnipeg exchanges over 6,000 tests were made during the year 1914. The results show that 99.2 per cent. of the calls were answered by the operator in 15 seconds; 96.6 per cent. in 10 seconds; 90.4 per cent. in five seconds; 62.1 per cent. in two seconds, but .8 per cent. of the calls requiring more than 15 seconds.

The time required to make connections was 60 seconds or less for 99.9 per cent. of the calls; 20 seconds for 98.2 per cent. of the calls; 15 seconds for 78.6 per cent.; 10 seconds for 41.3 per cent.; and over 60 seconds for .1 per cent. of the calls. 99.8 per cent. of the calls were disconnected in 30 seconds; 98.2 per cent. in 10 seconds; 91.8 per cent. in five seconds; 68.2 per cent. in two seconds, and .2 per cent. over 30 seconds.

The holding time of connection for 72.9 per cent. of the calls was 120 seconds; for 29.8 per cent., 60 seconds; 14.3 per cent., 45 seconds; 2.7 per cent., 30 seconds, and 27.1 per cent. over 120 seconds. The average number of calls per line per day was 11.9. The average number of complaints per 1,000 stations per annum was 17.4.

How Cleveland Handled Unemployment

That unemployment is a community responsibility and that the remedy for it is work were the principles which the people of Cleveland (Ohio) accepted last winter when they were confronted with a pressing problem of industrial depressing and idle wage-earners. When it developed that the city had no money with which to meet the situation, the citizens showed the sincerity of their convictions by raising \$81,000 in a private movement to "share-a-day's earnings," and they found work for several thousand men in a "give-a-job" campaign.

It became evident late in October that there would be an unusual unemployment situation. The superintendent of the State-City Labor Exchange reported that a thousand applicants a day were coming to his office, and that he had jobs for about fifty. Relief agencies were being called upon for from 75 to 100 per cent. more help than had been required the year before.

After some preliminary conferences the City Council requested its committee on labor to report on conditions. It made no appropriation, but the Welfare Council, an organization of social workers, succeeded in raising the money and a hasty survey of the city was made. This revealed the fact that there were 61,000 persons out of work. As a result of this report the mayor appointed a citizens' committee with F. H. Goff originator of the Cleveland Foundation, as chairman.

At once this committee discovered that the city was helpless. The Council's bonding power was exhausted, and local revenues were already overdrawn. The committee then turned to the employers of Cleveland and appealed to them to provide work wherever possible. This did not at once have the desired effect, because of the artificiality of the demand and the feeling that the employers were being held accountable for giving work. As a result the committee attempted a new registration of the unemployed. In January, 10,000 registered as being willing to accept work at any price.

In view of the feeling of some that not all of these men really desired work, the committee proposed what it called the "acid test." Employers were asked to give work for five hours a day for five days at 17½ cents an hour, with pay at the end of each day. There were offered 1,310 jobs of this character, and the percentage of refusals was very low.

Besides these jobs, 400 men went to work in the parks, paid with money furnished by private subscriptions, and 500 more were given work by the city, starting excavation that usually would have waited until spring. Large numbers of men showed both real need and their pluck by working sometimes in sleet and blinding snow in spite of lack of adequate clothing and sufficient food.

This proof of the reality of the need and the actual willingness of the men to work aroused the city to greater efforts. In a month 5,160 jobs had been secured through the State-City Employment Bureau. Still there were hundreds of men idle who were willing to work and who did not wish to resort to the relief agencies. With this spirit the committee was in perfect sympathy.

"They resented that men unemployed through no fault of their own," writes Allen T. Burns, director of the Cleveland Foundation, "should be subjected to resorting to any relief agency,—the humiliation was inhuman, the danger of permanent dependency too great."

It was decided, therefore, to raise an employment fund through private subscriptions which would at the same time emphasize the responsibility of the community. Accordingly, the mayor proclaimed a day, February 4, to "share-a-day's earnings." A special committee was appointed, posters, subscription blanks, newspaper coupons were used, and a general publicity campaign conducted. As a result \$81,000 was collected.

"Every one was surprised," says Mr. Burns, "since there was no personal solicitation. Necessary improvements in the parks, impossible for the city at present, were immediately selected. A workroom with sewing for public institutions was opened for women. It was decided to give half time to all; the men receiving \$2 for an eight-hour day, and the women, \$1 with lunch. The women, for the most part, had to be taught to sew. As they learned, more steady and better paid work was found for many of them.

The supervision of expenditures, as well as the direction of the "give-a-job" and the "share-a-day's earnings" campaigns was undertaken and efficiently managed by the Survey Committee of the Cleveland Foundation.

The visitors of all the philanthropic agencies and many experienced volunteers were set to work to find the most needy men with families. The lists of the State-City Employment Bureau were used, and all the able-bodied applicants to the Associated Charities were given a chance to work. For two months, 1,500 men and 80 women were given this half-time employment. As spring came increasing numbers found steady jobs and dropped out, the vacancies were filled and thus twice the number were actually helped.

"No one contends," says Mr. Burns, "that selection of the neediest was made as carefully as if an experienced organization had picked the applicants. But the committee believed that no reason could be maintained for such closes scrutiny and supervision when only a chance to work was being given. Neither did the committee's work establish a permanent method for handling unemployment. But the committee's policy did recognize and declare, by actual practice, society's duty to provide without charity for those willing to work. The community was startled at such a declaration. But its acceptance was registered in its substantial response to the appeal for 'work, not alms,' and in the organization of a committee of thirty now at work on a study of unemployment and a permanent policy for its relief."—The Survey.

TORONTO'S OBJECT LESSON.

United States Consul Julius D. Dreher reports from Toronto, Canada, under date of August 13:

Through the efforts of the Rotary Club of Toronto, 130 vacant city lots have been secured and turned over to needy families for the raising of vegetables. Members of the club, with the Mayor of Toronto and members of the City Council, made a tour of inspection of this work on August 12, when it was found that 96 families and 432 persons in all have already been benefited by this movement to have vacant city lots put to some good use. So much pleased were the Mayor and Councilmen with the results that it is likely that lots at the disposal of the municipal authorities will soon be used for growing vegetables for the poor of Toronto. Owing to the over-speculation in town lots and in laying out unnecessary additions to the city, Toronto has many acres of land within the corporate limits that could be profitably used to aid needy people in accordance with the plan adopted by the Rotary Club.

From which it is evident that conditions in Toronto are very much the same as on this side of the international boundary, even to the over-speculation in town lots and the object lesson of vacant lot cultivation. The Rotary Club is doing work which deserves commendation. It is having land put to some kind of productive use that but for its efforts would not be used at all. It is opening opportunities of some sort to the involuntarily idle who would otherwise be denied any opportunity. It would be much better, however, if the land were put to such use as that for which its value shows it to be fitted. Such use would in many cases be far more productive than cultivation of vegetables. But this can not be done so long as the laws of Ontario and of Canada encourage speculation. The Rotary Club is giving the people of Toronto a hint as to the permanent solution of the problem of unemployment. Will they take it?—S. D., in The Public.

TORONTO CITY'S INSURANCE ON ITS SOLDIERS.

The Metropolitan Life Insurance Company have issued approximately 4,700 policies on Toronto members of the First Canadian Contingent and Reservists. The company have been paid premiums to the amount of \$218,871.43. Up to the present date, 151 claims have been paid, with 25 claims pending, and which are now being attended to.

There have been a number of claims paid on soldiers killed in action who have no next-of-kin, and there will be other similar cases. The city will deposit such amounts to the credit of their "Death Claims Paid Account," and then should they receive notification of a death of a bona fide resident, for which no policy has been issued, the insurance can be paid out of that amount.

Policies have been issued on Toronto members of the Second and Third Contingents as follows:—

Ætna Life Insurance Company.....	1,100
Metropolitan Life Insurance Company.....	3,700
State Life Insurance Company.....	262

Altogether the city will have taken out over 10,000 policies on its soldier citizens.

Annual Meeting of Ontario Municipal Association

The seventeenth annual meeting of the Ontario Municipal Association, which was held in Toronto Sept. 1 and 2, was probably the most successful in the Association's existence. The programme—which was published in our September issue—was not only a good and sensible one, because of the live questions taken up, but the discussions were of a high order, those of the delegates taking part showing a thorough knowledge of their subjects. The system of making the resolutions effective is one to be commended. All resolutions have to be submitted at the first session, and the introducers, together with the executive, form a resolutions committee. This committee meets between the sessions, when each resolution is thoroughly discussed on its merits, with the man responsible for it on the spot. As a consequence out of the twenty-four submitted, twenty of the resolutions were recommend-

Municipal Council Procedure.—S. H. Kent, Esq., City Clerk, Hamilton; W. C. Caughell, Esq., Township Clerk, Yarmouth.

The Problem of the Unemployed.—Sir John S. Willison, Chairman Provincial Commission.

Toronto's Labor Bureau Experience.—D. Chisholm, Esq., Property Commissioner.

Prison Reform and Industries—Hon. W. J. Hanna.

Cultivation of Vacant Town Lots.—Chester S. Walters, Esq., Mayor of Hamilton; F. E. Robson, Esq., Rotary Club, Toronto.

Municipal Financing and War Conditions.—Thomas Bradshaw, Esq.

The City of Toronto, with its usual spirit of hospitality, entertained the delegates and their friends to dinner, and afterwards to the National Exhibition.



SOME OF THE DELEGATES TO THE ANNUAL MEETING OF THE ONTARIO MUNICIPAL ASSOCIATION.

ed for adoption by the committee, and four referred to the executive committee. The resolutions were printed over night, and brought up at the last session, when they were further discussed. That the resolutions mean something is illustrated in the putting into practice by the Provincial Parliament of most of those referring to the municipal laws of the province.

Unemployment.

One of the sessions was taken up in the discussion of unemployment in its different phases, resulting in the passing of a very important resolution, introduced by Mayor Stevenson, of London, which read as follows:—

"That this Association, in full session assembled, is in hearty sympathy with the Union of Canadian Municipalities, in its propaganda to bring together in conference the Federal, Provincial and Civic authorities, together with employers and employes, as a first step towards a solution of the unemployment situation which threatens to be serious this coming winter, and that the executive be authorized to help in the work so far as lies in the power of the Association."

The one disappointment of the meeting was the failure of Sir Adam Beck to attend and give an address on his great work—the Hydro-Electric Commission,—but he sent a good substitute in Mr. Gaby, the Chief Engineer of the Commission, who gave an interesting paper on "Ontario's Hydro Radial Enterprise." The other papers read were: Assessment and Taxation—K. W. McKay, Esq., County Clerk, St. Thomas.

New Officers of the Ontario Municipal Association.

President—Mr. A. K. Bunnell, City Treasurer, Brantford.
First Vice-President—Mr. W. C. Caughell, Township Clerk, Yarmouth.

Second Vice-President—Alderman E. H. Menzies, Niagara Falls.

Third Vice-President—Mr. A. M. Chapman, County Clerk, Beleville.

Fourth Vice-President—Mr. A. Ferland, Reeve of Coleman, Cobalt.

Fifth Vice-President—Mr. S. H. Kent, City Clerk, Hamilton.

Secretary-Treasurer—Mr. F. S. Spence, 150 Confederation Life Building, Toronto.

Executive Committee.

Mr. W. B. Doherty, City Solicitor, St. Thomas.

Mr. T. J. Moore, City Clerk, Guelph.

Mr. F. R. Waddell, K.C., City Solicitor, Hamilton.

Mr. S. Baker, City Clerk, London.

Mr. K. W. McKay, County Clerk, St. Thomas.

Mr. G. H. Dewey, City Clerk, Brockville.

Mr. H. Bertram, County Warden, Waterdown.

Mr. Wm. Johnston, City Solicitor, Toronto.

Mr. T. L. Church, Mayor, Toronto.

Mr. S. R. Armstrong, City Clerk, Peterboro.

Mr. John McQuaker, Mayor, Owen Sound.

Mr. M. Huenergard, Assessment Commissioner, Berlin.

NEW BOOKS.

"Municipal Life and Government in Germany.)

BY WILLIAM HARBUTT DAWSON.

The author has already published several works on Germany during the past twenty-five years, and devotes the present volume to an explanation of the actual workings in life in the communities, concerning himself solely with questions of urban administration. His aim, he explains, is to give a true picture, and not a resume drawn from other books, and the legislation which governs.

Some features are very prominent. For instance, the far reaching powers which German towns possess; and the dominant position held in local government by the permanent officials and experts. The author emphasizes the results of the long and careful study into the questions of taxation, town planning and social and educational activities.

The value of self-government is instanced by the fact that as German towns can spend what they like on advertising, without having to seek permission from a State authority, many have taken advantage of this, and have thus been able to build up a splendid tourist business, at the expense of other places, which may have quite as health-giving mineral springs, but which have been unable to make their virtues known to the world.

The book is one which every student of municipal matters should have both to read and to use for reference.

(Longmans, Green and Co., 506 pp. \$3.75 nett.)

CASTELL HOPKINS' ANNUAL REVIEW.

Some six years ago, when the writer first came to Canada, he was at a loss to get anything like a good perspective of the country—the public life of the Dominion, the Provinces and the Cities. Someone suggested his securing Castell Hopkins' annual review for the previous years. Result, a live knowledge of Canadian men and affairs was panoramically displayed before the mind's eye of the writer. Since that date, Castell Hopkins—the book is better known by the man than the title—has been looked for with every confidence that an impartial epitome of the year's doings will be given at least interestingly. And not once have we been disappointed, and it is no small task to review impartially, current events, together with the reasons for their taking place, and in the last review (for 1914) it would be hard to find out what Mr. Hopkins' views really are—only this, that the verbiage of shell is cleverly stripped away leaving the kernel only to deal with, and this is so well served that the reader is under the impression that Castell Hopkins' conclusions are his own. A further point about the review is that while the continuity of thought is kept up from beginning to end by the sequence of events, each one is complete in itself, so that one can open the book at any place and spend a profitable five minutes without feeling that his time has been wasted.

The work has meant much thought and time on the part of the compiler and editor—the present is the fourteenth volume—but the time has been well spent, and now that Canada is taking her place in Empire affairs, requiring Canadians to take a keener interest in the public life of the country, such a work as the Annual Review becomes a very necessary adjunct to every man's table and library.

If we might make a suggestion for the next volume, it is that the municipal affairs take a larger part of the work. It is true that the principal events of City public life are recorded, but it is very evident that they are taken from the daily newspapers—which have the unhappy knack of only reporting the spicy tit-bits. This has had the effect of giving a false impression of municipal life—which, on the whole, is better and purer than either federal or provincial politics.

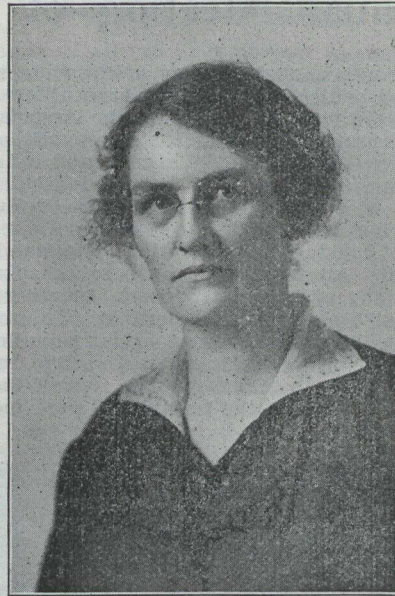


PHOTO OF

MISS M. A. DICKINSON

ACTING CITY CLERK OF WINDSOR,
ONTARIO

A Pen Sketch by "Ajax," of the only lady city clerk in Canada, will appear next month.

Special Articles for November Issue

SUGGESTED SEWAGE DISPOSAL SCHEME FOR A TOWN ON THE SEA COAST

By C. J. YORATH.

CULTIVATION OF VACANT CITY LOTS (City of Hamilton's experiment)

By S. H. KENT, City Clerk.

LOCAL GOVERNMENT IN INDIA

By Hon. Dr. T. M. NAIR.

CITY GOVERNMENT

By R. O. WYNE ROBERTS.

ENGINEERS AND CITY GOVERNMENT.

There is a tendency on the part of the public to consider the function of an engineer is that of an official or civic servant, but that the prerogative of administering the departments belongs to the municipal politician who perchance might know something of the duties of the office he is seeking to fill, but usually has but a hazy idea of what he is elected to perform.

The fact that the engineer occupies such a retired position in the estimation of the public is one for which he is alone to blame. Engineers, as a rule, are silent yet ceaseless workers; they are not given to flag-wagging or stumping with abundant supply of rhetorics, but it would nevertheless be an advantage if engineers were to assert themselves more prominently in city affairs, and, indeed, in all public affairs.

It is, of course, highly essential that the executive offices should be occupied by capable, experienced and tactful engineers, but it does not appear reasonable that their capacity, efficiency and tact should often be circumscribed by men elected by the public to administer and control such departments. We must acknowledge that there have been instances where such men have had the ability of applying good and sound commercial experience. Still, these are exceptions and only emphasize the need for public men of technical, commercial and financial training to undertake public duties.

City government, as is well known, is largely an aggregation of engineering problems—water supply, sewerage, sewage disposal, refuse disposal, streets and roads, street railway, lighting buildings, bridges, and so on. It is an anomalous situation when the public elect men to represent them in the administration of city business who have often paid the minimum of attention to the problems which they are expected to solve. Of course, it will be urged that the officials are appointed for that purpose and the elected representatives have only to decide on the adoption or rejection of the schemes submitted. It is here where the city government is lacking in strength and foresight. Laymen are called upon to decide on technical matter, and sometimes outside influences are brought to bear on the projects with the object of frustrating the advice of the technical advisers.

The engineer's training should be of value to the public. The nature of his work calls for foresight, preparation for the future, stability, surmounting difficulties, coordinating the work of different classes given for one united object, administration, developing schemes with due regard to economy, efficiency and utility.

It is often asserted that it would be an advantage if the engineer was endowed with some measure of estheticism. The foregoing qualities are recognized in the construction and administration of the Panama Canal. Lord Kitchener and General Joffre—two engineers—are allotted stupendous tasks. These examples might be multiplied. Can it be denied that the training of these men have had their value in the minds of the public they represent?

Engineers, however, like other men, are reluctant to enter a field where the recompense—if it can be so termed—is abuse and criticism. Engineers are not more sensitive to abuse and criticism but they have not gone through a schooling of casehardening and expect that public service merits something better. Public service calls forth the highest qualities of citizenship and this should be the key-note of city government.—Canadian Engineer.

NO MONOPOLY FOR THE MONKEYS.

Go to the monkey, thou voter; consider his ways and be wise. Do the monkeys pay ground rent to the descendants of the first old ape who discovered the valleys where the monkeys live?

Do they hire the trees from the chimpanzee who first found the forest?

Do they buy the cocoanuts from the great-great-grandchildren of the gorilla who invented a way to crack them?

Do they allow two or three monkeys to form a corporation and obtain control of all the paths that lead through the woods?

Do they permit some smart monkey, with superior business ability, to claim all the springs of water in the forest as his own, because of some alleged bargain made by their ancestors 500 years ago?

Do they allow a smart gang of monkey lawyers to so

ORDER TO PREVENT ELECTROLYSIS.

The City of Winnipeg has secured an important order relating to the subject of electrolysis. The order, which is dated July, 1915, marks an epoch in the history of street railway service in Canada, as it is the first order ever made of this nature in the Dominion, and as water mains and gas mains suffer very materially from electrolytic action, the action of the Winnipeg City Council in demanding the order looks as though a possible solution of the trouble has been arrived at. Our Winnipeg correspondent writes:

"It is a very serious thing in a city to have the water mains pitted by escaping current from the railway operations, for at a critical time, the pipes having become weakened, may burst under pressure at a fire, and thus prevent the fire fighting apparatus from adequately taking care of a conflagration. For some time it was a theory amongst electricians and others that electrolytic action was one of the incidents of the operation of the trolley system where the rails were used for the return of the current. Thorough investigations have been conducted and this old theory has been exploded by the application of science.

"As will be no doubt recollected, the theory at one time existed that the emission of sparks from an engine was necessary, and could not be prevented without a serious crippling of the efficiency of the engine, and therefore being an incident in the operation of a railway, any damage that was created could not be recovered for, because it was in the contemplation of the legislature, so the foolish reasoning was that an engine should emit sparks and should set fire and should damage innocent people's property.

A somewhat similar argument was adopted with respect to electrolytic action, but science has shown the courts and the judges that they did not know much at that time, and things are in such shape now that with the application of scientific knowledge electrolytic action can be prevented or at least limited to an enormous extent. In fact, after the subject became a live one in England, and water mains and gas mains had suffered from bad law and bad engineering practice, the British Board of Trade formulated a set of rules which has taken care of the situation for the past 20 years, and the wonder is that America has been slow in following the lead of the British, as the British Board of Trade rules have been effective for such a long period.

"I understand that the City of Winnipeg is not the only city where the water mains have suffered from electrolysis, but to what extent I am not in a position to say, as I have not been in correspondence with any Canadian cities on the subject. However, we think that with the special advice we have received from Professor Ganz, who conducted the tests and prescribed the remedies, we shall be able to eliminate this danger to our underground structures. I may say that in some cities in the United States the Federal Government has been conducting a series of experiments and has prescribed a set of rules which are effective, and no doubt copies of the reports can be obtained on this very important subject, which would make, I should think, somewhat interesting reading to those who are concerned with the preservation of the lead cables and water mains, gas mains and other underground structures which serve the public."

tangle up their conceptions of ownership that a few will obtain possession of everything?

Do they appoint a few monkeys to govern them and then allow those appointed monkeys to rob the tribe and mismanage all its affairs?

Do they build up a monkey city and then hand over the land, and the paths, and the trees, and the springs, and the fruits, to a few monkeys who sat on a log and chattered while the work was going on?—San Francisco Star.

MOOSE JAW TO HOLD TAX SALE.

The Moose Jaw city commissioners have set October 28th as the date on which the sale of city lands for unpaid taxes will be held. Over 30,000 lots or parcels will be offered for sale, and these comprise the lands on which the taxes have not been paid prior to and including the 1914 taxes.

Municipal Affairs in British Columbia

(By JACK LOUETET.)

The Union of B. C. Municipalities has postponed its annual meeting until September 23rd, owing to other important matters making it impossible for several municipalities to be represented on the date originally chosen.

Many matters of importance will be taken up and some form of united action on the unemployment question is expected.

In Vancouver the old question of the respective powers of the council and school board in regard to school finances is again under discussion. The present system is considered unsatisfactory, but the proposal to allow the school board to arrange its own financing and collections does not seem to offer a workable solution of the difficulty.

The general opinion seems to be that one body should collect both school and general taxes, and that the council should have more say than at present in the expenditure of the board. How that is to be arranged without interfering with what the board may consider necessary for educational purposes is yet to be discovered. The suggestion of Alderman Kirk that the council should be represented on the board is one way in which the difficulty may be overcome.

Experience in several municipalities has shown that where men have been elected both to the board and the council, harmony has prevailed, and many misunderstandings have been avoided. The school board must have systematic financing, and if the council do not collect the taxes the school board expects its money in any case, it having no power to enforce collection. When a proper system for the collection of taxes is made law and not left in the hands of the councils from year to year this source of trouble at least will disappear.

TAX SALES.

In Point Grey recently a meeting was held to discuss the action of the council in suing large property owners for arrears of taxes. The principal land owners were out in full force, and took strong exception to the action of the council.

During the meeting it developed that out of forty-three ratepayers sued, twenty-four of whom owed in all \$13,000, all but four had settled out of court. This was taken to indicate that many speculators were endeavoring to make the municipality carry them into better times, thus endangering the financial position of the municipality. Reeve Harvey maintained that the bondholders should be protected, but this did not suit the views of the chairman, who held that the people (the landowners?) came first. The

matter was eventually referred to a committee, a vote of censure on the council being defeated.

In view of the opposition to tax sales shown in several municipalities it is interesting to note just what does occur in places where tax sales have been held.

In the City of North Vancouver a tax sale was held in September last year, and 276 parcels of land, with taxes and costs against them of \$61,000 were offered for sale. At the close of the redemption period of one year all but 38 parcels had been redeemed, the amount against these being \$2,570, or just over 4 per cent. of the total amount of arrears subject to tax sale. Of the 38 several were apparently allowed to go owing to complications in the title, and in other cases none had sufficient equity to make it worth while to redeem under present conditions.

In no case did a resident of the city lose his property and no working man lost his home, all properties unredeemed being unimproved. The figures in other municipalities are not yet available, but so far redemptions have been made in considerable volume, and are increasing as the expiry date approaches.

STREET RAILWAY DISPUTE.

The street railway dispute between the men and the company affecting the cities of Vancouver, Victoria, New Westminster and North Vancouver, was settled at the last moment by slight changes in the arbitrators' decision. The cut in wages is slight, and the present agreement will remain in force until six months after the war, provided the war is over before January 1st, 1917.

A majority of the men had previously been in favour of a strike, but the refusal of support from the international union made this impossible.

The City of Victoria has found, as have many other municipalities, that fairly generous treatment of men requiring relief lead to the assumption on the part of the men that they have secured steady work. In order to counteract this impression, and induce the men to look for work elsewhere, the council have decided to stop this class of work for a short period.

In spite of the approach of winter unemployment seems to be decreasing to some extent, but it is yet to be determined whether this is a temporary or a permanent condition.

The Army has taken a great many away, and several hundreds left for the harvesting during August.

CALGARY MUNICIPAL RAILWAY.

The Municipal Street Railway at Calgary, Alta., for the year ending June 30th, shows that the net income, after all operating expenses, taxes, interest on funded and floating debts had been paid, was \$83,879.21 for the period from June 30, 1914, to June 30, 1915. From this amount, there were deducted reserves and sinking fund charges, leaving the municipal street railway with a surplus of \$8,894.32 for the period covering the first year of the great world war.

The cost of construction and equipment, per mile of road owned by the city, is \$31,331.85.

The gross earnings for the period from June 30, 1914, to June 30, 1915, were \$611,826.85.

The total funded debt of the system is \$2,280,210, and the interest paid on this sum during the period named was \$106,359.48.

Salaries and wages paid during the period totalled \$277,894.17, and the total operating expenses, including salaries and wages, were \$428,797.18.

The ratio of operating expenses to gross earnings during the same period was 70.08 per cent., and of operating expenses and taxes to gross earnings, 70.62 per cent.

The total number of employees is 272.

The total track of the system aggregates 71.5 miles, including main lines, siding and turnouts, while there are 87 cars of all classes on the system with equipment ready for operation.

The total number of passengers carried during the period including both fare and transfer, reached the enormous number of 19,073,278.

The operating expenses per car mile were 15.191 cents, while the car earnings per car mile were 21.328 cents.

ORGANIZING CANADA'S RESOURCES.

Caught between rising food costs at home and falling wheat prices abroad, the wheat producers of Canada turn against the railways, against and manufacturers, and resist the tariff. Here is where lies the sinister influence of wheat. The lack of a real National Policy of Production for Canada becomes manifest. The wheat miner, seeing no better national future than to grow wheat, would yield to the economic pressure of the highly efficient American nation to the south and have Canada become what she may only too easily become—a mere feeder of raw materials to American workmen. To correct the difficulties of wheat-growing the unwise wheat-grower would place in jeopardy the whole scheme of internal trade relations in Canada.

It would almost appear as though Canada had outgrown the national policy once so highly spoken of, and that she needs another. One is tempted to ask whether it would not be wise for men to consider carefully whether Canada is to be allowed merely to grow along the lines of the least resistance, shaping herself to the needs of the United States, or whether it is possible to conceive a career for a nation and organize the nation to that end. The easy path is lopsided agriculturalism, growing always what somebody else wants and never what is wanted at home. The difficult path is the path of combined agriculture and industry. The first is the course of inefficient nation; Such a nation cannot support the highest civilization. The second is the course of efficiency, not easy, calling for sacrifice, but the cause by which the economic, social, political, intellectual and artistic life of the country may be made really national.—Britton B. Cooke, in "Industrial Canada."

Unemployment --- Charity --- Health

(By R. O. WYNNE ROBERTS.)

Prof. Gunn read a valuable paper on the subject of Health and Charity at the recent convention of the Canadian Public Health Association, which was held in Toronto, and his remarks give rise to some thought on the more general question of unemployment—charity—health. This question has frequently occupied the attention of municipal authorities in Canada, and doubtless, will again call for the earnest consideration of the Councils and officials. Ordinarily, when the question of unemployment is discussed the problem of relief seems indissolubly associated with it, but its connection with health does not appear to be pronounced.

Unemployment is always a matter of grave importance. It has engaged the best minds in many countries, for it is by no means a local matter. Volumes have been written by writers of unquestioned ability, after most exhaustive investigations dealing with the causes of unemployment and submitting numerous suggestions as to how it may be reduced. It should be borne in mind that the nations that are most advanced in industrial developments and foremost in modern conceptions of civilization, and take the greatest accumulation of wealth, are also in a somewhat anomalous state, inasmuch as employment is there more periodic and aggravated. It seems that each flood of prosperity leaves behind it flotsam and jetsam of human debris; the greater the flood the more abundant the debris, which has to be dealt with afterwards in some manner or another. Each period of abnormal industrial activity is followed by another of great distress. Each swing of the pendulum of national development has its counter swing of social depression of increasing severity, causing grave concern to all who have the welfare of the people at heart.

Unemployment is almost perennial in character, for even when times are most prosperous there are many unemployed. This is not because they are all unemployable in the ordinary acceptance of that term, although doubtless some must fall into that category. It often happens that in a district there is a demand for labor of a certain class, but there is an insufficient supply, although there may be a great surplus of another class. It would, of course, be absurd to attempt to satisfy the demand of engineering works for mechanics by the supply of unemployed tailors. The contractor who requires bricklayers when the supply is inadequate will not employ carpenters even if there is a great surplussage of these. It is expected that the supply and demand of labor will be kept in better balance when the Labor Exchanges are established, but the public must not be too sanguine that labour can be exchanged from one district to another just like so much merchandise, because there are conditions which tend to prevent it. Labour Exchanges will do a great deal to bring the employer and employee together, and will give an opportunity for interchange of information as to the requirements of different districts. Also through them those free to move to places where there is employment awaiting them will have the authentic information to guide them.

There is a class among the unemployed which may be unemployable owing to disabilities of different kinds. When the war is over and the soldiers return to their homes it will be a serious problem where to find work for them, and what to do with the unemployable among them. Further, it is possible that the situation in Europe may be worse than in Canada, and many will leave the countries which have passed through the greatest catastrophic disturbances of the world's history, and which may then be reduced to a state of industrial, commercial and financial bankruptcy, from which it will require years to recuperate. This is a matter of grave national importance, which requires to be carefully considered in advance, and organizations must be established to effectually cope with the work, or there may be a social catclysm transcending anything we have experienced previous to the present war. Our fervent hope is that the situation after the war will be such that works will soon resume their normal pre-war working conditions, that prosperity will set in and produce a condition that will enable the question of unemployment to be readily adjusted. But it is doubtful wisdom to presume on such highly desirable conditions. It will redound to Canadian statesmanship if every preparation is made to meet unfavorable circumstances, so that the soldiers and their dependants at any rate may know that their services are appreciated by the country.

Unemployment always entails relief and charity, which involve the co-operation of every right thinking citizen.

There are a great number of men and women out of employment in every country at the present time. Fortunately the war has created work for many, otherwise the situation would have been infinitely worse. Nevertheless there are hundreds who are now drawing on their slender reserves to support themselves and their families in some sort of independence and respectability during their enforced idleness. Many a bank account has been, or will soon be closed, and assets which have taken years to accumulate must be disposed of at a sacrifice, bringing the men face to face with a depressing outlook which calls for stout hearts and abundant faith. There are others who by improvidence and profligacy in days of plenty, are dependent on charity when employment ceases. In what manner are these two classes to be given relief? Are those who have striven to be independent by saving for the eventuality of unemployment to be dealt with in the same manner as those who disregard every thought of such contingency?

Charity, however, is extremely repugnant to the independent workman who strives by every means in his power to find and keep his job, who struggles to build a home, and he will not accept charity until he and his family are forced by hunger and ill-health to surrender and suppress all their fine sentiments. This is a commendable spirit in many respects. It is desirable that workmen should be encouraged to regard independence as a valuable quality of citizenship, but notwithstanding this, when depressions come, over which the workmen have no control, it is as unjust to the community at large as it is to the workman that he and his family should suffer privations. To tolerate it is to invite cumulative disasters, the cost of which the community will have to bear, and the dire effects of which fall on himself in particular, and render him more helpless than he should be.

It is not relief or charity workers want. They have contributed to the wealth of the community and the state, and if the remuneration they secure in normal times is inadequate to enable them to save sufficiently for future eventualities, then the state should step in and in some manner insure the employees against unemployment from any cause. In this way the people of all classes would directly or indirectly contribute to the insurance fund. The public would derive the benefits accruing from the improved conditions under which the toilers of all classes would henceforth live as well as the advantages of the more prosperous and satisfactory condition of the people, generally.

At present unemployment causes great worry and anxiety to the workers, as the available private funds gradually and irresistably vanish. This develops into despair when they are gone. Insufficient food and that of poor quality must then suffice. Families must, as the result, move into cheaper houses, or pack into overcrowded houses, and habits will change with the environment. Children become apostles of filth, the health of the parents will be undermined, and perhaps ruined, and prospects grow as black as the ace of spades. This condition ultimately ends in additional burdens on the community. The worker who may formerly have been a most excellent person—an acquisition to the city—now becomes an unemployable—at any rate until his health is restored. Furthermore, much as slums may be condemned, unemployment tends to create them, for if families cannot afford to live in clean and comfortable homes they must perforce dwell in slums, amid insanitation and the City's bill of health suffers thereby, but worse still, a seething caldron of discontent is established, the disastrous influence of which no one can foreshadow. The creation of a national fund for insurance against unemployment would remove the taint of charity or relief and re-establish the true spirit of independence.

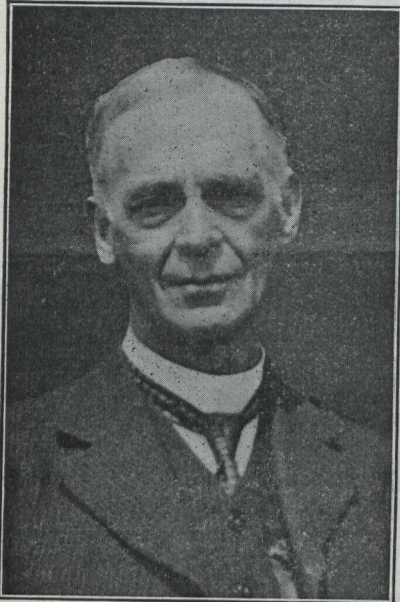
Unemployment, charity and health are matters of grave import to the cities of all countries. They have a most important influence on city politics, as is to be observed at municipal elections. Some day the function of attending to them will form an integral part of city administration, just as sanitary and other problems now constitute the primary duties of the city departments.

Labour exchanges, and insurance must of course, first receive the attention of the legislatures. As cities are affected to a greater extent by periodic occurrence of unemployment than is the case in rural communities, the call for legislation must, therefore, come from the cities.

SOME BIG MUNICIPAL MEN

(By AJAX.)

CONTROLLER F. S. SPENCE, Toronto.



Should a new school of public thought and life spring up in Canada because of her new position as a consequence of her part in the present awful fight for the free institutions of democracy, one of the leaders of that school would be F. S. Spence, of Toronto.

At first sight this statement does not seem to fit in with the pacific nature of Toronto's senior controller, who has been before the public for so many years that some of

the younger generation—who do not know him—would relegate him as a back number. Not so the writer of this sketch, who has, more than once, had the opportunity of studying the erudite forcefulness and mental capacity of the Controller. A walking encyclopedia in anything and everything municipal—from the legal to the ethical, from the practical to the extreme theories of the faddist—he is quick to dissect any scheme put forward in the municipal interest of the country, and such is the confidence that men have in Spence that his analysis is accepted with respect. Every theory must stand the test of practical application before it is endorsed by him, but he is always more than willing to help in putting into practise any good idea, if advanced in good faith. This attitude, philosophical in its quiet confidence of the leavening of values, would give the impression that Controller Spence is a prototype of the dead leveller. Nothing is further from the truth. One would say that he has always been a fighter, and a hard fighter, too, in his many propaganda of reform, and taking all the chances of defeat. This spirit would seem to have permeated his temperance campaigns—F. S. Spence is a noted temperance man—to carry on which he not only used voice and pen, but much of that very essential, money. But between F. S. Spence and most reformers there is this difference, that whereas many men who want to show the world how to live have only one way and that their very own, Spence does assume that his opponents have their side, too; all of which have had the effect of broadening his own views, so much so that he, after a long experience of human nature, does see some good in this old wicked world still.

This is the class of man required in the building up of the new Canada that we all hope for after this war, and the kind of man necessary in the standardizing of her public life. That is assuming he could be brought out—rather dragged out—for, singular

to state, though in the local public life of Toronto for so long (at least for one generation), Mr. Spence is the shyest of men. Modest in his own ability and rather too prone to sink his personality in the furtherance of a cause, leaving others less worthy to take the credit, the Controller has, time and again, been the willing horse for schemes good in themselves, but which have meant for him more kicks than oats. But there is no doubt about Controller Spence's ability. Every municipal man who comes in contact with him feels it, but every municipal man knows something more, that he is safe with Spence. It would be interesting to know how many aldermen and officials, and others, have been spared from making asses of themselves by this genial mentor. But Spence won't tell.

Controller Spence is an Irishman, which should be sufficient evidence that, mixed with the even temperament most of us know, there must be a streak of the devil. Or perhaps it would be better to state, and probably more correct, that his apparent evenness of temperament is but the surface of a character that is as volatile in its make-up as any Celt need be. Donegal was his birthplace in 1850. But Toronto has been the background of the greater part of his life. He was educated in the Queen City, and entering the teaching profession, he was headmaster, at different times, of a number of the city schools, though Drummondville and Prescott have both had the advantage of his scholastic services. In the year 1882, Francis Stephens Spence entered the public and journalistic arena at the same time. In fact, he made the one necessary to the other. What has also helped him in his public work is his gift of speech. One might say that his marshalling of facts, and the common sense logic of his reasoning have made him one of the most interesting and convincing speakers we have in Canada.

F. S. Spence first entered municipal life as an alderman of Toronto, in 1896, and since that date, with the exception of the year 1901, when he unsuccessfully contested the mayoralty, he has either been an alderman or controller. In 1911 his colleagues elected him as president of the Council. During this long period of practically twenty years' splendid public service, Controller Spence has endeared himself to every soul in Toronto's municipal life, from the Mayor to even the boys. He has represented the City on the Harbour board more than once, and in 1904, 1910 and 1914, he acted as president. Of his other public positions, the principal are Secretary of the Ontario Association of Municipalities (President 1904); President Ontario Branch Dominion Alliance; Vice-President Union of Canadian Municipalities; etc. The mayoralty of Toronto some day is his fair due. Mr. Spence is editor of the Pioneer and author of "The Facts of the Case," which is a summary of the evidence given before the Royal Commission on the liquor traffic (1896).

Issues of Canadian municipal bonds during August were \$1,807,415, comparing with \$546,830 a year ago. The proportion of the month's sale made in the United States was over \$1,000,000.

Toronto's Civic Employment Bureau

(By D. CHISHOLM.)

In the experience of Toronto, which doubtless pertains to all other large centres, the unemployment situation is one with which the City has made an attempt to grapple, not only by inaugurating a Municipal Bureau, such Bureau being operated for the purpose of registering all those persons without work, but also with a view to keeping in touch with parties requiring help from time to time.

The situation as presented to me during the past few months entails a great deal of careful study. My personal observations with those unengaged have been of such a nature as to impel me to suggest that there should be a distinct separation between those actually in need, and who are quite willing to work, and the men who are in a great measure unemployable. Of the latter class I may say that the experience during the past few months has been that the large number of men applying to the Bureau for work, who aver that they are in very straightened circumstances, represents quite a large percentage of the unemployed, and the great proportion of these men, when offered work, have found fault either with the class of labor or the wages paid. The wage objection seems to stand in the way of those who had previously been earning larger amounts, and the salaries we give are very much lower than were obtainable prior to the depression which is so prevalent over the whole Dominion. Numerous instances could be mentioned where work was obtained by the Bureau for which men could not be secured at wages ranging from \$1.50 to \$2.00 per day, and a case in point may be cited: A large firm in the northern part of Ontario requested that 30 laborers be sent to them, and the City agreed to advance their railway transportation. When the hour arrived for entraining, only 17 men presented themselves, and in endeavoring to engage others to take the places of the 13 who did not appear, not one man of those selected was on hand at the station at train time. I may incidentally remark that the Employment Bureau has been the medium of already placing 175 or more men at the plant in question.

This may also be said in connection with the construction of the Toronto-Hamilton Highway. In one case 27 laborers were requested to report for duty, and only 9 men availed themselves of the privilege. The opposition set forth in the main was on account of the low rate of wages. It must not be taken for granted, however, that the large percentage of those out of employment are included in the class referred to, as many persons make application to me who are prepared and willing to work, regardless of the employment or wages offered.

Our greatest difficulty, however, seems to be the loca-

tion of work for those who have been engaged as clerks, etc., and who are not able to perform laborious work. This is most natural in large cities similar to Toronto, where, owing to the contraction in business circles, a large number of clerks have been thrown out of employment.

With further regard to the Employment Bureau, I may remark that the organization should be of a permanent character, having regard for the fact that many men are out of employment every season, especially in the building trades, which are almost entirely closed during the winter months.

Notwithstanding statements that have been made, our Bureau has endeavored from time to time to bring together the employer and those seeking employment by means of advertising and keeping continuously in touch with those desiring assistance. I have at intervals directed to the attention of large manufacturers throughout the Province, the fact that we could provide all classes of skilled and unskilled labor, and during last Spring I also had notices posted in every rural Post Office in the Province, indicating that farm help could be procured through the Toronto Employment Bureau. This resulted in numerous enquiries for men, and I may add that during the months of May, June and July 832 persons were found employment outside the City in skilled trades, unskilled work and farm help, but of the latter class I cannot say that entire satisfaction was apparent to either those requiring help or the staff engaged in conjunction with me at the Labor Bureau. Experienced farm laborers are not obtainable to any extent in the City, and the unexperienced in many instances refuse to work at the remuneration offered, although a large number of men are still following the same employment.

Notwithstanding the very great care that has been exercised in respect to the employment situation in Toronto, a large number of unscrupulous people are continually taking advantage of the Corporation, more especially during the stringency so marked at present. I am therefore of opinion that the City of Toronto (and the same suggestion applies to other cities), should establish a separate department under the jurisdiction of the Board of Control and City Council to deal with the employment problem, and also to handle all charitable grants made by the City, the two matters being synonymous. This would preclude to a great extent the duplication of grants which are made from time to time under the present management. I cannot lay too great stress upon the foregoing recommendation, as to my mind, after a number of years of study, it is the only satisfactory method of coping with the problem of those who will not work.

MAYOR WALTERS' MOTHER.

In reference to "Ajax's" pen sketch of Mayor Walters of Hamilton, which appeared in the August issue of this Journal, the Hamilton Times received the following interesting letter:—

Sir,—I was pleased to note an excellent cut of the Mayor of your city in the Canadian Municipal Journal for August, and read with pleasure the nice things that were said about him at a recent meeting of mayors in the city of Ottawa. I remember Chester very well as a boy clerk in Col. York's drug store and he also attended the Waterford High School while I was chairman of the school board, and he was a brilliant scholar. Chester says that he attributes his success to the influence and teaching of his mother and I can well believe it. Mrs. Walters, although not possessed of much of this world's goods, is a real English lady and the following incident will show the kind of mother she is. When Chester's brother, John, who, by the way, is a South African veteran, was leaving for the camp at Niagara Falls some years ago, his mother gave him her parting blessing and said, "Good-bye, John, be a good boy; don't forget to say your prayers, and be sure to roll up your trousers when it rains." Chester has reason to be proud of his mother, and his mother has reason to be proud of her son.

A. M. LITTLE,

Ex-M.P.P. for North Norfolk.

Vancouver, B. C., August 12, 1915.

VACANT LOT GARDENS.

Excellent Results Secured — Precautions Against Weeds Required.

Reports from various cities and towns in Canada as to the cultivation of vacant lots indicate that the campaign inaugurated last spring for greater production and more extensive use of vacant land has been a success. Several cities have handled the vacant lot problem in a systematic manner, and have secured results commensurate to the amount of energy expended. Some, by allowing interest to lag, have been only partially successful. In others, also, circumstances militated against success, in that unemployed men took up the cultivation of vacant lots, and, upon securing employment, neglected them. On the whole, however, the movement can be regarded as a distinct success. No estimate of the value of the product is available, but, judging from the enthusiasm of some of the vacant lot gardeners, the total value is large.

There is one danger from the vacant lot garden, however, to which attention must be drawn, namely, the growth of noxious weeds in the newly cultivated land. Too often, on the removal of the crop, the ground is given over to the weeds. Organizations handling the vacant lot work should give the matter of weed destruction early attention; otherwise, the lots will not only prove a menace to the land in the vicinity by the spread of weed seeds, but create antagonism to the movement on the part of the occupiers of the neighboring land.

Signs of the Times

(By S. BAKER.)

The most generally advocated reform in municipal government is the separation of the legislative functions from the administrative. The legislator should be a fair representative of the people, the embodiment of their intelligence and idealism, their aim and desires. He should be directly in touch with the ratepayers. The administrator, on the other hand, is not interested in the politics of the people, their vote, nor their ideals. He should be an expert operator and independent. The expert has been described as a man extraordinarily intelligent on some branch of work, and a real expert is always more or less a monomaniac. He should never do more than advise as to legislation. He should always hold a subordinate place, except in so far as by his knowledge he can influence the judgment of the representative of the people.

The people must pay the taxation and they should have the responsibility of determining what is to be done. Experts for administrative purposes cannot be elected to public offices, and should be appointed by the people's representatives, paid reasonable salaries, and compelled to give real expert service.

The management of a city has become a gigantic business. Men without technical knowledge and practical experience, without authority, or proven business ability, too frequently try to govern the municipality, but generally they allow things to drift. What is more objectionable they have muzzled the engineer and other heads of departments, and the ratepayer is not allowed to know the truth. The councillors in power practise on the citizens the confidence trick on a gigantic scale. The expert is too often the scare-goat for mistakes. That condition prevails not only in England and Canada, but in all democracies, Switzerland alone excepted.

That there should be an administrative department is a corollary of the preceding contention. Thirty men can deliberate, decide a policy, or legislate better than five or one, but five or one can administrate better than thirty.

Germany owes her efficiency in municipal matters not to the Germans themselves, but to the political system which Frederick William the First, and Frederick the Great have created, so that a single will animates the whole administration. The whole Council acts like a single man, and every other consideration is subordinated to the city's interest, instead of squabbling over the question whether a corporation laborer lives within the city limits, or whether an alderman should go to a Fire Chiefs' Convention, or whether a committee should deal with a question before reference to a Board of Control.

Then, too, some department should be responsible to the Council, and should have control over the administration, subject to the general direction of the Council, just as the manager of a private corporation discharges its business.

The City Manager plan, although of recent growth and designed to meet the demand for concentration of authority, has not proven altogether a success. Mr. Cressley, City Manager of Inglewood, California, states, "The City Manager should be a civil engineer with municipal experience and possess the qualifications of an economist, a financier and executive officer of no mean ability." The affairs of a city are more complex, and cover more widely divergent operations than the usual business concern. The number of stockholders are more numerous and more personally interested. The duties of a City Manager, therefore, and the experience we have had appears to be against the City Manager.

There is also a tendency in favor of smaller Councils, elected by the city at large. The larger part of the time and energies of these men must necessarily be occupied with administrative problems, and a small number does not suggest the most efficient kind of a legislative body. The advocates of Commission form of government recognized this difficulty, and introduced the Initiative, Referendum and Recall, to have the legislative functions in part exercised by the people at large. It is extremely doubtful that experience with these innovations has demonstrated any material advance in the search for a business-like administration. A consideration of the former two suggestions would prove the weakness of this movement.

The trend of public opinion appears to be to replace the city government, composed of a Mayor, a City Council, divided into committees, numerous boards or commissions,

all independent and more or less jealous of each other with overlapping jurisdiction and conflicting authority, by a single board. This is due to the creation of spending bodies,—Library, Park, Utilities Commission and others—reducing the Council to a tax collecting body. Present conditions prove this change necessary.

The most significant fact is the creation of Civic Bureaus of Research, Civic Survey Committees, Rotary Clubs, and Ward Taxpayers' Associations. The people have, on their own initiative, taken up the discussion of city policies, made graft impossible, and aroused criticism. These Associations are not for securing a pavement or a walk, but for the discussion of the debenture debt, the administration of city departments, and the better government of the municipality. These bodies must be regarded in the municipal system.

Suggested Reforms.

The Council's powers should be restricted to legislative functions and the adoption of estimates. The membership should be increased to at least six from each ward, twenty elected by City at large, elected for a term of three years, and a representative of the Board of Trade, the Trades and Labor Council, the Builders' Exchange, and Civic Survey Committee, or the Rotary Club or Civic Improvement, made consultative members thereof.

This would provide a town meeting—the admittedly true aim of British municipal government—be educational, everyone would know what is going on, and lead to a more intelligent discussion of municipal matters throughout the year instead of as at present, at election time only, and recognize the public right to participate in the management of the city. One meeting a month should be sufficient.

Men of large business experience would be found willing to act as directors in the people's business, if they were relieved of responsibility of details, if the personal squabbles ever present in Council meetings were made less probable, and the heads of civic departments held strictly to efficient management.

Policies only should be discussed by the Council. Town planning arrangements, a system of pavement construction, and financial programmes are not now discussed, notwithstanding that without discussion money and time are wasted and work haphazard. The future needs of the city would not be overshadowed by the present demands.

There is little call for greater opportunities to secure an expression of the will of the people. The elections come every year, but there is a need for some opportunity to educate, interest and awaken the ratepayer from his eleven months of indifference to a sense of duty.

European countries have adopted this system, so have a number of American cities, and it is the practice in most British cities. The Council is almost wholly legislative, and the permanent officials executive.

The judicious Bagehot says, "The natural instinct of an Englishman is to resist or ignore authority." The mass of citizens assume they have rights, but not that they have duties. When the masses are induced to share in the government we shall find the open sesame to good government.

The Board of Control should be administrative only, and they should be held accountable for the proper discharge of all city affairs.

Ontario at first administered city affairs through Committees of Council, and then developed the idea of a partly executive and administrative Board of Control for the larger cities. This was a wise attempt to meet the demands of cities, but I see no reason why every city should not have a Board of Control.

City Manager.

No one man can fill the position of a City Manager—experts will still be required. Brainy, alert, common sense, executive business men are what expert officials ask for. The Mayor and Board of Control should be given power to co-ordinate the activities of all departments, and, if necessary, to compel unity of action. What has been lacking has not been technical skill, but business management; not more officials, but more opportunities for use of the skill and initiative of the officials we now have.

Municipal government would be nearer to the simplicity, flexibility and efficiency of business management if controlled by a few men elected by the ratepayers, and the policies determined by a really representative Council.

Population Figures

Population figures are of vital importance in the book-keeping of the Public Health. The reason is quite evident. Statistics of deaths, births or cases of sickness have very little significance when given alone. The statement that there were 4,356 deaths in Toronto in 1908 and 5,677 in 1914 does not convey much information regarding the comparative state of the public health in these two years, for we know that our population has grown rapidly. But if we say that the death rate per thousand persons living in 1908 was 14.4 and only 11.2 in 1914, we conclude at once that an improvement in the general health has taken place. In order to arrive at intelligent figures, we must state the deaths at a ratio of the population in which they occur. Therefore, it is absolutely necessary to have accurate population figures upon which to base these rates.

Police Census Most Complete.

The Police Census is the only really reliable enumeration of the people of Toronto. It is carefully checked and re-checked, so that there is no possibility of areas being enumerated twice, and the population thus being overstated. Still, it gives a much higher figure than any other enumeration. The conclusion is that less names are omitted than in other counts, and therefore it is the most nearly correct.

Estimates Based upon Police and Assessment Figures.

In order to do justice to the health situation, as has already been demonstrated, the most accurate population figure must be employed. But the police figure is available only at indefinite intervals, when the Board of Control sees fit to request a census. This necessitates an estimate of the population for the intervening years. Such an estimate has been made for the last ten years by drafting a curve of the police figures, using the curve of the assessment population as an indication of its direction.

Independent Check upon Population Estimate.

The population for mid-year 1914 obtained by this graphic method can be checked independently as follows:

The assessment population at the middle of 1911 was 374,000, and at the middle of 1912 was 417,000. If it had been taken at the beginning of 1912 (January), it would have been the average of these two figures—namely, 395,000.

The last police census was taken just at this time—January 20th, 1912—and is directly comparable to this figure. In making the comparison we find that the police census—which is the more accurate—is 8 per cent. greater than the assessment figure of the same date.

Assessment population, January, 1912	395,000
Last police census population, January, 1912	426,000

Excess of police census over assessment	31,000
or	8%

The assessment at the middle of 1914 was 470,000. An addition of 8 per cent. to this figure would give an estimated population at the middle of 1914 of about 508,000. The official estimate is 505,000. The provisional estimate for the current year, 1915, is 500,000, a deduction of 5,000 being made from last year's figure on account of war conditions.

Accuracy Obtained.

The population figures obtained are by far the most accurate available from existing data. The population of Ontario was estimated as described above, using the assessment census as a guide in plotting the Dominion census figures, and when the 1911 census was taken, the error in the estimate was found to amount to only 1 in 800, or $\frac{1}{800}$ of 1 per cent.

A method of estimating the population of cities similar in principle to that outlined above, has been adopted recently by the Registrar General of Scotland when the older mathematical method failed. The Department of Public Health method is endorsed by the Bureau of Municipal Research, as follows:

"The statistician plots the increase in population from the police figures, filling in the gaps by taking the intervening assessment figures as a guide. This gives a fairly satisfactory estimate of the total population at any given time."

Although the Department's estimate of the population of Toronto is the most accurate figure available, it has the disadvantage of being an estimate. No matter how scientifically an estimate is made, it can never carry the conviction to the general public that an actual census enumeration will. In order to supply each year a reliable population basis for all municipal statistics which will command the confidence of the trained and untrained alike, the police census must become an annual institution.

It should be taken automatically at a fixed time each year, preferably in January, so that the figures from year to year may be comparable, and the average of two succeeding figures will represent perfectly the average population during the intervening year. The cost of a police census is very small (\$167.00 in 1908) and the increased statistical efficiency obtained would be very cheaply purchased.

SIGNS OF THE TIMES.—Continued

The people will have the final and authoritative say. No Mayor or Council of a Canadian city will ever consent to be a rubber stamp to the dictum of a City Manager. To open up wider fields of activity will more strongly appeal to big men and incite greater willingness to assume the duties of office.

The term of office for members of the Council should be extended to two or three years. A city official of considerable experience and ability stated the other day that, "It took him all his time for the first five months to prevent the Council upsetting everything, and the last five to get them to do anything." One of the shrewdest and most capable men that ever sat in a Municipal Council, stated that it took the greater part of the year to master the details and conditions of city business. There is little continuity in the administration of affairs when the aldermen change each year. The fact that municipal councils follow no well thought out policy in municipal engineering or finance is largely due to the desire of the member to do something to report to the electors during his term of office.

The Council should have control of all boards for which taxes are collected, or which have the management of city affairs.

The Ontario Councils should be given back control over their electrical business, their waterworks, their parks, their schools, their railways, their library, their hospital, and their police. They have degenerated into tax-raising machines for these bodies. In London, this year, about seventeen mills out of the twenty-nine mills levied is for the purposes of these boards, over which the Council has no control. That there is lack of co-operation and wasteful expenditure may easily be shown in numerous ways on examination of the accounts of the Utilities Commission, Railway Commission, Board of Education, and the Hospital

Trust in the City of London. Examples may be taken from the laying of water mains on city streets, salaries of officials, building an unreasonable number of schools in one year, and building too expensive extensions. I believe no well informed person will deny this fact. The personnel of the Commissions are in no way of a higher order than that of the Councils, though the withdrawal of so much responsibility has unquestionably reduced the dignity, the powers and the honors of the office of aldermen.

Business management proves the practicability of the proposed change. There are scores of business houses with equally difficult problems to solve, and just as much money to spend. Would any of these concerns permit the methods designed for a hundred years ago to govern their business now? The long-suffering taxpayer has to meet the deficits, blunders, double expenses, lack of unity in effort and efficient practices, but has little to say in the despatch of the city's business, because he is bewildered with many ballots, and separate presentations of departmental expenditures without any attempt to present a financial nor administrative programme of the whole city's business. The Hospital Trust member is usually elected by acclamation, and the Utilities Board practically by acclamation, yet these two boards are admittedly the most extravagantly managed in the city. The ratepayer should have the power to compel the boards elected by him to work together for the common weal.

Efficiency demands centralization of power, co-operation of departments, co-ordination of operations, and responsibility for results. The creation of separate boards or commissions has been too readily granted in the Province of Ontario, and the results are plainly before us in the lowering of the dignity and power of the Council, with the result that many men of affairs are unwilling to assume the burden of citizenship, and there is confusion, waste and low efficiency in the conduct of city business.

TAX REFORM IN ONTARIO.

The advocates of tax reform in Ontario desire legislation that will reduce or entirely abolish the assessment of buildings and improvements on land, and the abolition of the business tax.

A special committee of the Legislature recently heard the arguments of all concerned, and decided in favor of the strict enforcement of, rather than a change in, the present law.

Buildings and improvements should be valued by assessors at the amount by which the value of the land is thereby increased.

The lowest would be scrap value, and the highest the cost of production.

Assessors should comply strictly with the provisions of the present law, and assess all land at its actual value.

Payments of money are usually for value received. When a municipality give value for taxes paid, there is not much cause for complaint, no matter what the system of assessment may be.

In districts where there are no buildings or improvements there is no necessity for taxation.

When the inhabitants of a new district apply for municipal incorporation, it is an evidence that municipal improvements for the use of the residents are necessary, and that to pay for these the land of residents and non-residents is to be taxed.

Improvements and increasing population add to the value of all the land. The land, with buildings, pays a higher tax, and in return the owner or occupier thereof receives immediate benefits from the expenditure of all the taxes.

When the tax derived from the assessment of buildings and improvements is more than sufficient to pay the annual cost of municipal conveniences for the use of the residents, such as parks, lighting, markets, music, police and fire protection, sanitary regulations, schools, etc., there would be good reason for reducing the taxation on this class of property.

In Ontario, fifty-three per cent. of the assessed values are derived from buildings and business tax, while sixty-six per cent. of the expenditures are necessary to pay the annual cost of conveniences for the use of those who occupy the buildings.

The confiscation of the unearned increment that accrues to land in growing communities should be considered on its merits, independent of any question of assessment and taxation.—K. W. McKay.

INSURANCE IN SASKATCHEWAN.

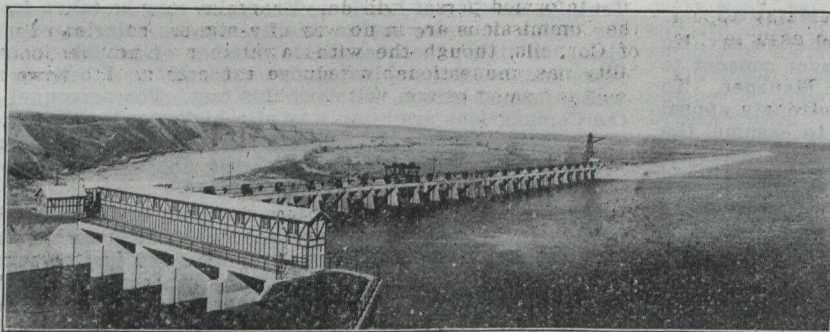
Investments in the Province of Saskatchewan for the year 1914, despite a certain financial stringency in the money markets, show a marked increase over those of 1913, according to a report recently issued at Regina. The various insurance companies doing business in the province did not materially increase their volume of business to any great extent, as the totals for the past two years show an increase of only \$60,000 in favor of 1914. The tax therefore paid to the Provincial Government on the premiums of the companies did not increase, for the difference in the two is an increase of over three millions, thereby showing debentures and bonds of Saskatchewan to have been the objective of the investors. Although no figures were obtainable for the first six months of 1915, well informed financial men state that, during that period, investments will show an increase over the same period of 1914.

REGINA'S INDEPENDENT AUDIT REPORT.

The report of the special city audit recently made into Regina's finances during the past six years shows a deficit on general revenue at the end of 1914 of \$130,191 instead of a balance of \$22,790 as shown by the city's annual statement. The auditor's report also shows a deficit of \$313,845 on the street railway instead of a deficit of \$183,110, as shown in the city's statement. The total difference on these two accounts, as shown by the audit, amounts to \$283,716, which the auditors recommend should be covered by general taxation this year. It was stated that in order to do this the rate would have to be raised four mills, making it about 27 mills altogether. The auditor's report shows debentures authorized at December, 1914, both sold and unsold, amounting to \$10,680,000. The capital charges on these amount to \$786,000 per annum, part of which is recoverable from property owners on local improvements, and part is provided out of the revenues of the electric light and waterworks departments.

COMMISSION OF CONSERVATION AND FIRES.

At the request of boards of trade, municipal councils and other public bodies interested in the subject, the Commission of Conservation has decided to undertake an investigation into the fire waste in Canada, with a view to suggesting means to overcome the heavy annual fire losses. The inquiry will be conducted under the direction of Mr. J. Grove Smith, B.A., B.Sc., head of the statistical department of the Canadian Fire Underwriters' Association. An exhaustive study of both cause and effect of Canada's fire loss will be carried out, and a report embodying the result will be published by the Commission as soon as this work can be completed.



**Large Dam Across the Bow River
about three miles from
Bassano.**

which the C. P. R. Company built
to supply the great irrigation
works.

**Irrigation Works of C. P. R. at
Bassano, Alberta.**

which the delegates of the Convention
of the Union of Alberta
Municipalities will visit
this month.



Concrete and Streets

By H. S. V. SCOYOE.

The use of concrete as a paving material is fast passing the experimental stage. Although it is doubtful if there is as yet sufficient information at hand to permit of a close approximation as to the life of concrete pavements under varying conditions of traffic, soil and climate there are particular cases of record showing the economy of this type of pavement after periods of actual use ranging from five years to ten years.

There are at least a few streets to-day in good condition after twenty years of service which would seem to show that if there were failures in the earlier work they could likely be traced to the same causes that will produce failures now. It is a fact, however, that there was more reason for attempting mixtures weak in cement then, for a barrel of cement cost from three to four times as much as now. In addition the remarkable increase in motor traffic during the last ten years has made it much more difficult to maintain those types of paving in which the various separate units are not held together by a positive binder as is the case with concrete. It has also greatly increased the life of concrete or similar surfaces because of the decrease in wear from rubber-tired vehicles as compared with that from horse-drawn, steel-tired traffic.

If it is granted that there must be some merit in a paving material the total yardage of which in Canada and the United States increased in 1913 from 9,000,000 square yards to 18,000,000 square yards and of which 16,000,000 square yards were laid during 1913, it ought to be worth while to note some of the facts that have been established by experience more particularly during the last five years.

Sub-Grade.

The fundamentals in road-building hold good for concrete just as for the other types. A system of drainage must be provided which will keep the water-level well below the sub-grade. This is especially true where frost has to be contended with. Where the natural soil is heavy clay or other material that is not self-draining there are certain advantages in placing the concrete upon several inches of gravel or other pervious material. If surface water does get beneath the concrete it then has a better opportunity to get away. In addition especially in hot dry climates there will be no trouble from cracks developing in the concrete slab due to the drying out and cracking of the sub-base material. This may occur when the concrete is laid directly on the natural soil. The sub-grade should be constructed with the idea of having it evenly compacted for the full width of the road section. This means special care where the concrete is replacing a highly crowned macadam road which was likely also not of as great a width as the new road will be. No doubt the bearing power of the soil can be greatly increased by careful rolling with a heavy roller, and this is certainly very desirable, but it is of at least equal importance that all parts be evenly compacted.

In order that the greatest thickness of concrete shall come where it is most needed the sub-grade should be flat up to a width of roadway that does not increase the thickness of the concrete slab at the centre unreasonably. With the crown usually given concrete roadways (1-100 of the width) the limiting width would be about twenty feet. Beyond this width the sub-grade should be slightly crowned so that the thickness of the concrete at the centre will remain constant.

Materials.

There is some difference of opinion as to whether it is the mortar composed of the fine aggregate and cement or whether it is the coarse gravel or broken stone that have to resist the wear on the road surface. It seems reasonable to suppose that both contentions may be right, that is, if a uniformly tough, hard fine aggregate is used with a comparatively soft coarse aggregate the mortar may take the wear while with the reverse conditions the wear may come on the coarse materials. With ideal materials both fine and coarse aggregates should be tough and uniformly tough, for it seems almost axiomatic that if construction is properly carried out the life of the pavement will depend directly upon the quantity and character of the traffic and the wear-resisting qualities of the aggregates. Materials that show uniform wear are certainly to be preferred over those containing some very tough and some very soft particles.

Proportioning.

While the proportions may be varied slightly according to the nature of the aggregates used in most of the work now being undertaken a mixture of about one part of cement to one and one-half parts of fine aggregate to three parts of coarse aggregate is specified. It seems strange that in road work there have been so few attempts made to get away from wheel barrow or bottomless box proportioning. It is one part of the work in which less progress has been made than in most of the others. There have been some exceptions notably one road in Oregon where the proportioning was done by bins at a central plant and three charges for the drum of the mixer carried in each car of the Industrial Railway train that was used to convey the material to the road. On one of the Maryland roads small dump cars were used in connection with a narrow gauge track. Partitions were placed in the cars so that one side of the car held exactly one charge of cement and fine aggregate and the other side the right quantity of coarse aggregate. Each car in this case thus held the material for one batch. Both schemes have been reported as satisfactory.

Mixing.

There has been wide variation in practice as to the time and speed required for mixing, but it is now realized that the number of revolutions per minute of the drum may vary with the type of mixer, the size of the drum and the nature of the mixture. For satisfactory results it is usually necessary to keep the batch in the drum for at least one minute. It is very desirable that a uniform mixture be secured. The concrete should be of such a consistency that it will stand without flowing when deposited. It should not be sloppy, but it should be wet enough to settle in place with the tamping that it receives from the strike-board.

Reinforcing.

No concrete road or street will be injured by the addition of reinforcing. It is almost certain, however, that all cracks of such a width as to be visible to the eye will not be prevented by the addition of the weight of reinforcing usually specified for concrete roadways.

Where subsoil conditions are bad, due either to the nature of the material or to the openings that may have been made for pipe lines there is value in reinforcing. Where the appearance of a road or street is of major importance reinforcing should be used. It is a question, however, if it has as yet been shown that reinforcing is economically justified for the usual widths of country roads where an occasional crack cannot be considered a serious fault.

Maintenance.

It has been said that the justification for the use of concrete lies in the low maintenance costs. With proper materials and workmanship the annual charge for repairs to the concrete surface should be small. There may be some surface pitting—there may be some cracks requiring attention; there likely will be some joints to be taken care of; on country roads there certainly will be shoulders to maintain and ditches to keep open. Undoubtedly some provision should be made for the maintenance of even a concrete road.

Costs.

Naturally the cost of the roadway proper will depend upon the cost of the cement, fine aggregate and coarse aggregate on the road and the labor cost for combining them properly and placing them in the road. The material costs will vary greatly with the distances they must be hauled. The labor costs will depend to some extent upon the organization. In rare instances where conditions are particularly favorable, the cost per square yard may be as low as one dollar. Usually the cost should be below one and one-half dollars. An average price in this vicinity will likely be in the neighborhood of \$1.35.

In conclusion, there is to my mind an analogy in concrete road building and the statement in mechanics that the work taken out of a machine cannot exceed the work put into it. In other words if a satisfactory road is to be built there must be a constant effort to secure the highest possible grade of concrete. Concrete is its own inspector. In concrete roadways concrete has its most severe test. The material is equal to the test, but it is at the mercy of the user.

Some Notes on Municipal Finance

(By T. BRADSHAW.)

Among the many problems confronting a municipality there is probably none which concerns its citizens more, and which so vitally affects its credit and future, as that of sound finance. This statement will be best appreciated when the large increase in our municipal debts, in our yearly borrowings and in our tax levies for interest and repayment of principal on these debts are considered.

In view of the disturbed financial conditions the world over, the important obligations of our municipalities, and the necessity for further heavy borrowings from time to time, it is believed that any practical suggestion which will have a steadying influence is worthy of attention, and without further preliminaries I will proceed to discuss three features of municipal finance:— (1) method of repayment of permanent loans, (2) rate of interest which loans should carry, and (3) administration of sinking funds.

1—Method of Repayment of Permanent Loans.

The three recognized methods of repaying moneys borrowed by municipalities for a long term of years are, (a) Sinking Fund, (b) Annuity Instalment, (c) Serial Instalment.

It is submitted that municipalities should, in practically every instance, adopt the instalment method, either annuity or serial, instead of the sinking fund method, chiefly because of the heavy financial loss involved in the sinking fund method. Many of the smaller Ontario municipalities issue only instalment bonds, and in this they have shown greater wisdom than our important cities, most of which still persist in obtaining their loans by the issue of long term Sinking Fund Bonds.

Let us consider the essentials of each method:—

(a) **Sinking Fund Method.**—Bonds are issued payable at the end of a certain term,—5 to 40 years,—according to the purpose for which the loan is required. Interest is payable half yearly or yearly throughout the whole term on the entire amount of the debt, and the principal is payable in one sum at the end of the term. In order that the municipality may be in a position to pay the principal at maturity, a certain amount, accurately determined beforehand, is annually laid aside by the municipality, which, with its interest accumulations from year to year, reckoned usually at 3 per cent., is sufficient to meet the amount of the loan. These annual amounts so laid aside, and their interest accumulations, constitute the Sinking Fund, hence the name by which the method of repayment is known. The moneys to pay the interest on the debt and to provide the Sinking Fund are, of course, obtained by levying a special tax, in accordance with the Municipal Act.

(b) **Annuity Instalment Method.**—By this method the loan created is gradually paid off each year instead of at the end of the period. No Sinking Fund is required to be established, but the annual levy for principal and interest is immediately applied in payment of principal and interest, and of course on that part of the debt so liquidated interest ceases to be paid. The annual levy, which exactly covers both principal and interest, is the same throughout the history of the loan. It is of course mathematically determined beforehand. Bonds are issued maturing in one, two, three, etc., years, according to the length of the period for which the loan is made, instead of all being issued payable at the end of the term, as under the Sinking Fund plan.

(c) **Serial Instalment Method.**—This method is very similar to the Annuity Instalment Method. It has, however, the advantage of liquidating the debt from year to year in round amounts instead of in odd amounts; (see illustrations below), while it has the slight disadvantage of calling for a levy slightly differing in amount each year. This plan, of course, admits of the loan being redeemed in larger or smaller annual amounts, but the repayments on account of principal can be made to so closely follow those of the Annuity Instalment Method that the annual levy varies very slightly from year to year. The first two are authorized by the Ontario Municipal Act; the last, viz. Serial Instalment, is not, but its popularity among investors and financial houses is such that it is fully expected that the legislature will at its next session adopt the suggestion made last year,—that the Act be so amended that municipalities may use it as an alternative plan.

Methods Compared.

From the foregoing it will be gathered that both instalment methods of repayment in effect contain within themselves a sinking fund which bears the same rate of interest as the loan which it is intended to discharge; whereas the Sinking Fund method necessitates the establishing of a separate sinking fund which is not calculated to earn (and in fact does not) as high a rate of interest as is payable upon the loan itself. What are the facts in the case of those municipalities which issue their bonds according to the sinking fund system? Loans are obtained by the issue of permanent debentures carrying interest ranging from 4½ per cent. to 5½ per cent., while the sinking fund to redeem such loans is assumed to earn only from 3 per cent. to 4 per cent., or from ½ per cent. to 2½ per cent. less, and, as a matter of fact, in many instances not much more than the assumed rate is earned.

In addition to this important difference between the rate of interest the municipality pays on its loans and that which the sinking fund, for their redemption, earns, considerable delay takes place in the investment of sinking fund moneys, and as a consequence a further loss in interest earnings inevitably ensues. In contrast to this, the genius of the instalment method is, that interest is being fully earned every day without exception.

Illustration of Each Method.

Let it be assumed that a municipality proposes to issue bonds for some important permanent work for, say, \$1,000,000, the loan to be repaid in 20 years and to carry interest at the rate of 5 per cent., and the question arises as to which method is most economical and desirable.

Under the sinking fund method the annual levy for interest would be \$50,000, and for sinking fund (assuming 3 per cent. as the sinking fund rate) \$37,215.71, a total annual levy of \$87,215.71.

Under the Annuity Instalment Method the annual levy required for repayment of principal and interest would be only \$80,242.59, or \$6,973.21 per annum less.

The present value of this annual saving for the lifetime of the loan is \$86,900.42, and this amount represents the actual saving to the municipality in issuing Annuity Instalment bonds instead of Sinking Fund bonds.

Under the Serial Instalment Method, according to the illustration assumed, the annual levy would vary from \$78,750 to \$81,500 per annum, and the saving therefore would be practically the same as in the Annuity Instalment case.

The following tables, No. 1 illustrating the Annuity Instalment, and No. 2, illustrating the Serial Instalment Methods of repayment, set forth in detail year by year, the gradual and systematic liquidation of the loan we have been considering.

Annuity Instalment, Table No. 1.

Table illustrating the repayment of a loan of \$1,000,000, with interest at 5 p.c. per annum, in 20 years, according to Serial Instalment Method.

End of	Payment	Interest	Principal	Balance of Prin- cipal at end of year
				Original Loan .. \$1,000,000.00
1st year	\$80,242.59	\$50,000.00	\$30,242.59	696,757.41
2nd year	80,242.59	48,487.87	31,754.72	938,757.41
3rd year	80,242.59	46,900.14	33,342.45	904,660.24
4th year	80,242.50	45,233.02	35,009.57	869,650.67
5th year	80,242.59	43,482.54	36,760.05	832,890.62
6th year	80,242.59	41,644.53	38,598.06	794,202.56
7th year	80,242.59	39,714.63	40,527.96	753,764.60
8th year	80,242.59	37,688.23	42,554.36	711,210.24
9th year	80,242.59	35,560.52	44,682.07	666,527.17
10th year	80,242.59	33,326.41	46,916.18	619,611.99
11th year	80,242.59	30,980.60	49,261.99	570,350.00
12th year	80,242.59	28,517.50	51,725.09	518,624.91
13th year	80,242.50	25,931.25	54,311.34	464,313.57
14th year	80,242.59	23,215.68	57,026.91	407,286.66
15th year	80,242.59	20,364.34	59,878.25	347,408.41

(Continued on Page 364.)

Municipal Finance

JAMES MURRAY.

REPAYMENT OF MUNICIPAL LOANS.

The principal article on finance in this issue is by Mr. Thomas Bradbury, F.I.A., probably one of the best known men in municipal finance in Canada. The article, which was presented as a paper before the convention of the Ontario Municipal Association, is a masterly analysis of the three recognized methods of repayment of municipal loans—the sinking fund, annuity instalment and the serial instalment. It is very evident that the serial instalment method of repayment—which Mr. Bradbury favors—is gaining in popularity in this country, as illustrated in Ottawa, which last month sold its issue of \$2,334,513 on the instalment plan.

SERIAL PAYMENT PLAN.

There is at least one municipal man (Mr. S. Humphreys, Treasurer of North Vancouver), who does not believe in the serial payment plan. In a letter to a contemporary, he says:—

I should like to point out that had every western Canadian city adopted the serial payment plan in connection with its debentures, that to-day in all probability a number of them would be in default, since I believe that this year the average collection of the 1915 taxes is not much more than 55 per cent. of the total amount collectible. As to how the sinking fund plan assists the cities in their financing, I leave that to interested persons to figure for themselves.

Again Mr. Beebe (the writer of an article favoring the serial payment plan) points out that a number of cities are foolish enough to allow sinking funds to remain on deposit in the banks when they might be much better employed in purchasing bonds of their own issues. If Mr. Beebe had experienced the difficulties that a number of our western cities have in endeavoring to borrow money from the banks, he might be willing to concede that there are two sides to this question. Would it not be reasonable to suppose that a bank could be approached for a loan with a far better chance of success if the borrower would deposit to a sinking fund savings account a large amount of cash, which would actually more than offset the amount required, than it could if its sinking fund was invested in its own securities?

As to a city investing its sinking fund in its own issues, I have always figured, probably, however, incorrectly, that the so doing was a reprehensible practice. In the first place, the tendency is for a city to value its bonds higher than the actual market valuation, and to purchase them for the sinking fund at such valuation, with the result that in the case of local improvement bonds being purchased for sinking fund purposes, that a small section of fronting property owners benefit at the expense of the sinking fund, or, in other words, at the expense of the community as a whole. Again, I have always imagined that a bondholder's security

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

A. E. AMES & CO.

INVESTMENT BANKERS

Established 1889

UNION BANK BUILDING

TORONTO

**PURCHASERS OF
GOVERNMENT
AND
MUNICIPAL
ISSUES**

Correspondence Solicited.

MUNICIPAL DEBENTURES

BOUGHT AND SOLD

SPECIAL FACILITIES IN THE UNITED STATES AND ABROAD

COMMUNICATIONS FROM - MUNICIPALITIES SOLICITED -

R. C. Matthews & Co.

Standard Bank Building,
TORONTO

Cable address: "MATCO."

W. L. McKinnon. Dean H. Pottes. 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.

was primarily the city as a whole, and secondly, the sinking fund.

In the case of a city defaulting, would not the bondholders, therefore, be in a much better position if the sinking fund was in cash or bonds of other cities or provinces than he would be if the defaulting town had invested the sinking fund in its own bonds?

CANONS OF MUNICIPAL FINANCE.

By J. Morley Wickett.

Pay-as-you-go for current expenditures.

Don't issue a debenture when you build a band stand,

The future has enough to carry,

The people will take all the more interest if when issuing Bonds you keep them short termed—

Adapted for the life time of the work—

Only big permanent improvements should be paid for longer than fifteen or twenty year bonds.

Consider Serial Bonds, an incentive to economy.

Consider whether bonds should be sold at par—the rate allowed to vary in proportion.

Tell the public clearly all municipal facts—especially the financial ones.

The people will do the rest.

RECORD OF CANADIAN MUNICIPALS.

The municipal bonds sold in the Canadian market for the first seven months of this year compare with the previous year as follows:—

	1914.	1915.
January	\$ 1,953,137	\$ 1,784,947
February	5,995,336	3,672,011
March	5,123,176	2,572,357
April	2,847,953	8,603,094
May	6,400,755	3,864,281
June	4,617,857	2,395,744
July	2,180,758	1,618,422
August	395,395	737,415
	\$29,514,367	\$25,248,271

The sales in the United States market of Canadian municipals during the same period compare as follows:—

	1914.	1915.
January	\$ 50,000	\$ 340,000
February	18,000	6,390,000
March	25,000	6,543,947
April	1,750,000	7,100,825
May	2,100,000	400,000
June	1,130,000	850,000
July	35,000	1,070,000
August		
	\$ 5,108,000	\$22,694,872

THAT RECEIVERSHIP NEWSPAPER STORY.

"Ask receiver for Montreal," was the heading of a sensational article in the Montreal Star. It was a foolish article, without rhyme or reason, except to rouse a momentary sensation; but it went much further than the Star's circulation. It was reproduced on the front pages of New York's big dailies, and goodness knows how many other American cities. This must have a distinctly injurious effect upon the credit of Canadian municipalities and will certainly check the great purchasing demand for Canadian municipal securities in the States. Canada, since the beginning of the year, has sold nearly \$100,000,000 of municipal and provincial debentures to American investors. This new market has been cultivated at great cost and effort in the past two years, and it requires little argument to show the danger of a representative Canadian newspaper circulating a story so false, and at the same time so compromising.—Financial Times.

Sale of Municipal Bonds

PART OF TORONTO'S DEBENTURES SOLD.

Toronto's board at first refused to accept the only tender received for \$4,000,000 worth of local improvement debentures, and despite the fact that the joint tenderers asked to have the figures kept private, the board by a unanimous vote decided that as public tenders were asked for they should be opened and read in public.

But on Sept. 22 one million dollars worth were sold at 91.50 and accrued interest, the purchasers taking one month's option for the balance. The purchasers were Messrs. Wood, Gundy and Co., A. E. Ames and Co., of Toronto, and N. W. Harris and Co., of Montreal. The joint tender was for \$3,750,774.10 ten year debentures, bearing interest at 4½ per cent.

A clause in the tender stipulated that in order to give the tenderers a fair market in which to dispose of the debentures the city was to sell no more securities during the year 1915.

The rider attached to the accepted tender for city debentures at the last sale, whereby the city was not allowed to sell any more securities for three months, made it impossible for the city to dispose of any debentures until now, when the market is in bad shape, as evidenced by the tender above mentioned.

Mayor Church, Controller Spence and City Treasurer Patterson, visited New York to look into the financial situation in connection with the bond issue.

DEBENTURE BY-LAWS APPROVED.

For the two weeks ending August 30 the Inspector of Municipalities, British Columbia, Mr. Robert Baird, has approved and certificated the following municipal debenture by-laws:—

New Westminster Debentures 10,364 to 10,465, By-law No. 232; New Westminster Debentures 10,466 to 10,512, By-law No. 233; New Westminster Debentures 10,513 to 10,620, By-law No. 234; New Westminster Treasury Certificates has 1-96 against Debentures 10,364 to 10,620; all certificated August 20th.

Penticton Waterworks, \$6,000, 30-year 6 per cent. debentures. Certificated August 23.

Salmon Arm City Debentures 1-40, By-law No. 58, Certified August 24.

Richmond Debentures 1-20, By-law No. 189. Certificated August 25.

North Vancouver City Ferry Purchase, \$30,000, 20-year 6 per cent. debentures. Certificated August 26.

RESULT OF SOUTH VANCOUVER TAX SALE.

The official report of Tax Collector Riley on the tax sale in South Vancouver shows that the total amount collected on account of taxes and interest from January 1 to July 31 was \$236,323.96, against \$72,116.47 for the same period last year.

The total number of holdings sold for arrears of taxes was 4,576, representing a total amount of \$211,597.76, made up as follows: Taxes and interest, \$195,080.06; costs and charges, \$18,517.70.

Of the number sold, 3,565 fell to the corporation, representing an amount of \$173,447.70, as follows: Taxes and interest, \$158,301.91; costs and charges, \$15,145.79.

The number sold to the public was 1,011, for an amount of \$41,195.63, as follows: Taxes and interest, \$34,778.15; costs and charges, \$3,371.91; surplus in trust, \$3,045.57.

In addition to the amount derived from the sale, \$66,553.90 was taken at the wicket for arrears of taxes and interest, between the dates of the publication of the list and the closing of the sale, on which there was collected the sum of \$4,613.99 for costs and charges on properties listed for sale.

The total amount, therefore, of costs and charges were as follows: Properties redeemed before sale, \$4,613.99; on properties sold by auction, \$3,371.91; properties sold to corporation and payable on redemption, \$15,145.79; total, \$23,131.69.

The total expenses of the tax sale were \$8,585.94.—
B. C. Financial Times.

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

NOTES ON MUNICIPAL FINANCE.

(Continued from Page 360.)

16th year	80,242.59	17,370.42	62,872.17	284,536.24
17th year	80,242.59	14,226.81	66,015.78	218,520.46
18th year	80,242.59	10,926.03	69,316.56	149,203.90
19th year	80,242.59	7,460.20	72,782.39	76,421.51
20th year	80,242.59	3,821.08	76,421.51	Debt paid off

\$1,604,851.80 604,851.80 1,000,000.00

Serial Instalment, Table No. 2.

Table illustrating the repayment of a loan of \$1,000,000, with interest at 5 p.c. per annum, in 20 years, according to Serial Instalment Method.

End of	Payment	Interest	Principal	Balance of Principal at end of year
			Original Loan	\$1,000,000.00
1st year	\$81,000	\$50,000	\$31,000	969,000
2nd year	80,450	48,450	32,000	937,000
3rd year	79,850	46,850	33,000	904,000
4th year	79,200	45,200	34,000	870,000
5th year	79,500	43,500	36,000	834,000
6th year	79,700	41,700	38,000	796,000
7th year	79,800	39,800	40,000	756,000
8th year	79,800	37,800	42,000	714,000
9th year	79,700	35,700	44,000	670,000
10th year	79,500	33,500	46,000	624,000
11th year	80,200	31,200	49,000	575,000
12th year	80,750	28,750	52,000	523,000
13th year	81,150	26,150	55,000	468,000
14th year	81,400	23,400	58,000	410,000
15th year	81,500	20,500	61,000	349,000
16th year	81,450	17,450	64,000	285,000
17th year	81,250	14,250	67,000	218,000
18th year	80,900	10,900	70,000	148,000
19th year	80,400	7,400	73,000	75,000
20th year	78,000	3,750	75,000	Debt paid off
	\$1,606,250	\$606,250	\$1,000,000	

Effect on Debt.

By the Annuity or Serial Instalment Method the amount of the debt repaid each year is a definite quantity, and the bonds corresponding thereto are redeemed and cancelled. As a result, the net indebtedness of the municipality at any given time can be determined with accuracy. By the Sinking Fund Method the entire debt and the bonds representing it remain outstanding until the end of the period, and, through the Sinking Fund, the debt is then paid off. The yearly reduction of a debt of any enterprise unquestionably tends to create a much more favorable impression of its financial position than a stationary liability of many years' standing, although there is an increasing asset (the Sinking Fund) to offset it.

Elimination of Sinking Fund.

Both Instalment Methods, which provide for the repayment of the debt gradually from year to year as the annual taxes are received, do away with the necessity of establishing a Sinking Fund, the management and conduct of which are always fraught with difficulties, dangers and temptation. The misuse of, the low rate of interest earned on, the failure to efficiently manage, the expense and time involved in administration of and the losses involved in Sinking Funds are thoroughly well known to those versed in municipal finance. Undoubtedly the best Sinking Fund ever devised is the partial payment of the debt year by year.

Market Standpoint.

More and more is it becoming recognized that the Instalment Method of repaying loans is the safest, surest and most economical. Bond houses and important investors in bonds, here and in the United States, are showing a preference for issues so made payable. They then have absolute knowledge that the municipality is steadily

improving its financial position by the annual reduction of its bonded liability. It is only necessary to mention that such cities as Chicago, New York, Boston, Philadelphia, etc., are issuing bonds in this form to indicate how general it is becoming.

It was formerly claimed that there was a limited market for instalment bonds, because investors preferred to have their investments mature at one period, some years distant. This objection has little weight in view of the fact that with such important issues as the larger municipalities will put out from time to time there will always be a choice of maturities, running from one to say 20 or 30 years, and that such variety will suit the varying needs of a greater body of investors.

It is confidently believed, based to an important extent upon the experience of first-class municipal loans, that municipalities adopting the instalment method would enhance their credit and prestige and consequently would be able to secure their loans, given equal market conditions, at lower rates of interest. In this connection the following statement made a short time ago by Comptroller Prendergast, of New York, at the time of the sale of that city's bonds is significant: "I have no hesitation in saying that the element which produced the success of the sale was the offering of the \$25,000,000 of serial bonds. This departure of the usual city bond offering (Sinking Fund) was very helpful in giving investors an opportunity to vary the form of their city holdings, and, I am certain, has proved very attractive."

I have examined the money by-laws of a number of our Ontario municipalities, passed in the year 1914, with the object of ascertaining the saving that would have been made if the bonds authorized had been issued on the Instalment Plan instead of on the Sinking Fund plan. In one municipality alone, which issues all of its bonds according to the Sinking Fund Method, I found that the annual levy for interest and Sinking Fund amounted to \$863,050. If these bonds had been issued according to the Annuity Instalment Method the annual levy for interest and payment of debt would have amounted to only \$318,180, or \$44,870 per annum less than by the Sinking Fund Method. The present value of this excess annual charge for the life-time of the bonds amounts to \$596,052. This last amount represents the actual loss to the citizens, as between the two methods, in respect to the bonds authorized for the single year of 1914. The municipality, of course, is a large one, but it will be found that the loss to the smaller municipalities which are continuing to put out their bonds by the Sinking Fund Method will be proportionately large, and approximately the same per capita.

The second matter to be discussed is:

It is submitted that bonds issued from time to time should carry a rate of interest which is in harmony with market conditions. For some time past it has been the practice of some of our municipalities to make their issues at a set uniform rate of interest, as though it were a sacred matter to preserve such rate for all of its borrowings. As a rule, the rate so strenuously adhered to is materially less than the prevailing rate and not in keeping with that at which similar securities are bought to yield. The more correct view is, that bonds should be issued at such a rate that the municipality would be enabled to realize approximately par for its issues. The failure to recognize this principle has forced many of our municipalities to dispose of their bonds at heavy discounts.

One municipality, which has religiously issued its bonds for a considerable period at a 4½ per cent. interest rate, gets over the difficulty by increasing the amount to be borrowed over and above the actual cost of the works for which the loan is provided, to the extent of the expected discount that will have to be made when a sale is effected. An illustration of this is found by referring to a recent by-law of this municipality. The by-law stated that the actual cost of the works amounted to \$1,460,000, while the debt incurred and the amount of bonds to be issued was set down at \$1,586,612, or \$126,612 more than the actual cost of the works. The reason given in the by-law for this large increase in debt over the actual cost of the work was, "To provide for the discount, if any, and the expense incidental to the negotiation and sale of the bonds." There is, of course, no expense incurred in connection with the sale of this municipality's bonds, inasmuch as they are sold by tender, and consequently the debt of the municipality was deliberately increased by \$126,612 because it was known that at the rate of interest at which the loan was authorized the bonds could not be sold so as to realize par, or their face value.

(To be continued next month).

H. O'HARA & CO.

MEMBERS TORONTO STOCK EXCHANGE.

STOCK & DEBENTURE BROKERS

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

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

Correspondence Invited

Royal Bank Bldg., King & Yonge Sts.,

TORONTO

AND LONDON, ENGLAND.

THE Canada Bond Corporation

Limited

59 Yonge Street Toronto

—BUYS—

MUNICIPAL DEBENTURES

AND ACTS AS FINANCIAL AGENTS FOR
MUNICIPALITIES

CONSULT THEM

Government and Municipal Securities

BOUGHT and SOLD

◆◆◆◆◆

W. A. Mackenzie & Company,

CANADA LIFE BUILDING,

TORONTO

here at times, earns more than the original estimate, a surplus accumulates and complicates the ordinary book-keeping.

But the main point brought out by the recent sale of the City's debentures, is that the instalment paying system has proved a profitable system for the City, as well as being a less cumbersome system.

The proof of the pudding is in the eating. The regular 10, 20 and 30 year debentures brought, at the recent sale, prices of 94.81 for the 10 years, 91.8' for the 20 years, and 90.16 for the 30 years. The instalment or "serial" debenture issued in 10, 15 and 20 year sets, brought 95.63.

As an example of the difference in favor of the serial price, one has but to figure on sample amounts of \$100,000 of each of the serial and long term debentures to ascertain that covering a 20 year period there is a difference to the City's advantage of over \$10,000 in favor of the serials. Where the City is issuing millions of dollars' worth of debentures, such a saving becomes very material.—Ottawa Journal.

BUSINESS FOUNDED 1795

AMERICAN BANK NOTE COMPANY

ENGRAVERS and PRINTERS

MUNICIPAL DEBENTURES AND CHEQUES
A SPECIALTY

HEAD OFFICE:

208-228 WELLINGTON STREET, OTTAWA

Branches: MONTREAL, TORONTO, WINNIPEG.

BANK OF MONTREAL

(Established 1817)

INCORPORATED BY ACT OF PARLIAMENT

Capital Paid-up..... \$16,000,000.00
Res..... 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.

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. Aikins, K.C., M.P., Winnipeg; Cawthra Mulock; Hon. Richard Turner, Quebec; Wm. Hamilton Merritt, M.D., St. Catharines; W. J. Gage.

HEAD OFFICE - - - TORONTO

BRANCHES:

Ontario	Nashville	Quebec	Alberta
Aurora	New Liskeard		Athabaska Landg.
Amherstburg	Niagara Falls (3)	Montreal (2)	Banff
Belwood	Niagara on the	Quebec (2)	Calgary
Bolton	Lake		Edmonton (4)
Brantford	North Bay	Manitoba	Redcliff
Caledon East	Ottawa		Lethbridge
Cobalt	Palgrave	Brandon	Red Deer
Cottam	Port Arthur	Portage la Prairie	Wetaskiwin
Cochrane	Port Colborne	Winnipeg (2)	
Elk Lake	Port Robinson		
Essex	Preston		British Col'ba
Fergus	Ridgeway	Saskatchewan	
Fonthill	Saulte Ste.	Balgonie	Athelmar
Fort William	Marie (3)	Broadview	Arrowhead
Galt	Sth. Porcupine	Fort Qu'Appelle	Chase
Hamilton	Sth. Woodsee	Hague	Cranbrook
Harrow	St. Catharines (3)	Kandahar	Fernie
Humberstone	St. Thomas (2)	Mooseaw	Golden
Ingersoll	St. Davids	Nth. Battleford	Kamloops
Jordan	Sparta	Prince Albert	Nelson
Vineland	Thessalon	Regina	Natal
Kenora	Timmins	Rosthern	Revelstoke
Listowel	Toronto (17)	Saskatoon	Vancouver (8)
London	Welland (2)	Wilkie	Victoria (2)
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

A. H. MARTENS

W. W. BALDWIN

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

A. H. Martens & Co'y

Members Toronto Stock Exchange

and
Dealers in

Government and Municipal Debentures

Highest market prices paid
for this class of securities

Correspondence Solicited

Royal Bank Building, Toronto, Ont.

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

EDWIN HANSON

WILLIAM HANSON

THE OLD AND RELIABLE HOUSE
OF

HANSON BROS.,

BOND DEALERS

MONTREAL

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

Correspondence Solicited

HANSON BROS.,

164 ST. JAMES STREET,

MONTREAL

Established 1893

OAKVILLE, ONT.

\$30,000 5 per cent. 20-year pavement bonds, awarded to Imperial Bank.

YORK TOWNSHIP, ONT.

\$19,333 5½ per cent. 10-year local improvement bonds, awarded Imperial Bank. Price 99.43.

\$32,000 5½ per cent. 20-years, to Canada Bond Corporation, Toronto.

SASKATOON, SASK.

The city has accepted an offer of Wood, Gundy and Co., Toronto, to handle an issue of \$500,000 bonds.

MELFORT, SASK.

W. L. McKinnon and Co., Toronto, have been given an option on \$2,500 7 per cent. bonds, due 1930.

OTTAWA, ONT.

The issue of bonds offered by the city, totalling \$2,334,513, were sold to Messrs. Wood, Gundy and Company, Toronto, and Messrs. N. W. Harris and Company, Montreal, at 5 11-16 and 5% basis.

FREDERICTON, N.B.

\$67,000.00 in city taxes in Fredericton, N.B., have been paid this year during the discount period. Last year the amount paid during the discount period was \$58,000. The amount paid this year is the largest paid in this period in the history of the city. The \$18,000 paid on the last day was also the largest.

BANK LOANS TO MUNICIPALITIES.

Month.	Bank loans to municipalities.
1913—August ..	\$41,310,281
September ..	37,465,383
October ..	37,846,369
November ..	35,173,817
December ..	30,518,573
1914—January ..	29,301,620
February ..	30,372,854
March ..	31,890,843
April ..	30,168,812
May ..	33,689,577
June ..	37,260,571
July ..	36,372,334
August ..	39,664,534
September ..	44,338,873
October ..	47,316,076
November ..	44,706,055
December ..	38,256,947
1915—January ..	35,952,805
February ..	38,437,903
March ..	41,227,449
April ..	43,031,360
May ..	43,948,436
June ..	46,889,816
July ..	44,029,446

Only once during the past two years did bank loans to municipalities exceed those of June last. The high record during that period was in October, 1914, when these loans totalled \$47,316,076. The decrease is partly due to repayments to the bank from the proceeds of bond sales and from tax collections.—Monetary Times.

PLEASED WITH SERIAL BOND.

In selling a quantity of instalment debentures the other day, the City tried an experiment which seems, by the results of the sale, to open up new paths in the debenture field for Ottawa. The instalment debenture idea is practically new to Canada, though becoming quite popular in the United States. The instalment plan in debenture means that where the City sells a 20 years debenture, both the principal and interest become due yearly, thus doing away with sinking funds, and a lot of complicated civic book-keeping. In the case of the regular long term debenture the principal is paid yearly into the sinking fund, and lies there accumulating till the end of the period. In figuring out the amount of yearly deposit on principal, the City must estimate the interest earning power of the money on deposit and deduct that from the yearly payments into the fund. If the sinking fund, as has been the case

.. THE ..
BANK OF OTTAWA

ESTABLISHED 1874

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

Head Office - Ottawa, Can.

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

Board of Directors :

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

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*
 J. HOSKIN, Esq., K.C., LL.D., D.C.L. 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., K.C.
 ROBERT STUART, Esq. H. J. FULLER, Esq.
 G. F. GALT, Esq. F. P. JONES, Esq.
- JOHN AIRD - - - - General Manager
 H. V. F. JONES - - - - Assistant 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.

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

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

THE ROYAL BANK OF CANADA

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

HEAD OFFICE - MONTREAL

BOARD OF DIRECTORS:

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

OFFICERS

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

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

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

The Merchants' Bank

OF CANADA

HEAD OFFICE - - - - MONTREAL

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

BOARD OF DIRECTORS:

- SIR H. MONTAGU ALLAN, C.V.O., *President*
 K. W. BLACKWELL, *Vice-President*
 THOS. LONG ANDREW A. ALLAN F. ROBERTSON
 ALEX. BARNET C. C. BALLANTYNE G. L. CAINS
 F. ORR LEWIS F. HOWARD WILSON A. B. EVANS
 A. J. DAWES

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

A GENERAL BANKING BUSINESS TRANSACTED

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

209 BRANCHES AND AGENCIES IN CANADA

Extending from the Atlantic to the Pacific

SAVINGS DEPARTMENT AT ALL BRANCHES

Deposits received and Interest allowed at best current rates

New York Agency: 63 and 65 WALL STREET

Assessment and Taxation in Ontario

(By K. W. McKAY.)

The Ontario law relating to municipal taxation is the result of gradual development. In 1793, during the first session of the second Legislature of Upper Canada, an Act was passed "to authorize and direct the levying and collecting of assessment rates in every district within the Province." This provided for the appointment of assessors and the valuation of real and personal property. The taxes were levied by the justices in quarter session. When the present system of municipal institutions was established, the authority to levy taxes was transferred to the municipal councils. The original system was continued for many years, with very little change. An agitation, however, gradually arose for a more equitable basis, and in 1878 the Legislature appointed a special committee to consider and take evidence on the subject of municipal taxation and exemptions. Ten years later the report of a municipal commission contained an extended reference to taxation. The only important change from the basis of taxation first established was made at this time, the live stock and implements of the farmer being exempted from assessment as personal property. The effect of an active agitation for some reform in the assessment of personal property resulted in the appointment, in 1900, of a commission to consider the whole question. Its report, together with a consolidation of the assessment laws of the Province, was presented in 1902. This showed that ninety-five per cent. of the municipal taxation of the whole Province was levied on the assessed value of lands and buildings, and that in townships practically the whole tax was derived from this source. The commission recommended that the main basis or incidence of taxation be the same, the actual value of lands and buildings, personal property, and machinery of all kinds to be exempt. New sources of municipal revenue were suggested, to be levied on the actual value of lands and buildings occupied for business or residence purposes. The Legislature did not approve of the residence tax, but adopted the principle of a special business tax. This includes a tax on business of all kinds, based on the value of the property occupied for business purposes, the tax to be levied in the same manner as other taxes, and for this purpose the business properties were classified and their values increased from twenty-five per cent. to one hundred and fifty per cent.

Where any person carries on more than one kind of business, the rate is that for the chief or predominating business.

To relieve small businesses, the Act provides that where the amount of business assessment is under two hundred and fifty dollars it is to be assessed for one hundred dollars only.

Where land is partly used for business and residence, the portion occupied for business purposes only is considered.

There is no business tax for operating vessel property, or a steam railway, or a farm, garden, or nursery.

The basis for the imposition of the tax is definite, and its amount is easily ascertained. It is applied to all professions, trades, and businesses with a definite location. It is not claimed that this tax is equitable in every respect. The percentages were determined largely by the proportion of personalty tax formerly paid by each class of business. This was inaccurate, and the existing tax perpetuates the inaccuracy. The business tax eliminates all opportunities for evasion and dishonesty, and is simple and inexpensive in administration. It increases revenue by not allowing anyone in business to escape taxation.

Property Exemptions.

Most of the property exemptions at present in force were taken from the Act of 1869, the additions being seminaries of learning, public parks, and machinery used for manufacturing and farming. The full list included: Crown property, places of worship, churchyards, burying-grounds, buildings and grounds of educational institutions, but not if otherwise occupied; seminaries of learning maintained for philanthropic, religious or educational purposes, the whole profits from which are devoted or applied to such purposes only; municipal buildings and public hospitals receiving Government aid; roads and public squares, the property of any county or municipality, but not when occupied by any person as tenant or lessee; public parks, prisons, industrial farms, poor-houses, etc.; property used by children's immigration and aid societies; public libraries and the property of agricultural and horticultural societies; machinery used for manufacturing or farming, but not the

fixed machinery used or required for the supply of motive power, or the machinery of a street railway or a company having permission to use the streets for the supply of water, heat, light, power, transportation, or other service.

The structures, rails, poles, ties, etc., on the right of way of a railway are exempt from assessment. The Province, however, collects from sixty to twenty dollars per mile of track, a portion of which is distributed among the municipalities in proportion to population.

The Assessment Act of Ontario contains the most modern ideas in reference to municipal taxation. The most important feature in addition to the business assessment are the reduction of income exemption in the case of those who are not householders, the specific assessment value per mile for telegraph and telephone companies in townships and assessment based on gross receipts in urban municipalities and police villages—the assessment of land including buildings at actual value. The taxable values of the province have increased very rapidly under its administration.

Land and buildings	50 per cent.
Business assessment over personal property values	122 per cent.
Income	250 per cent.
Total income in values of 1904 compared with 1911	56 per cent.

Notwithstanding this, the average rate of taxation remains about the same, the councils having increased their annual levies very largely during recent years.

To meet emergencies due to the war the provincial authorities found it necessary to levy a special War Tax of one mill on the dollar on the equalized value of Municipalities in Counties and the assessed value of other municipalities.

This is the first direct provincial levy on the Municipalities in Ontario, as a system of raising provincial revenue it is to be commended and is preferable from a municipal point of view to some of the provisions of the act respecting the "taxation of certain corporations for provincial purposes."

The present assessment or equalized values, while sufficient for municipal purposes, do not form an equitable basis for raising revenue for provincial purposes. No fault can be found with the legislature for adopting the only basis available in levying the War Tax.

With a view of being prepared for future emergencies the law should be amended by making it compulsory for County Councils to appoint County valuers every five or ten years and by providing for the supervision of these valuations and the assessment of property in other Municipalities by a provincial authority.

In the constitutions of the states of the Union to the South of us, the bases for Municipal and State revenue are clearly defined and a state board of equalizers or assessors assists the local assessors in maintaining valuations on an equitable basis for state tax purposes.

In Ontario the municipalities do not have access to all the sources of revenue to which they are entitled.

The structures, etc., on railway right of way are exempt and as a result municipalities in which the railways are situated are deprived of the right to levy on values which under other owners would be found on the Assessment Rolls.

The amount of assessable railway land value that Ontario municipalities may claim the right to tax, is the amount by which the rails, ties, poles, and other structures on a railway right of way increase the value of the land to an ordinary purchaser. Any greater value than this is franchise value, which should be taxed by the Province.

A few years ago the Michigan State Tax Commission reported on the actual present value, considering cost and condition, of 7,000 miles of main line railway and 3,800 miles of branches and second track. For the property now specially exempt in Ontario, the present value was \$5,820 per mile, of which \$3,100 was for rails only. To an ordinary purchaser of railway land, these values would be very much less, or what is known as scrap or junk value.

The question is a large one, entirely separate from the taxation of railways by the Province for supplementary revenue purposes. It would give great satisfaction if The Assessment Act were amended by directing assessors to add to the value of railway land a fixed sum per mile of track, the annual returns now made by the railway companies to show mileage in each municipality.

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 107 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

HYDRO ELECTRIC.

The Hydro-Electric Power Commission will soon have completed statistics and reports for the various municipalities interested in the construction of a network of radial railways throughout the western portion of Ontario. The Commission has had requests from some 300 municipalities along 1,600 miles of roads, in the districts from Whitby on the east to Sarnia and Windsor on the west.

TO TEST NEW POWER OFFERS.

A specially appointed committee of the Edmonton City Council has been empowered to go into the offers to supply the municipality with electric power at rates cheaper than the city can produce it. Three offers are under consideration, two of which are steam proposals put forward by the Canadian Coal & Coke Co. and the Wabamun Power & Coal Co., the third is a hydro-electric offer by G. W. Farrell & Co., of Montreal, which it is stated will require a capital outlay of about \$6,000,000, while a railroad to the site would cost another \$1,000,000. Each offer has to be backed by a bond for \$100,000, guaranteeing that work will be commenced within three months and carried to a completion, supplying the city with power for twelve months after the first delivery of electrical energy.

EDMONTON'S STREET RAILWAY.

Edmonton's street railway earnings for the first six months of this year totalled \$267,097.40, as compared with \$324,610.81, a decrease of \$57,513.41. Total expenses, exclusive of fixed charges, were \$200,423.52, as against \$285,549.85 for the first six months of 1914, a decrease of \$85,126.33. Gross expenses, including capital charges and depreciation, were \$342,819.80, as against \$449,688.13 in 1914, a decrease of \$106,869.33.

EDMONTON TESTS CANADIAN ASPHALT.

The City of Edmonton is giving a practical test of the values of the extensive deposits of bituminous sand found in Northern Alberta by the laying of a pavement of asphalt extracted from the deposit.

Cities in Western Canada are intensely interested in the work that is under way. The City Commissioners of Calgary, for instance, when they learned of the progress that was being made, sent Mr. F. C. Field, who is recognized west of the Great Lakes as a leading authority on asphalt work, to prepare a report for their consideration; and, as indications point to the successful use of these bituminous deposits in paving work, it is quite probable that other cities will shortly be trying it out. This will mark the establishment of a new industry in Alberta.

INSPECTION OF BUILDINGS A NEED.

Fire departments, if they be properly equipped for inspection of buildings and conditions before the fire, with printed forms to guide them, will become experts in the work, and the record they will strive for will be, not how many fires or the time of getting to them, but rather the minimum of fires and consequent reduction of losses in their respective districts. No one better than the firemen by their inspections can inform the people of hazardous conditions and careless habits with reasonable success of getting them remedied, because the firemen are looked upon by the public as their natural protectors when fire comes into the question, and by the exercise of a bit of tact on the part of the fireman inspector, his word of counsel and recommendation will be listened to, and if not always, at least in many cases, acted upon. These were suggestions given by Mr. A. Lindback, Manitoba's fire commissioner, to the Provincial Association of Fire Chiefs at Ottawa.

WELLAND, ONT.

Building permits for month of August this year \$ 12,147.00
 Building permits for month of August last year \$ 13,625.00
 Total for year to end of above month is \$126,054.00
 Total for corresponding period last year . . . \$314,018.00

TORONTO, ONT.

The contract for the supply and installation of 7,000 ft. 13,200 volt, paper-insulated, lead-covered cable has been awarded to Eugene Phillips Electrical Works, Montreal, by the Toronto Hydro-Electric System.

CHILLIWACK, B.C.

The sewage system of Chilliwack, B.C., has been completed. It has been under construction for the past sixteen months, the work having been handicapped by water and quicksand. Originally it was being done by contract, but it was later taken over by the city and completed under the direction of Mr. A. Hobson, city engineer.

PETERBORO', ONT.

Mr. R. H. Parsons, city engineer, of Peterborough, Ont., reports that 9,540 lineal feet of sidewalks have been laid to date this year at an average cost of 12¼ cents per sq. ft.

VICTORIA, B.C.

About 13,000 square yards of civic paving have been completed to date, and about 10,000 square yards are yet to be finished under the 1915 programme. The grading and foundation work on a large portion of it have been completed, and the civic paving plant is in operation.

REGINA, SASK.

With this years' construction programme completed last week, the city now has 67¾ miles of sewers laid within the city limits, including storm sewers and 73¼ miles of water mains, including the supply mains from Boggy Creek.

NEW WESTMINSTER, B.C.

The five-million-gallon storage reservoir built by the City of Westminister, B.C., is now practically completed, and will provide an added safeguard against shortage on the upper levels of the city for fire protection purposes. The two reservoirs will have a storage capacity of over seven million gallons.

LONDON, ONT.

The City of London's syphon chamber, where the city sewage is elevated on its way to the disposal plant, has been completed. The syphon is provided with a necessary valve for flow regulation and is expected to be the means of entirely eliminating a long-termed nuisance.

QUEBEC, QUE.

The foundation stone of the new Union Station at the Palais has been laid by His Worship Mayor Drouin, and it is expected that by the New Year the new station will be in use.

WATERING CITY TREES.

A very ingenious and practical device for assuring the trees on city sidewalks a sufficient supply of water, no matter how dry the season and how hard baked the earth, has recently been put in operation on the Continent of Europe. It consists of a tube of iron or lead bent into the form of a ring large enough to encircle the stem of the tree. The earth is removed so that this ring may be placed just above the roots, and is then filled in again, leaving the end of a pipe connecting with the ring projecting above the surface of the ground. The top of the ring is pierced with a large number of small holes, and a tin cover or shield presents these from becoming stopped up with earth. By means of a funnel in the protruding end of the pipe any desired amount of water may be supplied to the roots without waste or loss of time. A further advantage is the ventilation thus secured of the earth in the vicinity of the roots.

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

R. O. WYNNE-ROBERTS

Consulting Engineer

310 Temple Bldg., Bay Street, TORONTO

Water Supply, Sewerage, Sewage Disposal, Civic and
 General Engineering, Arbitrations, Investigations, Valua-
 tions, Reports, etc.

Walter J. Francis, C.E.,
 M. Can. Soc. C.E.,
 M. Am. Soc. C.E.,
 M. Inst. C.E.

Frederick B. Brown, M.Sc.
 M. Can. Soc. C.E.
 Mem. Am. Soc. M.E.,
 Mem. A. I. E. E.

WALTER J. FRANCIS & CO.

CONSULTING ENGINEERS

Head Office—232 St. James Street, MONTREAL
 Long Distance Telephone—Main 5643
 Cable Address—"WALFRAN, MONTREAL."—Western Un. Code

**R. S. & W. S. LEA
 CONSULTING ENGINEERS**

Water Supply and Purification, Sewerage and Sewage Dis-
 posal, Water Power Development
 Tel. Long Distance Uptown 6740—41
 New Birks Bldg. MONTREAL

FAIRCHILD, JONES & TAYLOR

Consulting Engineers & Land Surveyors

Steam and Electric Railways, Electric and Water Power,
 Sewerage and Waterworks
 Land, Timber & Mine Surveys. Townsite Subdivisions
 Room: 608-609 Tegner 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

The Canadian Municipal Journal

OFFICIAL ORGAN OF

THE UNION OF CANADIAN MUNICIPALITIES, WHICH REPRESENTS EVERY MUNICIPALITY IN CANADA, AND ALSO OFFICIAL ORGAN OF THE PROVINCIAL MUNICIPAL UNIONS OF

BRITISH COLUMBIA,

NOVA SCOTIA,

NEW BRUNSWICK,

QUEBEC.

ARTICLES ON EVERY PHASE OF CIVIC GOVERNMENT.

SPECIAL DEPARTMENTS.

THE ONE JOURNAL WHICH IS READ BY CIVIC HEADS FROM COAST TO COAST

Advertising Rates on Application to

The Canadian Municipal Journal Co.,
Limited, Montreal

Financial Progress of Ontario and Quebec Provinces

A striking illustration of the financial progress throughout the two older provinces of the Dominion during recent years, with respect to banking facilities, is graphically shown in a new edition of a Bank Map of Ontario and Quebec which has recently been issued by the Department of the Interior at Ottawa. According to the information which has been incorporated in the publication the number of branches in operation in 1901, the first year for which statistics of this nature are given, totalled approximately 500, in comparison with 2,000 at the present time. This interesting compilation of current banking information is valuable also as a Railway Map showing as it does the location, on the various main and branch lines, of all towns and cities. This, together with other general information, makes the publication very useful for reference purposes.

A copy may be procured free of charge upon application to F. C. C. Lynch, Superintendent of the Railway Lands Branch, Department of the Interior, Ottawa.

Any investor or manufacturer who wants the

FACTS

about any CANADIAN CITY or TOWN with the view of investing or establishing an industrial enterprise, may have full information — *without one cent of cost* — by applying to the

Bureau of Information

CANADIAN MUNICIPAL
JOURNAL

221 Coristine Bldg., Montreal, P.Q.