

AND REVIEW OF CIVIC IMPROVEMENT

# The Pride of the Town

"Main Streets of Vankleek Hill are improved with Imperial Asphalt"



Three views showing the splendid main streets in Vanklzek Hill, Ont.

• R OR many years, Vankleek Hill maintained natural gravel roads but the ever-increasing traffic imposed such a heavy strain that the surface required continual attention, while the dust was intolerable.

"Determined to alleviate these conditions, the progressive council under Dr. E. A. Mooney (Mayor), after carefully investigating various types, decided to lay Asphalt Macadam (penetration type) using Imperial Asphalt Binder B. Work was begun in 1919 and completed last year. Sutherland & Grant, contractors, under the supervision of W. A. Magwood, C.E., M.EI.C., improved in all about  $2\frac{1}{2}$  miles of main streets.

"Vankleek Hill is now right proud of its model thoroughfares. Their smooth, clear, resilient surface is particularly pleasing to business men and motorists. The total absence of dust is a source of satisfaction to everybody.

"Asphalt Macadam (penetration type) is the logical solution to the problem of road improvement and maintenance in small towns and on suburban highways. It can be laid over old roads with perfect results. Its first cost is low, its maintenance negligible."

ROAD ENGINEERING DEPARTMENT

Our new booklet on Imperial Liquid Asphalt is now being distributed. We shall be pleased to mail you a copy on request.



IMPERIAL OIL LIMITED Toronto - - Canada No. 5

## Pedlar's "Perfect" Steelcrete IDEAL FOR CONCRETE ROAD CONSTRUCTION

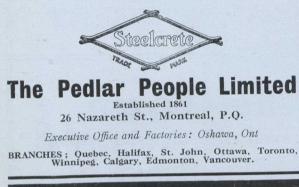
Pedlar's "Perfect" Steelcrete is manufactured in our new plant at Oshawa, and is made by a cold-drawn process. It, therefore, possesses great unit strength and a high elastic limit. It is uniform in quality and stiffness, which makes a taut reinforcing material requiring no stretching or placing to take the "waves" out of it that often happens in other types of reinforcing. It enables the more extended use of unskilled labor thus conducing to greater economy.

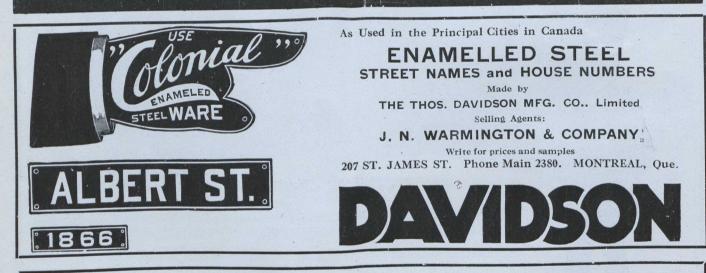
Pedlar's "Perfect" Steelcrete is a Canadian-made product, fabricated in Canada from the raw material to the finished article.

By placing your orders with us you will save the duty and delay which are inseparable from import orders.

Write for Steelcrete Folder "M.J." and Table of Dimensions







## The CANADIAN BRIDGE CO., Limited Walkerville, Ont.

Manufacturers of

**Railway and Highway Bridges** 

LOCOMOTIVE TURN TABLES, ROOFS, STEEL BUILDINGS AND STRUCTURAL IRON WORK OF ALL DESCRIPTIONS

# Power and Telephone Cables \* \*



# Eugene F. Phillips Electrical Works

Limited

Head Office and Factory - M

MONTREAL

Branches : TORONTO, WINNIPEG, REGINA, CALGARY, VANCOUVER

Alphabetical List of Advert
-----------------------------

		W. D. Lighthall, K.C.	134
American Bank Note Company	130	Lea, R. S. and W. S.	134
Ames, A. E. and CompanyCover 3	136	Lea, R. S. and W. S	134
Armco Iron Company, Ltd		Lesperance, A. P	
			158
B		London Concrete Indennery cog	
, , , , , , , , , , , , , , , , , , , ,		M	
Bank of Montreal	137	MacKinnon Steel Company, Limited	159
Burnett and McGugan	134	Merchants Banks	
Burgess C. H., and Company	136	McLaren Belting CompanyCover	3
Babcock & WilcoxCover	3		157
Barrett Company, Limited, The	133		157
Bell Telephone Company	135		159
	136		
Barber, Wynne-Roberts & Seymour	157	N	
		Northern Electric Company	131
e			
C	159	0	
Crane, Limited Montreal City and District Savings Bank		Office Specialty Manufacturing Company	135
Canadian Fairbanks-Morse Co., Limited	100	office specialty minutacturing, company tretter	
Canada Cement Company, LimitedBack C	over	P	
Canadian Appraisal Company, Limited	102	Pedlar PeopleCover 2 and	102
Coulter and Jones	156	Phillips Electrical Works, Eug. F	129
Crossley, T. Linsey	134	Thimps Electrical Horns, Lag	
orossiey, 1. Linsey		Q	
D		Quebec Savings and Trust Company	157
	0	quebec barrings and Trust company	
Davidson Manufacturing Company, LimitedCover	2	R.	
Dominion Securities Corporation, Limited	155 156	Royal Bank of Canada	157
Dominion of Canada Guarantee Company	100	Ross and Angers	134
Dominion Bridge CompanyCover	9		TOT
			134
Ţ		Ross, H. J	
E		Ross, H. J	134
	134	Ross, H. J	134 134
E Ewing, Lovelace and Tremblay	134	Ross, H. J	134 134 134
	134	Ross, H. J	134 134 134
Ewing, Lovelace and TremblayG		Ross, H. J	134 134 134
Ewing, Lovelace and Tremblay	134 134	Ross, H. J	134 134 134 159
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.A		Ross, H. J	134 134 134 159
Ewing, Lovelace and TremblayG		Ross, H. J	134 134 134 159
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.A H Hanson Brothers	134 136	Ross, H. J	134 134 134 159
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.A H	134	Ross, H. J	134 134 134 159 160
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.AH H Hanson Brothers	134 136	Ross, H. J	134 134 134 159 160
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.A H Hanson Brothers	134 136	Ross, H. J.       Roberts-Wynne, R. O.         Roberts-Wynne, R. O.       Reakes, Geo. C. E.         Rutherford & Co., Ltd., Wm.       S         S       S         Stinson-Reeb Builders Supply Co., Ltd.       S         Standard Underground Cable Co., of Canada       T         Tarvia       T	134 134 134 159 160
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.AH Hanson BrothersH Hersey, Milton, LimitedI	134 136 136	Ross, H. J	134 134 134 159 160
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.AH H Hanson Brothers	134 136 136	Ross, H. J	134 134 134 159 160 133 102
Ewing, Lovelace and TremblayG G Gardner, H. Murray, A.C.AH H Hanson BrothersH Hersey, Milton, LimitedI I Imperial Oil Company, LimitedFront O	134 136 136	Ross, H. J	134 134 134 159 160 133 102

**BUSINESS FOUNDED 1795** 

Incorporated A. D. 1897 by Act of Parliament of Canada

# AMERICAN BANK NOTE COMPANY

ENGRAVERS AND PRINTERS

Municipal debentures-Bonds-Certificates of Stock-Cheques, etc.

Try us when you sell your next lot of debentures.

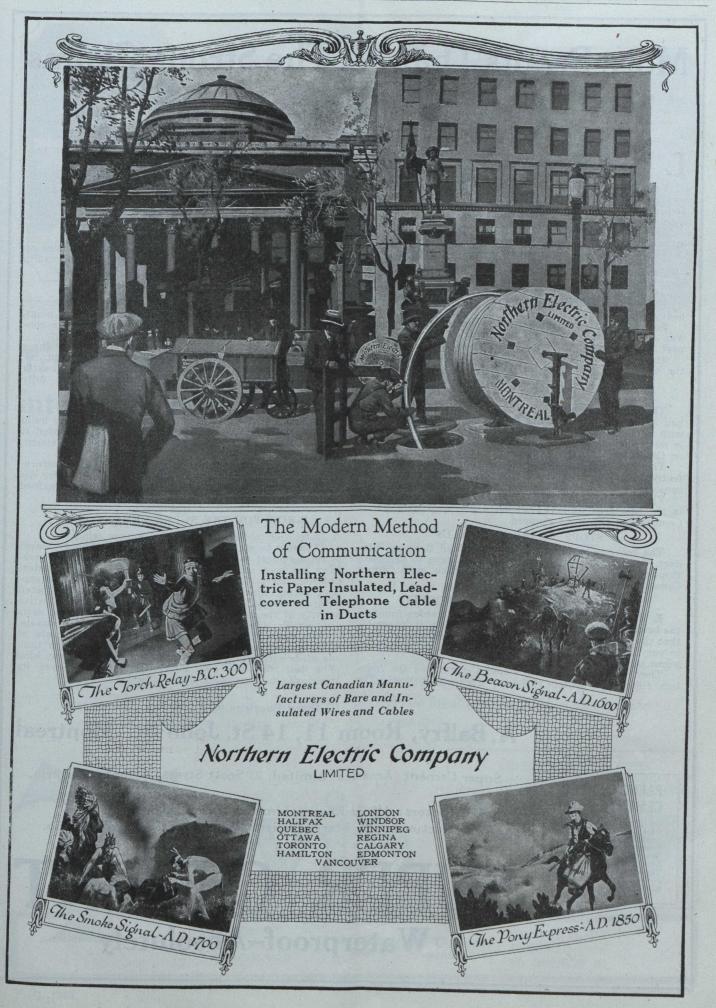
-

HEAD OFFICE

224 WELLINGTON STREET, OTTAWA

MONTREAL 224 St. James Street Branch Offices ; TORONTO 19 Melinda Street

WINNIPEG Union Bank Bldg



131

AST year, Super Cement—the discovery of a leading English Engineer—was introduced to the Canadian building trade.

Verp strong claims were made for Super Cement. It was claimed that Super Cement could make a stronger and denser mortar and concrete—and could make an absolutely waterproof job.

All these claims have been proven true by results on actual jobs.

#### PROVEN WATERPROOF AGAINST ODDS

Gushing water from springs caused trouble in the basement of the Federal Government Customs Building (Connaught Building), Ottawa.

Here was a good place to test Super Cement against heavy odds.

So, at the places where the water came through a space was chipped out of the wall and a thick mortar of one part Super Cement to two parts river sand was used.

In every case, Super Cement kept the water out, and the basement is now dry and is used for storage.

## STEWART COMPANY WATERPROOFS A STORAGE TANK

A STORAGE TANK The Canadian Stewart Company, Limited (Contractors), had a basement tank which had been previously treated with a membrane waterproofing system but was leaking in numerous places. They plastered Super Cement mortar on the inside. All the leaks were stopped. The fact that the Super Cement mortar bonded per-fectly to the old concrete they considered noteworthy, considering it was applied on the inside of the walls. The big new Union Station at Toronto developed leaks in the basement walls. They were plastered with Super

in the basement walls. They were plastered with Super Cement and the leaks stopped.

#### STOPS LEAKS IN WALLS

The concrete walls of the Avenue Road Concrete Viaduct, Toronto, permitted water and dampness to percolate through. They were plastered this time with Super Cement mortar and are now waterproof.

#### LEAKY FOUNTAIN WATERPROOFED

E. R. Rolph, Architect, Toronto, had a garden fountain the basin of which would not hold water. Mr. Rolph states that the walls of the fountain were of crude masonry and in very bad shape, and the conditions could not have been worse.

They were repaired with Super Cement and the foun-tain filled with water 24 hours after application. The

fountain proved absolutely water-tight and has given perfect satisfaction.

#### EARTHQUAKE VAULTS MADE DRY

In the Royal Observatory, Ottawa, are deep vaults in which are kept the seismograph instruments for record-ing earthquakes. Being so far below the surface, these vaults and connecting tunnels were very damp, with water

trickling down the sides. But Super Cement mortar was applied as a plaster on interior faces of walls, floors and ceilings, and the vaults and tunnels were made waterproof.

#### FLOODED CELLAR NOW DRY

The Rapid Electrotype Company had a brick basement, laid in Portland Cement mortar, in their Montreal plant. A portion of it was flooded with water forced by a considerable pressure from some unknown source.

Super Cement mortar of one part cement to three parts sand was carefully applied in two coats about %" thick. The treatment proved effective. The flow of water has been completely stopped. The interior is now quite dry.

#### WATERPROOF DEPOSIT VAULTS

The Union Trust Company, Toronto, wanted to build the best possible Safety Deposit Vault. They wanted it absolutely waterproof, So they built it of Super Cement, using 70 barrels.

Shortly after the vault was completed, a rainstorm flooded the adjoining parts of the building, but water did not penetrate the walls of the vault which remained absolutely waterproof.

#### WRITE FOR THE SUPER CEMENT BOOK

It tells all about this remarkable new cement.

It cannot be stated too emphatically that Super Cement is not a cement to which a mere water repellant or porefiller has been added. Super Cement does all the water-proofing itself. It is made by a new and improved prowith the cement clinker, which increases the hydrative activity of the cement. Super Cement is used just as is ordinary Portland Cement in making mortar and concrete. But Super Cement makes a mortar and concrete of

much greater adhesive power, density and strength than one made with ordinary Portland Cement. Make any kind of a test you like and Super Cement will prove its superiority to your complete satisfaction.

#### Direct Enquiries to

A. Balfry, Room 11, 14 St. John St. Montreal

### Super Cement (America) Limited, 23 Scott Street, Toronto, Ontario.

#### PLENTY SUPER CEMENT READY

for this season's building operations. If your dealer does not handle Super Cement, write Super Cement (America) Limited, 23 Scott Street, Toronto. We will see that your order is promptly filled.

Distributors: Alfred Rogers, Limited, Toronto, Ontario. Manufacturers: St. Marys Cement, Limited, St. Marys, Ontario.

# SUPER CEMENT Waterproof-Absolutely

You'd scarcely believe that this smooth, dustless, easy-traction road was ever in the veretched condition shown on the right. Yet the two views are of the same section of Yonge Street, near Mewmarket, Ontario, before and after Tarvia Double. Seal Construction

## Transforming a Rutty Road into a Smooth Highway—

WHAT to do with Yonge Street near Newmarket, Ontario, was the problem confronting the Toronto and York Roads Commission: Someone aptly described the street as "muddy in wet weather, dusty in dry weather, bumpy, rutty and generally disreputable looking in any kind of weather."

Judge for yourself from the "before" photograph how accurately this describes Yonge Street as it used to be.

Today all this is changed, as the "after" photograph shows. Now this section of Yonge Street is mudless in wet weather, dustless in dry weather; and the street surface is smooth, clean and firm in all kinds of weather. 133

If you have a "Yonge Street problem" in your community—some road or residential street that needs building or rebuilding—profit by Newmarket's experience and adopt Tarvia.

Tarvia is a coal-tar prepartion for use in constructing new roads or repairing old ones. It reinforces the road and makes it not only mudless and dustless, but also waterproof, frostproof and automobile proof.

Write for illustrated booklet and further information.



#### Landscape Architects

#### FREDERICK TODD LANDSCAPE ARCHITECTS MUNICIPAL PARK SYSTEMS AND TOWN PLANNING 801 New Birks Building Montreal

Write for illustrated booklet on Landscape Architecture by Frederick G. Todd.

### **Consulting Engineers**

#### Barber, Wynne-Roberts & Seymour

MUNICIPAL ENGINEERS and DEVELOPMENT SPECIALISTS

Bridges, Structures. Sewers and Sewage Disposal. Waterworks. Industrial Housing, Zoning and Town Planning. Surveys, Assessments and Arbitrations.

40 Jarvis Street, Toronto.

#### R. S. & W. S. LEA CONSULTING ENGINEER

Water Supply, Sewerage and Drainage, Water Puri-fication; Disposal of Sewage and Refuge Hydro-Electric Developments and Power Plants of all kinds. Reports - Designs - Supervision of Construction. New Birks Building, Montreal, Que., Tel. Uptown 783

BURNETT & McGUGAN **CIVIL ENGINEERS** DOMINION AND B. C. LAND SURVEYORS PLANS, SURVEYS, REPORTS NEW WESTMINSTER, BRITISH COLUMBIA P. O. BOX 107.

#### A. L. MCCULLOCH, M. C. Soc. C.E. CONSULTING ENGINEER

Hydro-Electric Power Installation. Water-Works, Sewerage and Sewage Disposal. Ex-aminations Plans, Estimates and Reports. BRITISH COLUMBIA NELSON -

#### T. LINSEY CROSSLEY

A.M. Can. Soc. C.E. CONSULTING CHEMIST CHEMICAL ENGINEER Asphalt Paving and Inspection, Municipal Chemistry 43 SCOTT STREET TORONTO

#### GEORGE REAKES, C.E. A.M. Can. Soc. C.E.

CONSULTING ENGINEER Expert on Concrete, Asphalt, Tarvia and Macadam Roads Inspections and Reports Made. P. Q. ST. LAMBERT --.

### **R. O. WYNNE - ROBERTS** CONSULTING ENGINEER **40 JARVIS STREET, TORONTO** Water Supply, Sewerage, Sewage Disposal, Civic and General Engineering, Arbitrations, Investiga-tions, Valuations, Reports, etc.

H. MURRAY GARDNER, A.C.A. CHARTERED ACCOUNTANT Vice-President Canadian Municipal Journal Co., Limited

128-9 CORISTINE BLDG., MONTREAL, Cable "Magdalan"

**Chartered Accountants** 

### **Appraisers**

#### CANADIAN APPRAISAL CO., LIMITED

Property Values Definitely Established to Meet All Insurance, Financial and Accounting Requirements HEAD OFFICE: 17 St. John St., MONTREAL Toronto: Royal Bank Bldg.

New York: Equitable Bldg.

### Legal Advisers

HOWARD ROSS, K.C.

EUGENE R. ANGERS

### **ROSS & ANGERS**

BARRISTERS AND SOLICITORS

Coristine Building 20 Nicholas Street, Montreal

#### W. D. LIGHTHALL, K. C.

Counsel, Union of Canadian Municipalities, and General Municipal Adviser MONTREAL TRUST BUILDING, QUE. MONTREAL,

### Badges

For Receptions and Conventions, in fact whenever vou require BADGES Our estimates and service will satisfactorily answer your demand BADGE & SPECIALTY CO. Factory: 251 St. James Street, Montreal.

### **Wood Stave Pipes**

"MICHIGAN" WOOD STAVE PIPE FOR WATER WORKS, ETC. T. A. Morrison & Co.,

128 BLEURY STREET, MONTREAL.

### This is our record Do you know a better one?

In 40 years' operation, all surplus earnings have gone, not to shareholders, but back into our business to buy more plant and so to earn more revenue.

Not a drop of water in our stock! Money spent on telephone plant exceeds stock and bond liability by over 16 millions.

We have never "cut a melon"! Each share of stock sold from the beginning has averaged \$106 per hundred-dollar share.

Dividends to shareholders have averaged less than 8 per cent., and have never exceeded 8.

And our subscribers have got more, for the money they have paid us in telephone rates, than those of any other system we know of anywhere.

#### and this is our problem-

The demand for telephone service is so great that to extend our plant fast enough, millions of new money must be found—something like 10 millions a year!

Where are we to get this money?

It can come only from investors who have confidence in our ability to pay a fai rand constant rate of return on the money they invest in our business. If we fair to pay this fair and constant return, then naturally they will invest their savings elsewhere!

A fair and assured return can come only from adequate revenues. Adequate revenues can come only from adequate rates.

Our problem is the problem of utilities everywhere. Regulation fixes the price we must charge for our service; it does not limit the price we must pay for wages or supplies. Fair minded people concede that adequate rates and adequate service must go hand in hand.

TELEPHONE TELEPHONE CONG DISTANCE ELEPHONE

## The Bell Telephone Co. of Canada

## Your Priceless Records Protected at Little Cost

Adequate protection for your papers against fire and water is brought well within your reach by the "Office Specialty" Fire-Wall Filing Cabinet. This cabinet is made of *steel plus asbestos*, and resists heat and flame like a safe, while the flanged drawers fit so tightly that no flooding water can get at the records inside.

#### "OFFICE SPECIALTY" FIRE-WALL FILING CABINET

Each drawer holds 4,000 papers, and every paper is fully protected and instantly available.

Fire-Wall Filing Cabinets are made in our Canadian factories where we also make the FIRE-WALL RECORD SAFE. Write or telephone our nearest service store for our interesting folder "Protection for Your Business Records".

THE OFFICE SPECIALTY MFG. CO. LIMITED Home Office NEWMARKET Canada

Filing Equipment Stores at : Toronto Montreal Ottawa Halifax Hamilton Winnipeg Regina Edmonton Calgary Vancouver





"Office Specialty" Fire-Wall Filing Cabinets

The above illustration shows all the sizes that the Fire-Wall Filing Cabinet comes in. Like all 'Office Specialty' equipment, the Fire-Wall Filing Cabinet is made on the sectional principle—buy the sections sufficient for present needs—add new ones as your files grow.

## **Beyond All Comparison**

Victory Bonds are Beyond all Comparison the best investment in Canada.

Victory Bonds are now on the various exchanges subject to the usual commissions for buying and selling. Quotations will be found on the financial pages of all Canada's leading dailies.

Dominion Government securities are the best in the market and no price fluctuations can affect the quality of the investment or the ability and undertaking of Canada to redeem them at maturity at one hundred cents on the dollar.

The financing of the greatest crops in Canada's history has required all available banking funds. Money rates must, therefore, be temporarily high. Many business men, under these conditions, prefer selling securities in order to procure the necessary funds for business purposes. With such a volume of securities coming to the market, unusual investment opportunities are resulting.

The crest of high prices for commodities has been passed. Many staple products have already had decided drops. These conditions always proceede higher opportunities of a lifetime.

We have every possible facility for handling War Loan business. Your orders will receive our best attention.

> Members Toronto Stock Exchange. Members Montreal Stock Exchange.

E. AMES & CO.

Investment Securities Union Bank Bldg., - -Transportation Bldg., -74 Broadway, - - -Belmont House, - -Harris Trust Bldg. - - Toronto Montreal New York Cictoria Chicago

Established 1880

T. J. Coulter, LI.A.

W. S. Jones, C.A.

## **COULTER & JONES**

PUBLIC ACCOUNTANTS GENERAL CONSULTANTS.

Audits made for Municipalities and Corporations.

137 McGILL STREET, MONTREAL

ORIGINAL TAG DAY NOVELTIES

---- Home Reunion and Reception -----

**BADGES AND FAVOURS** 

Civic Requisites too difficult for you to find elsewhere

### Badge & Specialty Company

Address Mail P.O. Box 456 or Wire 251 St. James St. Long Distance - Main 1611 Milton Hersey Co., Limited

> CONSULTING ENGINEERS *AND* INDUSTRIAL CHEMISTS

A Complete Testing Service to all Municipalities on

CEMENT SAND GRAVEL BRICKS ROAD OILS ASPHALTS TARS

A Complete Organization of Road Engineers, Experts in the Design of Roads and Pavements thoroughly Equipped for their Inspection and for Supervision of their Construction.

WATER

MONTREAL - WINNIPEG

# The Canadian Municipal Journal

Published Monthly by

The Canadian Municipal Journal Co., Limited,

Coristine Building, Montreal

#### SUBSCRIPTION RATES

City of Montreal and United States \$2.25

Canada, Great Britain and Countries in Postal Union \$2.00

FREDERICK WRIGHT, Editor

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

NO. 5

#### VOL. XVII.

#### CONTENTS

MONTREAL, MAY, 1921

-	4		-

Ypres138Trials of a Mayor138Efficiency138Metropolitan Commission of the Island of Montreal139The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Executive Meeting of U. C. M.141Bituminous Highways for Japan142		
Ypres138Trials of a Mayor138Efficiency138Efficiency138Metropolitan Commission of the Island of Montreal139The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Executive Meeting of U. C. M.141Bituminous Highways for Japan142	Unemployment and the Municipalities	137
Trials of a Mayor138Efficiency138Metropolitan Commission of the Island of Montreal139The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Caccutive Meeting of U. C. M.141Bituminous Highways for Japan142		138
Efficiency138Metropolitan Commission of the Island of Montreal.139The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Cxecutive Meeting of U. C. M.141Bituminous Highways for Japan142		138
Metropolitan Commission of the Island of Montreal.139The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Executive Meeting of U. C. M.141Bituminous Highways for Japan142	Efficiency	138
The Social Worker139Curfew for Children140Things That are Useless140Like Father Like Son140Federal Good Roads Grant141U. C. M. Convention140Executive Meeting of U. C. M.141Bituminous Highways for Japan142	Metropolitan Commission of the Island of Montreal	139
Things That are Useless.140Like Father Like Son.140Federal Good Roads Grant.141U. C. M. Convention.140Executive Meeting of U. C. M.141Bituminous Highways for Japan.142		139
Like Father Like Son.140Federal Good Roads Grant.141U. C. M. Convention.140Executive Meeting of U. C. M.141Bituminous Highways for Japan.142	Curfew for Children	140
Federal Good Roads Grant.141U. C. M. Convention.140Executive Meeting of U. C. M.141Bituminous Highways for Japan.142	Things That are Useless	140
U. C. M. Convention	Like Father Like Son	140
U. C. M. Convention	Federal Good Roads Grant	141
Bituminous Highways for Japan 142		140
Bituminous Highways for Japan 142	Executive Meeting of U. C. M	141
		142
		142

Fire Protection in Australia	143
Advanced Sub-Division Regulations (T. W. Edwards)	143
Engineers in Public Life (T. Linsey Crossley)	144
Rubber Road Paving	145
Elements of Success in City Development (Thomas	110
Adams)	146
City Trees a Community Asset	147
Cities Do Not Happen (Walter Parcelle)	148
Quebec Municipal Union	149
Rural Municipal Government in Saskatchewan (J. J.	
Smith)	150
Road Building in U. S	152
Draining and Housing Schemes	152
Housing Problem in Germany	153
Public Utilities in Edmonton	155

## **Unemployment and the Municipalities**

Unemployment is increasing to an alarming extent in the industrial centres of Canada, and as in 1915, when industrial conditions were bad throughout the Dominion, the unemployed are looking to the city halls to ease their condition. In the city of Toronto, on April 22, three hundred out-of-works marched to the City Hall and there presented to Mayor Church a resolution demanding "to be gainfully employed immediately, or failing this, allowance to be granted at the rate of \$15 for single men and \$20 a week for married men, with an additional \$2 for each child. Be it further resolved that failing this, they adopt such methods that will accomplish the results desired."

The latter part of the resolution, which was in reality a threat to create a disturbance if the demands were not complied with, was met by the mustering of the police at police headquarters. There was no disturbance. The mayor, with his well-known diplomacy, saw to that. Be that as it may the Toronto incident is an indication to what extent hungry men with hungry families will go when driven to it, and it must be remembered that thousands of these men have been out of employment for months. And the unemployment problem is not confined to Toronto by any means.

What the municipal councils can do under the circumstances is hard to say for undoubtedly every municipality is doing all the public work that is necessary, and to carry on more is to add an increased burden on an already heavily taxed people. Of course, with the summer coming on some can go on the land, but not many as the large proportion of men now out of work are mechanics and clerks, whose training has absolutely unfitted them for farm work. According to bank reports this summer is going to be one of the hardest for industry in the history of Canada, the reason given being that no business can be done with the present high prices prevailing.

One of the principal industries affected is the building trade, especially the building of private dwellings which means not only present unemployment but an increasing shortage of houses. Many thousands of men in moderate circumstances having got tired of paying excessive rents intended this year to build their own homes, but high costs have stopped them, they choosing to take the lesser, of what they think two evils by renting. What is to be done? Every attempt made to bring the financier, the supply man, the contractor and labor together would seemed to have failed. Each keep trying to pass the "buck" on the others. No one will take up the responsibility of forcing the situation which common-sense says would go far to solve the problem as far as housing was concerned.

#### A FAIRY GODMOTHER.

Last year we published an article in these columns from the pen of Mr. John Kidman, in which he suggested that Canadian cities follow the example of certain English cities that had each adopted some town located in the devastated territory of France or Belgium. We note with pleasure that the City Council of Montreal have passed a resolution to give practical assistance in the reconstruction of Avion, a little town near Lens. In this way Montreal becomes the fairy godmother of one of the stricken towns of France. What other Canadian city will follow her splendid example?

### Yprès

April twenty-second is now known throughout Canada as Ypres Day—the day of national victory and national remembrance. On that day six years ago the best of Canada's young manhood proved to the world that the cause of humanity was as sacred to-day as in the early days of chivalry. The story will ever be fresh in the minds of those who have pride in their race and their country. How in face of heavy odds and the terrible gas of the enemy the then untried Canadians held the line, and "averted a disaster." The day was saved but at a terrible cost in lives, and we would indeed be ungrateful if we did not bow our heads in silent prayer for the glorious dead.

Every city and every hamlet in Canada sent its youth to Flanders and thirty thousand graves mark the progress of their battle days. What Canada has won in glory and prestige was the price of their sacrifice. How is Canada repaying that great sacrifice? Is she bettering the condition of those left behind? Are her cities and towns endeavoring to build up a social fabric that will eliminate the evils and dangers of youth? If her people are not making Canada better for those who returned from the wars, and

Some years ago when conversing with a wealthy public man who had had a large experience in civic government we asked him why more men of leisure did not take up public work. The answer he gave was significant: "I have many friends who have the time and the means to go in for public life but all are afraid of becoming the butt for all kinds of slander. Why I never knew what an awful liar I was until I became an alderman." As the man in question was the soul of honor and truth his remarks could not help but make one appreciate the trials of those who conduct public affairs, especially municipal affairs. The conversation was recalled to our mind in reading the experience of ex-Mayor P. W. Johnson, of Marion (South Carolina) who after six years of office lost his election. Mr. Johnson is editor of the local newspaper in which he summarizes his term of office as follows:—

We have settled land disputes, family disputes, dog disputes, and some unfair accounts.

We have been insulted, disgusted, spat upon, and imposed upon.

We have locked up culprits for wrong-doing, and then envied them their place of limbo.

We have been blamed for stopped sewers, blocked streets, heavenly showers, poor telephone service, and the present price of cotton. We have been cursed for cutting down trees,

We have been cursed for cutting down trees, and threatened with death for allowing other trees to stand.

We have been blacklisted for the bum work of one policeman, and ostracized for the sterling work of another.

We have been called a liar until we almost believe it.

We have become widely known as a grand rascal, an arch criminal, a desperado, a policy player, and a bigoted fool.

We have been accused of attempting to give the Presbyterian Church title to the Town Hall.

the widows and orphans of those who lie in the graves of France, she is not keeping faith.

In 1914 Canada's sons, and daughters, went to the war with great ideals before them; those who have returned have sometimes lost confidence in the consummation of their ideals. Instead of the loyalty and the comradeship of the war days they found a spirit of selfishness pervading the land, and they wondered if their fighting and sacrifice had been in vain. As the days of sacrifice gradually became more a memory than a reality greed and intolerance seemed to thrive and they thought sadly of the fair promises of those who had sent them to the war. To-day Canada is going through an industrial depression and the returned soldier-the last to be taken on-is the first to be thrown out of employment, as being the least fitted. His sacrifice had made him the least fitted. What an irony on our sense of justice. He may well ask was it worth while?

The municipal councils can at least do their duty by employing all the returned men possible on their public works, and in their offices.

### The Trials of a Mayor

Mothers have accused us of over-running the town with dogs, and dog-owners blamed us with the deluge of babies.

One bunch wanted hogs in town, while another said there were too many hogs already.

They cursed our name when mosquito time came.

They yelled at us when the ditches ran over after having been filled to capacity by the good Lord.

They blamed us for the many peculiarities of their neighbors' chickens, dog, man-servant, maid-servant, and mule.

#### WHAT IS EFFICIENCY?

So much has been said about "efficiency" in government and particularly in municipal administration and so many constructions have been placed upon the word that it is hard to tell exactly what people mean when they glibly cry out efficiency, efficiency, every time they refer to public administration.

There is the efficiency of the official who does his work quietly and thoroughly and there is the socalled efficiency of the man who talks much. Unfortunately it is the latter who convinces his fellowmen of his ability to do something out of nothing though in the testing he is usually found wanting. In the meantime, though, he has done incalculable harm in straining the faith of those who accepted certain principles on his theory alone-principles which may be good and workable in the hands of one of those men who work and say nothing, but which have been found impracticable in the hands of the man who talks much. And as with men so with systems. Each year new schemes of government keep being introduced, all of course to bring about more "efficiency," but so far we have had no improvement on the old-fashioned form, that is, in getting results.

### Metropolitan Commission of the Island of Montreal

The Metropolitan Commission of the Island of Montreal that was created recently for the supervision of the finances of sixteen municipalities surrounding the City of Montreal marks a new spoch in civic administration, not only in Canada but on this Continent, inasmuch that if successful it will be a basis upon which can be built a system of govern ing a large metropolitan area without the municipal units losing their autonomous standing in so far as the government of their own community is concerned. The charter of the Metropolitan Commission is fundamentally similar to that of the London County Council, though it is limited at present to the financial supervision of the municipalities that come under its control, with the exception of Montreal itself which is independent of the commission, other than contributing towards its cost, and to the funds and credit necessary to place three of the municipalities now under the commission on a sound financial basis. To protect Montreal's interest the City Council elects eight out of fifteen members of the commission-one member to be the City Comptroller and seven selected from the Council itself.

Included in the sixteen municipalities are the cities of Lachine, Westmount, Verdun and Outremont, the council of each of which must select from among the members a representative to sit on the commission. The other municipalities affected select two representatives who must be a member of one of the councils. To complete the Commission, though he has no vote, one member is appointed by the Provincial Department for Municipal Affairs. The M. C. I. M. then can be said to be fairly and proportionately representative of the municipalities under its control, and as all the members have had a large experience in the civic affairs of their respective communities, the commission is fortunate in starting off with the right personnel. To still further strengthen its position the Commission at its first session appointed as legal adviser, Mr. C. L. Laurendeau, late city attorney of Montreal, and as secre-tary-treasurer Mr. E. T. Samson, who as secretarytreasurer of Outremont had much to do with the drafting of the charter.

The Commission has extensive powers. For instance no municipality under its control "may contract a loan or issue bonds unless it be specially authorized by a resolution of the Commission" other than temporary loans in anticipation of the collection of their annual revenue. It can, of its own initiative, float loans upon the taxable property of any of the municipalities for meeting the debts of any or all the municipalities. As a check on the commission itself all its bond issues must be submitted to the Minister of Municipal Affairs, the expenses of which, after approval, are apportioned among the various municipalities and "especially the interest and the contribution to the sinking fund. . . in such manner that the charges and expenses shall be born entirely by the municipalities for whose benefit they have been incurred." Should a municipality fail to meet its just proportion of any expenses or charges incurred, the Commission has power to levy and collect a tax sufficient to cover such expenses.

The reason for the creating of the commission was that certain small municipalities adjacent to Montreal, had through extensive improvements increased their debits to such an extent that to save them from bankruptcy the city was asked to annex them. This Montreal was prepared to do provided other adjacent municipalities, such as Westmount and Outremont, were also annexed. Naturally they objected, and other ways and means had to be found to serve the delinquent municipalities. Hence the metropolitan commission, under which the stronger municipalities help the weaker.

Of course, as already said, the Commission is an experiment and its success depends on the spirit in which the members work together for the common benefit of the whole district. As a number of the members are the actual originators of the idea we can confidently hope that every opportunity will be taken to insure the Commission's success.

#### A PREVAILING FASHION.

In a course of an address delivered recently before a meeting composed of the gentler sex a lawyer, according to the local report characterized the city manager movement as the latest and prevailing fashion in city government. Whatever may be said for the "manager" form of government, in terming it a "fashion" is hardly recommending it the serious attention of Canadian citizens. Fads and fancies and "fashions" may be alright to discuss in the abstract but when it comes to serious business regarding municipal administration something more solid must be advanced to change our present systems.

#### THE SOCIAL WORKER.

Probably the most tragic sight that one can see in this land of broad acres is the low class tenement in some dirty narrow street. Yet in most of our industrial centres this tenement, often multiplied by the thousand, stands as a question mark to our boasted civilization. The men and women and children that live in the tenements are not there from choice as a rule, but because of circumstances over which they have no control. To a degree they are the brothers and the sisters of those who live in the better parts of the city, but so selfish is human nature, and so limited our sense of responsibility, that we are inclined to accept the "slum" and its evils as a necessary part of our community life.

Fortunately for Canadian citizenship there are those splendid men and women who are continually striving in every town and city to better the conditions of the "submerged tenth," and though at times it would seem that their efforts were in vain, they are by their insistence gradually bringing home to the citizens as a whole a deeper sense of their responsibility in the matter of providing more decent habitations and better surroundings for the poorer part of the community. The social worker to-day is a scientific worker. He, or she, is educating both the inhabitant of the slums and the inhabitant of Mayfair to their dual responsibility to the community. To the one the social worker gives hope to the other the opportunity to serve.

#### THE CURFEW FOR CHILDREN.

"Curfew to blow at ten o'clock, p.m., daylight saving time, beginning May 2nd., after which hour children must not appear on the streets except when accompanied.

The above regulation is taken from the minutes of a recent meeting of the new model town of Iroquois Falls, in Northern Ontario, that was built by the Abitibi Pulp & Paper Company for its employees. It seems strange that such an old custom, which is a relic of the Norman invasion of England, should be revived in the newest of communities located over 3,000 miles from the country in which it originated, and where, except in a few instances, it is only a memory. Old though the custom may be it is an excellent one so far as young people are concerned, and the Council of Iroquois Falls is to be congratulated on its determination to ensure children being indoors after dark. The habit of young people roaming the streets at all hours of the night has become too prevalent, and if the sound of the Curfew can break it off, then let it be heard by all or any means in all our towns and cities.

#### THINGS THAT ARE USELESS.

Though seemingly paradoxical the recent statement of ex-Dean Moyse, of McGill University, that "unless a university teaches useless things it is not a university," was not only a truth in itself but a challenge to materialism. The true function of the university is to inculcate ideas and principles of life and conduct, and to build character, and in doing these things many "useless" subjects, in so far as they bring material results, must be taught. Culture in itself has no earning power when measured by the dollar mark, but culture is a desirable thing in every well living family and community-and by culture we mean the knowledge and intelligent interpretation of that which is fine and beautiful in all things. It is an understanding and appreciation of the spiritual in our nature — whether expressed in song or word, in music or painting-that uplift the community and the nation and it is in the cultivation of these ideas, the seeds of which are implanted in every human being, that the true work of the university lies.

This does not mean that the material side of university training should be neglected, for industrialism with its specialized training is very necessary for the economic development of a young country, but unless that which is best in us is encouraged and developed in our universities, our colleges and our schools, our citizenship will suffer. We would then soon sink down to rank materialism, from which may we be preserved.

#### FUNCTION OF A CITY PLAN.

"The function of a city plan is to wield both our accomplishments and our future requirements together, and there can be no question as to its great economic value. It would visualize in a large measure the city's present and future requirements—it must be clear that to secure the greatest economy and even ahead of the city's growth—and by affording a true prespective would enable the city to determine the relative urgency, and to control the proper sequence, of improvements to be made, and in a manner best suited to the city's financial resources."—A. E. K. Bunnell.

#### LIKE FATHER LIKE SON.

Those who have had a lengthy experience in Canadian municipal affairs will remember the yeoman service of ex-Mayor Ellis to the city of Ottawa. Though Mr. Ellis is now engaged in the larger field of provincial affairs as Director of Housing and Superintendent of Municipalities for Ontario his son, in the person of Controller M. Ellis, is, in that field that ex-Mayor Ellis made essentially his own, keeping up the family reputation in the capital of Canada. Controller Ellis, of course, is a very young man but already he has shown something of the thoroughness that characterizes his father. As controller in charge of the finances of the city young Ellis is showing the wisdom of a born financier, though he is a lawyer by profession. He is evidently not lacking in the gift of speech as witness his delightful little address at the luncheon tendered to the executive of the U. C. M. last month, when he playfully told a story against his colleague, Controller Champagne, while the old campaigner himself looked beamingly on the son of his old friend and colleague. Municipal government is surely coming into its own when the sons are taking up the mantle laid aside by the fathers.

#### THE U. C. M. CONVENTION.

The Union of Canadian Municipalities is to hold its convention this year in the city of Ottawa on July 27-28-29, when papers and addresses on subjects affecting the municipal life of the Dominion will be dealt with by the best authorities that can be secured. The executive is going further this year to make the convention a success by providing all the means possible for the delegates to have little chats one with the other. After all the greatest value of a convention is not in papers by experts but in the opportunity given to those in attendance to meet men face to face who have similar difficulties to their own. And what municipal man is there that hasn't a problem? The more serious he takes his work the more problems he has, and the fact that he will be able to talk with municipal men from whom he can get some pointers is always a great incentive to attend a gathering of his kind. But in receiving knowledge he is also bestowing knowledge to others, for the best pointers one can get on any subject is from the experience of others, particularly in municipal administration which is ever changing to suit the exigencies of the time.

The convention is for three days, and from all accounts the executive intend that the full three days are taken up, for every municipal subject worth while will be studied and discussed.

#### "TRANSACTIONS." An Instructive Publication.

The University of Toronto Engineering Society has just published the first issue of its "Transactions" which is really a continuation of "Applied Science" that was stopped in 1916 because of the war. "Transactions" contains a number of excellent papers by good writers, including "Reconstruction," by Dean Mitchell; "Switchboards," by S. E. M. Henderson; "Engineer-Human Factor," by Wills McLachlan; "Fire Prevention," by A. L. Irwin; "Power Plant Instruments," by E. G. Bailey; "The Testing and Research Laboratories of the Ontario Hydro," by W. P. Dobson.

### EXECUTIVE MEETING OF THE UNION OF CANADIAN MUNICIPALITIES

A meeting of the Executive of the Union of Canadian Municipalities was held at Ottawa, April 14th. Among those present were Arthur Roberts, K.C., of Bridgewater, N.S., President; ex-Mayor Harold Fisher, Ottawa; ex-Mayor W. D. Lighthall, Westmount; ex-Mayor Fred Cook, Ottawa, Past Presidents; Alderman J. P. Dixon, Montreal; C. W. McCrea, City Treasurer, Sault Ste. Marie; Mayor J. A. Campbell, Summerside, P.E.I.; Alderman C. W. H. Rondeau, Westmount; Mayor T. D. Bouchard, St. Hyacinthe; Mayor F. H. Plant, Ottawa; Alderman P. H. Bedard, representing Mayor Samson, Quebec; A. D. Shibley, Secretary-Treasurer and Frederick Wright, Editor of the Canadian Municipal Journal.

#### **Telephone** Rates.

Among the items of interest in the Secretary-Treasurer's report was a reference to the decision of the Board of Railway Commissioners in the matter of the application of the Bell Telephone Company for higher rates, showing that the measured system of rates advanced by the company and opposed by the Union's representatives had been refused by the Board. Although the company claimed \$4,500,000 additional revenue, only \$2,100,000 was granted. Of the latter amount the Union had admitted the justice of such increases as would produce about \$1,630,000. It has been estimated that the measured rate alone would have given the company nearer ten millions than what was awarded. As the new rates are declared to be temporary only and as the Unions' contentions had in the main been upheld, the report was considered very satisfactory.

The cost to the Union of organizing the defence of the cities and towns in this case was \$14,277.28. Of this amount \$12,140 was contributed by municipalities affected. The city fo Montreal as the largest city represented, very generously assumed the deficit.

Another feature noted in the report was the increase of membership by twenty-six new member cities showing a gratifying and growing interest in the Unions affairs. Regret was expressed that owing to the great distance of the Western member cities, few of that section of the Executive had been able to attend. This was pleasantly offset by a call from Mr. W. G. McQuarrie, M.P. for Burnaby, B.C., who appeared before the Executive to thank the Union on behalf of the British Columbia cities for its aggressive and effective opposition to some very undesirable railway legislation which had been planned and recently withdrawn due to Union efforts.

Fixing the place of the 1921 Convention developed a spirited discussion. Invitations had been received from Edmonton, Winnipeg and Ottawa. Winnipeg's claim was particularly strongly urged and Edmonton as a Western Capital City was given due consideration. The determining factor was the situation of Ottawa at about the centre of the Dominion's population and its prestige as the national hub. In view of the intention of the Executive to reorganize and extend the work of the Union and the necessity of advancing that object this year it was deemed wise to make Ottawa the 1921 Convention City for the reasons given above, with an understanding that next year a city further west will have the call.

The programme of the Convention is being arranged by an advisory committee consisting of the President with ex-mayor Fisher, W. D. Lighthall, T. D. Bouchard, Mayor Plant of Ottawa, and will include addresses by public men of note from Canada and the United States on subjects of timely interest to all municipal men.

Full programme of Convention will be given in July issue.

#### THE FEDERAL "GOOD GOODS" GRANT AND URBAN MUNICIPALITIES.

The Prince Edward Island delegate to the Ottawa executive meeting of the Union of Canadian Municipalities was Mayor Campbell of Summerside, one of those beautiful little old world towns that are to be seen and remembered on our Atlantic coast. Mr. Campbell came for the special purpose of interesting the Union in the petition of the Prince Edward Island towns to secure part of the Federal Good Roads grant. Under the Federal Act no urban municipality is entitled to any portion of the grant even though it may be located on a main highway.

In the case of Summerside, whose principal street not only forms part of the main highway of the province, but forms part of the waterfront of the harbor, this is a distinct handicap inasmuch, outside the motor car traffic which is not heavy and certainly not local, the road is used almost exclusively for Federal government haulage.

The Union executive was sufficiently impressed with the argument of Mayor Campbell that it unanimously passed the following resolution:—

"The Council was of the opinion that in this particular instance there is no reason why the road within the town of Summerside should not be treated on the same basis as the road outside, and suggested that the support of the Council should be given to the municipality in making representation to this effect to the Department of the Dominion Government having charge of the matter.

"The Council was further of opinion that the general principle of refusing grants to those portions of through highways contained within urban municipalities is unjust. The inhabitants of urban municipalities contribute a share to main highways in rural districts and there seems to be no reason why they should bear the whole cost of the portions of this highway within their own municipality."

It will be noted that in the latter part of the resolution the Union urges the Federal government to help all municipalities that may be situated as Summerside. Of course, the resolution refers in particular to those municipalities that are not in a position to improve the local highway. Even if the Federal "Good Roads" Commission cannot see its way clear to help all municipalities there are cases, such as in Summerside and Charlottetown, where the fund should be applied.

#### AN EXCELLENT BY-LAW.

We congratulate the Municipal Council of Richmond, B.C., for its courage in passing a by-law by which sub-division owners must deposit with the council a sum of money, sufficient to cover the necessary improvements, before their plans are passed. According to the report, which appears in another part of this issue, the real estate owners have taken kindly to the innovation, which should encourage other suburban councils to follow the example of Richmond. There are many municipalities in Canada suffering to-day from the want of a little moral courage in the past when it came to the opening of new sub-divisions. The councils, gambling on the future, issued loans for improvements on properties that are not even occupied to-day. So far as the suburb of Richmond is concerned this practice of pawning the future for the benefit of the real estate speculator is now stopped and it would be a good thing for municipal Canada if a similar by-law was made general.

#### THE DOMINION MORTGAGE AND INVEST-MENTS ASSOCIATION.

The Dominion Mortgage and Investments Association held its annual meeting this year in Winnipeg. In many respects this association is the most important in Canada, inasmuch as its membership comprises the principal insurance, trust and loaning companies in the Dominion. Collectively the member companies are the largest owners of municipal bonds, consequently the association is keenly interested in the economic welfare of municipal Canada, and its officers are ever ready to advise any municipality regarding its finances. Mr. John Appleton the secretary is well known to municipal men personally, and through the columns of this journal.

The object of the Association, according to the programme of the Winnipeg meeting is "to secure united action and the support of all members of the community interested in proposed or existing legislation designed to create the best possible relationship between borrowers and lenders," and through the courtesy of the officers this object has been largely achieved. Among the subjects taken up and discussed at the meeting were: "Subordination of Mortgage."

"Securities by Provincial Legislation." "Rural Credits in Western Canada." "Basis of Operations of Lending Institutions." "Citizens Co-operation in Government." "Arrears of Taxes Act in Saskatchewan."

#### THE INTERNATIONAL ASSOCIATION OF STREET CLEANING OFFICIALS.

The International Association of Street Cleaning Officials will hold its next annual conference in Chicago, Wednesday, Thursday and Friday, August 10th, 11th and 12th, at the Hotel La Salle.

The first session will open with a luncheon at 12.30 Wednesday, August 10th, in the East Room of the Hotel La Salle.

As its name denotes this association specializes in studying street cleaning, which is one of the big problems of every urban municipality. The association, which takes in Canada, has as one of the governors Lt.-Col. F. W. W. Doane, city engineer of Halifax, N.S., well known to most municipal men who in the past have attended U. C. M. conventions.

#### TORONTO STREET RAILWAY ARBITRATION.



The purchase of the Toronto Street Railway by the City of Toronto is to be by arbitration, the city's representative being Sir Adam Beck and the company's representative Sir Thomas White (late Minister of Finance).

#### BITUMINOUS HIGHWAYS FOR JAPAN.

After an investigation of street improvement and road building in Europe and America, Prof. T. Takakuwa, of Kiriu University, Tokio, commissioner for the Japanese government, maintains that the bituminous pavement is among those best suited to conditions in Japan. "It is my intention," he says, "to promote the paving question in Japan by trying as far as lies in my power to advocate the use of bituminous pavement.

"In advocating the subject in hand, however," the Japanese commissioner continues, "some difficulty arises owing to the fact that we have, in Japan, many highway engineers who look with unfavorable eyes upon the introduction of bituminous pavements and who, on the other hand, are strongly in favor of the wood-block pavements which, in a measure, may be ascribed to a certain prejudice.

"Several years ago the city of Tokio, as well as some other cities, experimented in asphalt pavement, which experiments subsequently proved to be a failure. This failure weighed heavily with the engineers as a reason for not finding it desirable to adopt bituminous pavement in Japana. Japan, on the other hand, to all appearances, abounds in luxurious quantities of wood which would, as a matter of course, facilitate the acquiring of material for wood-block pavements. This, in a great measure, influences the engineers in favor of the wood-block pavement. I think it might be said without the slightest hesitation that the city engineers merely failed in their attempt and concluded thereupon that the asphalt pavement was unsuitable for Japan. They have not analyzed the question, nor have they made any thorough investigation of the aforesaid failure.

"The city of Tokio, the capital of Japan, is going to lay down perfectly new pavements throughout the city and will probably commence the work this spring. The city of Osaka, which is the largest business and industrial city next to Tokio, and the other principal cities will also start the paving work. in the immediate future,-possibly this year. It may be seen from this, that the paving enterprise is growing rapidly in Japan and will develop into a big business in the near future.

"Aside from the pavement question there is another side to the asphalt problem which must be given sober consideration. In the immediate future the several cities of Japan plan to institute numerous changes. They have in view the extension of their water works, improvement of the sewerage systems and the reconstruction of buildings. And they are planning to build subways as well. This work is in process of being planned and in part is being put into effect.

#### WELFARE OF FIREMEN IN AUSTRALIA.

The welfare of fire department personnel receives far more attention in Australia than is given to it in the United States or Canada, where the comfort and living conditions of the firemen have commonly been given comparatively little consideration. Harrie B. Lee, Chief Officer of the Metropolitan Fire Brigade, Melbourne, Australia, has given some interesting data in his report relative to the type of stations now being constructed in that city.

Married firemen live with their families either in the fire station itself or in separate cottages immediately adjacent. Melbourne's new No. 2 fire station makes comfortable provisions for twelve married men and their families all under the same roof, as well as providing quarters for single men and recreation rooms for general use. This station has four large doors for apparatus and two smaller entrances at either side for entrances to the living quarters. The building is three stories high and is constructed of brick and concrete. It contains twelve sets of quarters, six having three rooms, and the remaining two, five rooms. There are also four single rooms for the use of unmarried men. Each set of quarters receives ample daylight from light areas. Each set of quarters has its own private entrance, there being a passageway on each side of the station, each common to six sets of quarters. Entrance to the several quarters is by way of staircases. This allows visitors to reach the men's homes without in any way trespassing on the station proper. To enable the men to turn out quickly, each set of quarters has a door which opens onto a gangway leading to poles, down which the men slide to the ground floor immediately behind the engine room.

The quarters are equipped with all modern conveniences. All kitchen and other refuse is deposited in air-tight bins, the contents being burned in the furnace connected with the heating apparatus. In this station twelve married and five single firemen are housed, in all forty-five people, including women and children.

Another station, the South Yarra, has accommodations for a smaller number of families in the fire house, but, being located outside of the congested-value district, has space adjacent to the station for individual cottages for the firemen. These cottages are owned by the men. Quarters are provided in the building for one officer and two firemen with their respective families.

#### Signal System for Watchmen.

As a means of checking up the efficiency of the watchmen in various buildings throughout Melbourne, there are, in addition to the numerous street fire alarm circuits, about 40 direct lines to various important buildings, such as the Government Stamp Offices and the King's Warehouse, where the materials for the manufacture of notes, money orders, etc., are stored, and many private firms. In most of these premises a watchman's clock system is installed. All being well and the watchman doing his duty, there is no alarm, but should the watchman fail in his rounds, fire department headquarters are at once notified by the opening of a particular circuit. The watchman is immediately called on the telephone, and if he fails to answer, a motor hose wagon is sent out to make inquiries. A similar device is in operation in the watchroom at the station. This has a five-minute check with a one-minute warning bell. Should the duty man neglect to press the button which is conveniently situated on the switchboard, within six minutes, a general alarm is rung through the building, when the whole staff turns out and the reason for the neglect of duty is ascertained .- American City.

"Cities develop characters and reputations as well as men. As they sow so they reap."

#### ADVANCED SUB-DIVISION REGULATIONS. By T. W. EDWARDS.

The Municipal Council of Richmond, near Vancouver, on the 2nd April last, gave the final reading to a by-law which is in advance of the usual by-laws regulating sub-divisions of land. This by-law requires that, before sub-division plans are passed, a sum of money must be deposited with the council sufficient to cover the cost of ditching, contouring and rocking the roads shown in the plans, and for providing and laying water mains in those roads.

This by-law is part of a policy of relieving the general municipal revenue of the burden of making roads and ditches, and laying pipe lines for new residents.

Richmond is mainly a dairy farming district with an area of about 30,000 acres of alluvial land lying south of the Fraser River, five miles from Vancouver. The west half is traversed by an electric railway which is bringing a rapidly increasing number of city workers to take up half acre, acre and five acre plots within its borders.

These city workers expect a standard of municipal service more elaborate than that to which farmers are accustomed but their taxes do not pay half the cost of the benefits they receive.

The main problem of administration in the last year or two has been that of meeting the requirements of the new suburban residential section without imposing a rate that the farmer cannot afford to pay.

The present rate is 22 mills on a low assessment. The land tax with fifty per cent. tax on improvements are the main sources of revenue.

Compared with other parts of Greater Vancouver the land as yet is little sub-divided in spite of the land boom of about twelve years ago. In the last two years the population has increased about thirty per cent. and many applications for new sub-division plans to be approved were submitted to the Council early last year. Many of these were subdivision into small holdings which were quickly bought by returned men with loans from the Soldier Settlement Board. The men no sooner settled on their land when they began to ask for ditches, roads and water connections which were altogether out of proportion to the taxes they were going to pay, though perhaps reasonable enough from the settler's point of view. The council were obliged to refuse many of these requests and there was much dissatisfaction. To prevent the trouble arising in the future a by-law was passed last year, requiring a deposit of a sum of money to cover ditching and contouring roads. This by-law was received with unexpected approval by leading real estate men and property owners. In one case, where the sum deposited under the by-law proved more than sufficient to pay for the work insisted on, the property owners voluntarily asked the council to retain the balance for future contingencies and expended a further sum themselves on additional improvements. It was found that purchasers could more easily be found for property in the way of being properly developed than for lots where there was the wearisome task of persuading the council to do the work, to be faced, even though the proportionate cost of those same improvements was added to the purchase price. The recent and more drastic by-law which requires not only the cost of contouring and ditching to be deposited but also a further sum for rocking the road and laying water pipes, is the result of the encouragement the earlier by-law had received.

The council of Clarke township, Durham county, Ontario, has decided to purchase ten acres of non-agricultural land for tree-planting under the Ontario Government's forest demonstration plot scheme.

#### ENGINEERS IN PUBLIC LIFE T. LINSEY CROSSLEY, M.E.I.C.\*

In a letter to the "Canadian Engineer," Prof. Gillespie drew attention to an address by Morris L. Cooke in which the statement is made that "while the engineer as a technologist is capable enough, he is not a citizen in the enlarged sense of the work. His structures may be safe; his work may display an ingenuity that compels admiration; his integrity may be above question, but outside of his occupation his influence is not felt—he is not, indeed, in contact with the pulsating life of his time and his community."

Prof. Gillespie cites Sir Sandford Fleming as an outstanding example of the public spirited engineer:

"Fleming, the product of a Scottish parish school. who became the Chancellor of a great university; Fleming, the youthful surveyor, who became the chief engineer of the Intercolonial and the Canadian Pacific railways; Fleming, the founder of the Royal Canadian Institute, promoter of Standard Time and the "All Red Line," advocate of parliamentary reform, apostle of an united Empire, soldier, scientist, plenipotentiary, publicist, litterateur, citizen. And while it is true that few engineers can be what Fleming was, there must be, even in the contemplation of his unique career, some measure of inspiration for all.

Fleming believed that the Canadian Institute, because of its character as a scientific and literary body, was in a peculiarly favorable position to consider the question of electoral and parliamentary reform. In 1892 he addressed to that society a note in which he pointed to our present majority-vote method of electing legislators and our party system of government as the two outstanding evils of our parliamentary system. In relation to the former, he averred that electors who vote for defeated candidates, together with those who do not vote or have no vote, remain unrepresented, that thereby one-half of the population is disfranchised.

The problem was to devise a method of electoral representation by which the whole electorate might be duly recognized in one deliberate body, so that every interest within the nation might be fairly represented in its government. He quoted from the author of "The British Commonwealth" to the effect that "party is a rude and barbarous instrument of legislation, only less bad than legislation by despotic power, which it supplanted." The author looked for the dawn of a new day, when, in place of the evils above referred to, "there would be scope and encouragement for the awakening of a calm patriotism," and when "men of capacity, wisdom and of good conscience, with minds evenly balanced, would be preferred, and generally would be chosen as representatives."

We are greatly indebted to Prof. Gillespie for this letter and its reminder of a great citizen and engineer who thought in terms of personal duty. In a later part of the letter Prof. Gillespie refers to Fleming's advice that:

"Silent men such as we are, cannot hope for profit or place in law, cannot look for fame in press or pulpit, and, above all things, must keep out of politics."

Now the logical sequence is, if engineers are in duty bound to aid in public affairs, yet keep out of politics, that politics as we know it must be relegated to limbo, and that time is coming.

It took some hundreds of years to break down the feudal system; it took some more to evolve our present constitutional form of government, and it is not likely that one or two generations will see another, but inevitable change to a form of government more consistent with the development of citizen-

ship. It is in the power of the engineer associated with others who truly have community welfare at heart to do much to see to it that the ends of justice and freedom which have been further by the progressive changes of the past are not imperilled by attempts to preserve the over-ripe fruit of those changes, but to make that fruit the logical foodspring for the seed of a new and larger harvest of human progress.

To abolish "politics" (using the word as referring to its present malodorous conditions) we must come to grips with it. One of the first things to do is to dissociate it from personalities and get it back to principles. We must not be afraid of expressing divergent views, and we must express our views as to public matters in public places, in such a way as to retain our personal respect, we do it in other matters. How much more interest we could get into municipal politics, and how much more information would the public have in civic matters if engineers and scientists in general were to take the platforms in civic elections, even if two old engineering friends were to set forth each other's views on opposite sides.

#### Representation by Occupation.

Another thing is to place it above the power of special interests. This cannot be done until the decisions of the administrative body represent in reality the concensus of opinion of the public. This will not be while the present system of geographical representation is perpetuated.

- If the electors of a city are composed for instance of:-
  - 2,000 Artisans;
  - 1,000 Clerks and salespeople;
  - 200 Administrative workers and employers;
  - 3,000 Mothers;
    - 400 Educationalists and clerics;
    - 100 Professional Technologists;
    - 50 Lawyers;
    - 50 Doctors and dentists;

6,800

our present arrangement might result in a council of say 34 members, one for every 200 electors, and we would find say:

- 12 Artisans;
- 15 Administrative;
- 2 Mothers; 3 Lawyers;
- 1 Doctor;

where most of the discussions would evidently result in a line of capital versus labor, and all decisions would be compromises or victories of those two parties with the general welfare subservient.

A line up on the basis of occupations would be:---

- 10 Artisans;
- 5 Clerks or salespeople;
- 1 Employer;
- 15 Mothers:
- 2 Educationalists or Clerics;
  - Professional Technologists, Doctors and Lawyers, one each by arrangement,

any other class of fifty or over should be allowed a representative in that community, which would have a population of say 15,000 people.

In such a council the mothers and artisans would predominate. Its actions would be perhaps radical, but its intentions would evidently be the public welfare and its components would not always line up for special class interests.

<sup>\*</sup> Chairman Social Service Committee of the Toronto Branch of the Engineering Institute of Canada.



HON. MEDERIC MARTIN, M.L.C., Mayor of Montreal.

#### ENGINEERS IN PUBLIC LIFE—(Continued).

A third point of attack would be that of education in current history. The past should be taught only to develop the present and future.

The payment of sessional indemnities has brought the possibilities of representation into wider fields opening the office of administration to a greater range of personal opinions. This while it makes for a better representation also presents an opening for the exploration of public funds for private cupidity, and the desire to hold office against public interests.

With occupational representation there would be less danger from this cause.

It might be suggested that there would be a chance for power to be retained long by one clique, without a watchful opposition, but the watchful opposition needs numbers and wins out in the event only of strong public opinion against the administration, not necessarily desirous of government by the other party except for a change, and if there were no definite limit to the life of an administration, it could hold on a long while before the opposition could make it inoperative by negation.

The indications are that public administrative bodies will in the future be elected on account of their proficiency in the function they are to perform, than in the geographical location of residence, which has in reality become more or less of a travesty.

The feudal system was broken down by the commons, especially the workers and tradesmen, and the geographical system took its place as a sort of compromise. The latter system is now much in question, and its logical sequence is that of occupation.

In looking over the political situation the writer has come to the conclusion that the phase of greatest moment is the question of the personnel of our parliaments whether municipal, provincial or federal.

The good fellowship of nations has been lost before and is now jeopardized by those who put party before humanity and political exigencies, before patriotism.

Some system should be evolved to make the will of the community more vocal and its interests safeguarded while at the same time ensuring attention to emergency matters without loss of time by the loquacity of those who "darken counsel by words without knowledge" or sacrifice public to private interest.

Proportional Representation is being urged and is being

tried in several cases. It, however, does not aim to abolish the party system, but it appears to be a long step towards a more equitable representation. In the December "Canadian Forum," Mr. Ernest Thomas gives a brief but lucid account of P. R. as experienced in the Winnipeg Election which would well repay reading.

Engineers should be at home in politics, there they can study moduli of rupture and moments of inertia and note the effect of strain on important members.

#### RUBBER ROAD PAVING IN ENGLAND.

Real progress seems to have been made towards the perfection of a system of rubber road-paving. Considerable departures have been made from the original system, involving the use of rubber-capped hardwood blocks, and the latest experiment in the Southwark Bridge-road (London) has given distinctly promising results.

According to the "Surveyer" the method of vulcanizing the rubber cap on to a plain steel plate—the first departure from the wood-block foundation—proved after experiment incapable of withstanding the heavy traffic which the roadway has to carry. As a result, it was decided to experiment with vulcanizing on to expanded metal, instead of a plain steel plate. The borough engineer, Mr. Arthur Harrison, reports that the present system seems to have overcome the difficulties of attachment. Longer time is, however, needed fully to prove the efficiency of the system from an attachment point of view, and also from the commercial standpoint.

A rubber roadway must always be initially expensive, and its commercial practicability must, therefore, depend on its length of life as compared with other road surfaces. There is no doubt as to the length of life of the rubber caps themselves. What has yet to be demonstrated is the ability of the attachments to stand the great strain which present-day traffic involves.

The company claims at least to have proved that a rubber roadway is dustless, clean and easily squeegeed, therefore sanitary, and, most important of all, non-skidding. Horses get a clean grip on it, and there is no skidding of omnibuses or cars. It is virtually noiseless, and there is no vibration in the surrounding houses. In the circumstances it should prove of great benefit to hospitals, schools and for offices where absence of noise and vibration is essential.

For foot pavement also the advantages of rubber are manifest. The strain is far less than on roads, and the section of side-walk that it is proposed to pave this year in Southwark ought to give very satisfactory results.

Speaking of the original experimental patch laid down in 1913, Mr. Arthur Harrison states that for twenty-one months it was under traffic averaging 190 tons per yard of street width per hour. No case of slip was found; in fact, it was the part of the roadway where a true imprint of horseshoes could always be found, whereas generally, in other parts, the imprint of horseshoes showed a slight slip or twist in damp weather.

The blocks were next carefully examined for wear. On being placed side by side with unused blocks htey did not appear to have lost anything through wear, but on removing the rubber cap from the wood block it was found that considerable wear had taken place both on the wood and underside of the rubber. This led to various departures from the wood block foundation. A slab of rubber vulcanized on to a steel plate with four lugs for holding down into concrete was first tried. Under heavy traffic it was found that the rubber was apt to become detached from the steel plate. However, the results encouraged further development, and a new type of block was produced, in which the ordinary steel plate was substituted by a plate of expanded metal embedded in the vulcanite.

#### Vol. XVII. No. 5.

### ELEMENTS OF SUCCESS IN CITY DEVELOPMENT THOMAS ADAMS.

In a pamphlet issued by the Commission of Conservation Mr. Thomas Adams has, under the title of "Municipal and Real Estate Finance in Canada" contributed a most valuable analysis of the economics of civic development in Canada. While we cannot agree with all the arguments put forth, by Mr. Adams, particularly when he would place the whole responsibility for the "wasteful and economic system" of urban land values on the municipal councils, we are one with him in his contention that with the adoption of town planning a more equitable distribution of values would result, with equal benefit to the welfare of the citizens and the progress of the municipality.

We regret that space will not allow the printing of the whole of the pamphlet but the following excerpts are sufficient to show the importance of the work:

The success of a city or town depends on its manufactures and trade, and the average factors that contribute most to that success are the health and contentment of the citizens, the transportation and other facilities for transit of passengers and distribution of goods, the supply of power, and the absence of excessive burdens of taxation. All these are dependent, in turn, on the proper development of the land and the absence of exploitation for purely speculative purposes of those who use it. The health and contentment of the individual are not so much determined by the amount of wages he receives as by the amount of goods he can purchase with his wages. In a community where proper living standards exist he will have to pay from one-fourth to onefifth of his income for shelter. If for that payment he can get a good home, with a pleasant environment, proper sanitary conditions and convenient means of transit, he will, or should, be satisfied. But in the average large city he cannot get such a home at a reasonable figure. If he lives in a central district he has to be content, invariably, with a crowded or insanitary dwelling. If in a suburban area, where a good house is available at a reasonable price or rent, he will probably have to put up with bad sanitary conditions and lack of facilities for travel. Urban land is not planned and sub-divided to aid the worker to get a convenient and healthy home, nor to enable the city to obtain an economic system of development, but primarily to yield profit to the sub-divider, without regard to other results, either to the purchaser or to the city.

#### Where Responsibility Rests.

The responsibility for the wasteful and uneconomic system which has been followed must rest with those who have the power to end or vary the system in so far as it is defective. That power does not rest with the private builder or real estate operator any more than with the home-owner or tenant. Each of these parties is a victim of the system. even if utilizing it for private ends. The only power that can operate to improve housing, transportation, industrial development and other things that constitute the problems of the modern city, is vested in the government of the city. Therefore, it is the city council, subject to the terms of the Municipal Act of the province, that has the responsibility for existing conditions, or for their improvement. For instance, if land is sub-divided 20 or 50 years before it is wanted for building, with consequent waste of capital in development, lessening of agrictural production near the city, etc., the discredit for that must rest with the council that could impose conditions to prevent excessive sub-divisions. If, in the city, there are thousands of vacant lots in the suburbs, with

miles of pavements, sewers, and water mains, producing no revenue to any one, then the city that has no plan to secure closer development and prevent wasteful scattering of buildings is to blame.

Transportation, which affects both the facilities needed to develop industries and those need to convey workers to and from their places of employment, can be conveniently arranged in the well-planned city. where wide streets are provided and height of buildings is controlled so as to avoid congestion. Enormous expense has been incurred in getting rid of evils that should never have been allowed to develop. These are chiefly caused by haphazard building and bad subdivision of land, coupled with the lack of planning the street railway system on any definite principle as a community service.

The cost of land for industrial or residential purposes is often excessive, and this high cost is aggravated by the system of assessment of land for which the city is responsible. Land values are excessive when they do not permit of stable conditions of investment in the land the improvements placed upon it. A bad feature is that land is not planned so as to give adequate facilities for industries. Valuable land, suitable for industrial location, is occupied by buildings that have no need for frontage on railways, canals and main highways. Those who wish to establish industries in the city or suburbs have often to purchase land that has been sub-divided in small lots and sold to numerous purchasers, some of them perhaps in remote parts of the world. The person proposing to start an industry has to be put to great inconvenience in acquiring such lots, and this may cause him to give up the idea of coming near or into the city. In some cases, he may have to scrap valuable pavements and other public services which are constructed to suit a kind of development entirely different from that which the industry requires.

Town planning can accomplish much in the way of improving the older parts of existing cities, by the regulation of building heights, densities and character of use of land and buildings. Perhaps the bigger problem however, and certainly in many respects the more urgent one, is the planning of areas, in course of development or undeveloped, in the suburbs around the city. Among the fallacies that sometimes are regarded as truisms by business men, and that have prevented them from condemning the existing conditions —notwithstanding that they recognize the evil results which accrue from these conditions—is the theory that land speculation is harmless in any of the forms now practised and the high buildings are an indication of enterprise rightly directed.

#### Profits for Real Estate Operators.

The operations of one of the large real estate firms in Toronto, who dealt in suburban property, show that this aspect of the system does not really yield large profits to the real estate interests. Some of the mortgage companies have taken over property which was acquired some years ago, and in one case quoted by "Saturday Night," of Toronto, the arrears of interest alone, standing against the mortgage on a farm, amounts to as much as the capital stock put in by the purchasers. The Lawrence Park Estates, Limited, was bought for \$500,000; \$100,000 of stocks was sold to acquire it, and \$400,000 assumed as mortgage. The arrears now amount to \$100,000 or equivalent, as stated, to the capital invested by the purchasing company. It is not too much to say that Toronto has enough untouched land for the erection of houses without using the land in question, and "Saturday Night" says there is very little chance of the shareholders recovering their money. One might add that it is even doubtful if the mortgagors will recover theirs. It may be argued that this is the kind of thing that must happen in a

## ELEMENTS OF SUCCESS IN CITY DEVELOPMENT. (Continued).

state of freedom of carrying on business operations, also, that this freedom is essential under the present system of society. This might be so if the dealings were with almost anything other than land. In the case of land, the city, by its huge expenditures, provides the services necessary to give the main part of the value to the land, and it should be protected from "wild-cat" schemes that involve increased civic liability and are at the same time unprofitable to the promoters. The trouble, in such cases, is therefore not that people are making a great deal of money out of the land speculation but that they are not making money and are doing serious public injury.

#### Assessment and Taxation.

The extent to which the finance of the city and its problems of land development or town planning overlap is not usually appreciated. Indeed, the average man thinks of town planning in terms of increasing expenditures on fanciful improvements instead of in terms of regulation of the growth of the city in the interests of economy. Toronto is not the most appreciative city in respect of town planning - and never has had any town planning policy in the proper sense. Yet the most urgent financial problems of Toronto are due to want of town planning. According to official pronouncements, one-quarter of the entire debt of the city has been caused by carrying out local improvement works, which constitute the city's share in developing land it has failed to plan on economical lines. Industries are moving out of Toronto for want of room for expansion, and the city is powerless to annex the new urban areas being created round its fringes because neglect of planning these areas has resulted in unsound forms of development. If these areas were economically planned and built it would be profitable for Toronto to annex them. The contrary is the case. In the Toronto "Evening Telegram" for November 18, 1920, one of long experience in civic administration is quoted that, if it was not for past annexations, Toronto would be in the most unique financial position of any city on the continent. It is stated that, when North Toronto was annexed, R. C. Harris, Works Commissioner, estimated that it would take \$5,000,000 to provide a sewerage system. Some 5,000 people had been allowed to locate in the district without any proper scheme of development including sewerage facilities, and had been allowed to spread themselves over the land on the average density of two to the acre without regard to questions of drainage or other local improvements. Hence the prohibitive cost of providing these improvements. What is bad for these outside districts is bad for Toronto. To refuse to annex them solves no problem and merely postpones the evil day for Toronto taxpayers. Meanwhile some central parts of Toronto are almost stationary in growth, and rapid development is taking place on the same haphazard lines that have led to the present impasse in the outer suburbs.

The planning of the outside municipalities is a provincial responsibility, and Toronto is powerless to deal with this situation till it gets adequate town planning powers. In this connection regional planning is needed as much as town planning.

Another form of injury to the big city is the tendency of smaller municipalities to bonus industries. This is an immoral proceeding which should be stopped by provincial law. A gift is made to a particular industry at the expense of the other industries and the homes; this is neither good finance nor elementary justice.

Methods of assessing land should have regard to benefits received by the owners of land and to ability to pay out of the revenues derived from the proper use of land. Abuse of the land by congestion of buildings, or non-use by monopolists,

#### CITY TREES A COMMUNITY ASSET. By BOLTON HALL.

Some European cities and citizens know the cash value of beauty. Without its trees, Paris would not be Paris; and that charm is transferable to any city that wants it enough to pay for it. Be decent to nature and she will do the rest. Any city can have trees wherever the sidewalk is wide enough to hold them.

Paris spends little money and gets a lot of trees. There are roughly 100,000, most of them big trees, in the streets and public squares, not including the two forests, the Bois de Boulogne and the Bois de Vincennes, outside the city walls. It costs Paris about \$60,000 a year to keep them. Sixty thousand dollars is not a large item in a great city's budget, and Paris gets the money back many times from travelers who would not come to see a naked city.

Old trees are taken away and new ones planted at the rate of about 2,000 every twelve months. The street men take care of them just as they wash the gutters. The street trees of Paris have plenty of room around the roots. A steel grating in sections gives water and fertilizer a chance to get at them, and at the same time makes a perfect surface for pedestrians. A man with a hose turns his stream into the grating, fills up the depression under it with water, and goes on to the next tree. Once a year a gang comes along with fertilizer. The men lift the grating, rake out the caked earth of the surface, replace it with rich, nourishing material, put back the grating, and are gone. The trees grow well up toward the fifth-story windows; Paris and the world gain by the money they cost.—Exchange.

#### **RESEARCH CONFERENCE.**

The June meeting of the Governmental Research Conference of the United States and Canada will be held this year in Philadelphia, June 2, 3 and 4.

The secretary of the Conference is Dr. L. D. Upson, 542 Griswold Street, Detroit, Michigan.

should be prevented. The present assessment methods encourage rather than retard land speculation. The speculator usually does not own the land long enough to find himself liable for taxes. He passes on the liability to the purchaser for use when he can. Many never have more than a nominal equity in the land. Referring to this matter, Mr. F. W. G. Fitzgerald, Managing Director of the Canadian Mortgage Investment Company, says: "The principal activity of lawyers in the western provinces, during the past six years, I imagine to have been the ascertaining who the ultimately responsible owners of properties actually were and are, out of the vast web of purchasers, transferees, mortgagors and debtors of every size and kind who, in the western country, appear to have fed on one another for a few excited years." At the same time, the properties whose values have been eaten up in these legal tangles and in taxes are being taken over by the cities by tax sale. These lands have no value in the form of liquid assets to help the cities to meet their bills and their financial difficulties are increasing. The burden of all this sad failure in government will gradually revert to the owner of revenue-producing property, that is, to the industries and homes of the people.

It will be no solution of the problem of excessive taxation of real property, where it exists, to transfer the burden to income and personal property. There may be cases where equity demands that this should be done, but the solution is to be found by planning the city so that scattered and wasteful development will be avoided, and the cost of government reduced.

## "CITIES DO NOT HAPPEN-CO-OPERATION BUILDS THEM"

By WALTER PARCELLE.

Efforts of the Merchants' Association of Montreal to expand its membership and strengthen its resources have directed attention again to a "growth of an idea" which is now exercising some influence at least clear across the Dominion, from St. John, N.B., to Victoria, B.C. The "idea" is that of uniting communities to perform the function which has been described as "teaching the public to think, and then transforming that thought into action."

The associations of citizens which are putting the "idea" at work are called by various names. The most general name is Chamber of Commerce, that having found favor in most of the communities which have adopted the "idea." That is to say, the former Boards of Trade have become Chambers of Commerce.

Historically, the "idea" has had an interesting development in the Dominion. In 1913 the citizens of St. John began to think collectively for the promotion of the common welfare, though the form of organization fell far short of that which has been the outgrowth of more actual experience and the result of many more or less costly experiments. Five years elapsed before another Canadian community caught the vision. In October, 1918, London, Ont., reorganized its Board of Trade into a Chamber of Commerce, and since that time eighteen other municipalities in Canada have followed the example.

The full list follows: Belleville, Ont.; Brantford, Ont.; Chatham, Ont.; Goderich, Ont.; Guelph, Ont.; Hamilton, Ont.; Kitchener, Ont.; London, Ont.; Medicine Hat, Alta.; Regina, Sask.; St. Catherines, Ont.; St. John, N.B.; Sarnia, Ont.; Saskatoon, Sask.; Stratford, Ont.; Three Rivers, Que.; Toronto, Ont.; Victoria, B.C.; Winnipeg, Man.

The basis of the "idea" on which the new community associations are being formed is variously expressed, for as no iwo persons are alike, no two communities present the same problems for public solution. But after all, the basic principle is the same everywhere, and the definition of the kind of an organization which the Merchants' Association of Montreal is building will give a clear conception of all of them. Primarily, it is a vision of the immediate future. "Montreal in 1826; it is a challenge," says one of the formal announcements of the undertaking. "To-day Montreal is the largest financial, trade, shipping and population centre in Canada. As such, it commands the attention of the world. Five years from to-day, what will it be?

"In other cities, business and professional men are uniting for their common welfare. They are listing the assets and liabilities (human and social, as well as financial) of the community where they live and do business. They are applying to the growth of their city those great principles of friendly co-operation, unselfish service, same optimism, and intelligent advancement, which have been demonstrated time and again.

"Montreal is great only in relation to other cities. Her future growth and prosperity depend almost entirely on what her business and professional men do to promote her best interests by a united effort.

"Every man in Montreal must be made to feel that he has something to contribute to his city and that his own business welfare will be at stake if he does not make the contribution gladly.

"It is a truth but vaguely realized that 'good' business is dependent on something besides price, advertising and salesmanship. The real thing is 'market' and it is to develop and maintain the market that collective effort is necessary. 'Business' is only the job of supplying human wants. Distrust, selfishness, knocking, dishonesty, and pes-

simism never made a dollar. On the other hand, the creation of a city-wide spirit of optimism, co-operation, faith, and a willingness to work for a city will bring returns without measure.

"Good business demands of every man that he subscribe to these principles and enlist in this work.

"Montreal has need for an organization of business men which can crystallize this thought of a better, as well as a greater, city; an organization that will get the things done that every business man knows to be necessary—an organization with personal service as its motto."

Those who have analyzed the plan of organization and operation of the new community associations are unanimous in their feeling that in Canada there is a peculiar need for them; at least, there is opportunity for them such as does not exist elsewhere. The comparative isolation of most Canadian communities, due to distances and as yet unsettled areas, makes peculiarly necessary the organization of the citizens into associations which have the common welfare for their chief programs. There are not the inter-dependence and inter-relationships which exist where one city closely adjoins another, where, as in New England, the traveler in a day's journey hardly knows when he has left one municipality and entered another; where one community may be spurred to action because another has done something worth while.

Undoubtedly, as undefined realization of this isolation has been the animating feeling which has induced the rapid growth in the past three years of the community association idea in Canada.

The fact that in practically every Canadian community, with the exception of Toronto and Montreal, the existing Board of Trade was made the basis of the new association, is significant. (In Toronto, the new organization is the successor of a so-called street association and is now called the Down Town Association; in Montreal the Merchants' Association expansion has already led to the definite suggestion of a change of name to one more inclusive of all business and professional men.)

Avoidance of duplication of effort is one of the prime objects of the new associations. The Boards of Trade in all cases were long established and, within their limitations, had records of some achievement. They made good "starting points." It was necessary only to enlarge the vision of the members, to commit them to programs of community advancement and then to bring into them large numbers of the citizens, to make them smooth working and effective for their new aims.

Though figures are uninteresting, they are important in showing just how the citizens of Canadian communities approve of the community association idea. Sarnia's Board of Trade literally jumped from a membership of 150 and an income of \$1,500 a year, to 529 members and an income of nearly \$14,000. Victoria now has nearly 800 citizens thinking and working unitedly for the city's advancement where formerly less than 300 business men were keeping alive a Board of Trade. Winnipeg is spending nearly \$50,000 a year for the good of the citizens generally. London's (Ont.) 700 Chamber of Commerce members are credited by the people with having done more for the community in a couple of years than had been done in the previous couple of decades or would have been done in the next 20 years.

The "secret" of these new organizations is merely the application of an age-old principle: "Cities do not happen; co-operation builds them."

The foundation of the community associations—for the most part of Commerce—which are springing up all over Canada is this:

#### May, 1921,

### REPORT OF THE EXECUTIVE OF THE UNION OF MUNICIPALITIES OF THE PROVINCE OF QUEBEC

The Union of Municipalities of the Province was formed on December 16, 1919, at a convention held in the City Hall, Montreal, at which about 600 delegates representing approximately 400 rural and urban municipalities attended. With such a splendid inauguration much was expected from the Union and we venture to say that expectation has been realized in the municipal reforms brought about since by and through the propaganda started and kept up by the executive.

CO-OPERATION .- At the last convention held in September, 1920, in Montreal, certain important resolutions affecting municipal administration in the province were passed. All these resolutions were taken care of by the executive who, through a special sub-committee of three, saw to it that they were placed before the provincial government, who in turn promised that proper consideration would be given to each resolution. It should be said here that from the first there has been the closest sympathy and co-operation between the Department of Municipal Affairs and the Union, the effect of which is that there is a growing understanding of the needs of the municipalities by the department itself and a better appreciation of its work and difficulties by municipal officials and executives. For making this possible the thanks of the Union are due to the Minister for Municipal Affairs (the Hon. Walter Mitchell) and the Deputy Minister (Mr. Oscar Morin.)

CONVENTIONS .- Since the formation of the Union three conventions have been held-the two Montreal meetings mentioned above and a district meeting held in Plessisville last summer.

PUBLICITY .- To enable the municipal councils of the Province to keep in touch with the best ideas and latest information regarding municipal administration the executive made arrangements with the publishers of "Le Québec Municipal" to send copies of this journal to every municipal council, through the local secretary-treasurer. During the last year over 1,000 personal letters and 10,000 circulars have been sent out to the councils by the Secretary of the Union.

EXPERT ADVICE .- In keeping with the purpose of the Union special advisory committees of experts and authorities on different phases of municipal government were selected and appointed to give free advice to member municipalities. These committees have given splendid service, particularly the legal committee which has given advice in over 100 cases. As time goes on the value of these committees will be more fully appreciated by the members.

CHARTER .- Arrangments have been made to secure a special charter for the Union. This will be ready very shortly.

SPECIAL SUB-COMMITTEE.-At the last meeting of the Executive of the Union it was decided to facilitate the business of the Union by appointing the officers as a subcommittee. This committee has met almost every week, sometimes twice a week, to study many questions affecting the welfare of the members and the union itself. Up to the present all the officers have given their services free.

#### "CITIES DO NOT HAPPEN."-(Continued).

"A city must think progress, must be guided by its optimists, must value constructive men more than destructive ones, must have a clear idea of the demands and possibilities of future city and national growth, and must have the courage to live up to its ideals."

FINANCES.-The treasurer's report shows that 185 municipal councils have joined the union. This is an excellent showing for a young association but to do really effective work the Union should have a membership of 600, which would be about 50 per cent. of the total municipalities in the province.

NEW PROPAGANDA.-As a means of securing a larger interest and increased membership in the Union it is proposed to make the next annual convention, which will probably be held in September in the City of Quebec, the best of its kind in Canada. In addition to the special attractions which the hospitable citizens of the capital know well how to provide the best authorities on municipal administration will attend the sessions to give the benefit of their advice to the delegates. In addition to the annual convention it is suggested that sub-conventions be held from time to time, along the same lines as the one held in Plessisville. It is proposed that St. Hyacinthe be the place for the next district convention.

CONCLUSION .- Though only eighteen months old the Quebec Union has much to be proud of. As a municipal Union it has achieved a position second to none in Canada. Its resolutions have been treated with respect by the provincial and other authorities. Its policy of giving actual and free service to its members has proved a boon to many councils who would otherwise have suffered considerable inconvenience and unnecessary expense. Its insistence on municipal officials keeping their finances and accounts in good order has done much to raise the financial standing of the different municipalities. Its co-operative efforts have brought together many aldermen and officials who have learned from each other.

In Union there is strength. A single municipality may be weak in its own protection but many municipalities joined together become strong enough to successfully defend their rights. This has been proved more than once by the Quebec Union.

JOSEPH BEAUBIEN, ROSAIRE BRIEUR,

President.

Secretary.

A PERFECT CONCRETE STREET.



149

### SOME THOUGHTS ON RURAL MUNICIPAL GOVERNMENT IN SASKATCHEWAN

(J. J. SMITH, Deputy Minister of Municipal Affairs.)

DeTocqueville says in his great work, "Democracy in America," that municipal institutions constitute the strength of free nations. They are to liberty what primary schools are to science; they bring it within the people's reach; they teach men how to use and enjoy it. A nation, he says, may establish a system of free government, but without municipal institutions it cannot have the spirit of liberty. Our municipal institutions owe their origin to our Anglo-Saxon forefathers whose folk moot has become the organized municipality of to-day. In the folk moot the citizens governed directly. In the municipality of to-day the citizen governs through elected representatives. The responsibility which was formerly borne by the whole community has been in a measure delegated to chosen representatives who form the governing bodies of our municipalities. The primary function of the municipality is the service of the members of the community. In order that the municipality may discharge its functions efficiently, it must have revenue. To use the words of Alexander Hamilton, the great American lawyer and statesman, uttered over a century ago, "Money is with propriety considered the vital principle of the body politic as that which sustains its life and motion and enable it to perform its most essential functions." Outside of certain government grants, the only money available for public expenditure in a municipality is that derived from taxes. A tax is an impost by the state or municipality and has been defined as "a payment by the individual citizen to the organized community for services rendered to him by it." The municipality can only give to the citizen in service, whether it be roads, schools, telephones or hospitals, what it has first taken from him in the form of taxes. If the ratepayer would have the benefit of the many services which the municipality is expected to give, he must be prepared to contribute his fair and just share of the cost of these services in taxes. Too many ratepayers fail to realize their obligations to the municipality in the matter of the payment of taxes and look to the council to obtain the necessary funds for municipal undertakings from sources outside themselves.

#### Increasing Interest Payments.

The Rural Municipality Act of Saskatchewan empowers the council to borrow upon the credit of the taxes for current expenses. The council of practically every municipality borrows considerable sums of money pending the collection of the taxes. As a result large sums of money are annually paid out in interest to the chartered banks by the municipalities of the province. In the year 1919 the interest paid by the rural municipalities of Saskatchewan on current municipal loans amounted to \$190,688.00, while in 1920 the interest payments aggregated \$242,929.00. These figures do not include payments of interest on seed grain and relief loans. These interest charges constitute a very considerable annual drain upon the municipalities of the province, and the amounts are, in my opinion, sufficiently large to warrant our looking about for some means of reducing them.

There are three measures which might be adopted by the municipality in an endeavor to bring about a reduction in the amount of interest paid on municipal loans. These are:

1. Economy and retrenchment in municipal expenditure;

- 2. Enforcement of the prompt payment of taxes;
- 3. Creation of a surplus in the municipal treasury.

1. In times like these, when general conditions are un-

satisfactory and collection of taxes is difficult, the expenditure of the municipality should be reduced to a minimum. In no case should the council embark upon a policy of heavy expenditure unless the municipal finances are in a perfectly sound and healthy condition. The borrowing of money upon the credit of taxes which may not be collected for years, and expending this money in road improvements and other public works, should not be countenanced. If the ratepayers are unable or unwilling to pay their taxes, they cannot reasonably expect the municipality to expend money for their benefit. As already stated, the municipality can only give to the ratepayer what it has already taken from him in taxes. If the municipality borrows from the bank, it pledges the taxes levied against the ratepayer, and this, in my opinion should only be done where the expenditure is fully justified and where there is every prospect that the taxes will be promptly paid. The practice followed in some municipalities of "working out" the taxes on the roads cannot be too strongly condemned. The old system of statute labor in vogue in the North-West Territories was discarded in 1903 and should not be allowed to reappear in any form. All taxes should be paid in cash, and all work performed for the municipality should be paid for in the same medium of exchange. Where a municipality borrows on the credit of the taxes the council breaks faith with the lender if it allows any portion of the taxes to be "worked out" on the roads. Taxes pledged as security for a municipal loan are the property of the lender and the council is not free to devote the taxes to any other purpose than the repayment of the said loan until the full amount of the loan is satisfied. If this practice is persisted in, it will inevitably destroy the very foundations of municipal credit.

2. The second measure which I would recommend is the enforcement of the prompt payment of taxes. No doubt the abnormal conditions which have prevailed in certain portions of the province during the past few years have given rise to a very considerable accumulation of unpaid taxes. I cannot but think, however, that many ratepayers who are financially able to pay their indebtedness to the municipality allow their taxes to remain unpaid until their lands are offered for sale under The Arrears of Taxes Act. This is decidedly unfair to the municipality in whose welfare every ratepayer should have a deep and abiding interest. I have made some inquiry as to the reason for this delinquency and have been informed that the penalty of eight per cent. which becomes attached to unpaid taxes immediately after the end of the year is too low in view of the high rate of interest being charged by the banks for short term loans. Many ratepayers, it is claimed, regard it as poor business to pay their taxes when the banks are charging a higher rate of interest than they are required to pay to the municipality. I am also informed that the provision in the law protecting the registered owner of land from distraint of his goods and chattels for taxes is being deliberately abused by taxpayers who are registered owners of land. I have in mind a certain municipality in the eastern portion of the province where forty per cent. of the 1920 taxes are in arrears largely because of the failure of registered owners of land in the said municipality to pay their taxes when they fell due. I am convinced that considerably more drastic measures will have to be taken by municipalities to recover their taxes than have been taken for some years past if the municipalities of the province are to continue to do satisfactory work.

3. My third suggestion is that every municipality should endeavor to create a surplus of municipal funds sufficient to

<sup>\*</sup> From an address of J. J. Smith, Deputy Minister of Municipal Affairs, at the Convention of the Saskatchewan Association of Rural Municipalities.

#### RURAL MUNICIPAL GOVERNMENT.-(Continued).

enable the council to meet the necessary current expenditure of the first few months of the year without borrowing from the bank. I am strongly opposed to the creation of large and unnecessary surpluses by municipalities. Every municipality should aim, however, to place its finances in such a position that it will be unnecessary for the council to pay out large sums in interest on money borrowed for current needs. This can easily be done by the creation of a reasonable surplus in the municipal treasury.

I am sure if these measures are adopted that the financial condition of our municipalities will soon improve and the difficulties which are being encountered this year by many councils in securing the necessary funds for schools and general municipal purposes will ere long be matters of history.

#### Bonding Secretary-Treasurers.

Some time ago the Municipal Department was asked to prescribe a uniform bond for use in bonding municipal secretary-treasurers. This matter has been given very careful consideration by the department and during the past year a uniform bond was drafted and prescribed for use by all fidelity bond companies in the bonding of secretary-treasurers of rural municipalities. Rural Municipality Act was amended to provide that the bond shall be in such form as may be prescribed by the minister and that no bond in any other form shall be accepted. Copies of the new form of bond have been sent to all fidelity bond companies doing business in the province and to the reeves and secretary treasurers of all rural municipalities. A copy of every such bond is required to be forwarded to the department where it will be carefully examined to see that it is in the form prescribed.

#### Qualifications fo Auditors.

The provisions of the law relating to auditors have been amended with a view to setting out more clearly the duties of these important officers. It is also provided that where the auditor appointed by the council does not possess the necessary qualifications, or has not discharged his duties in a satisfactory manner, the Minister may require the council to appoint another person, company or firm as auditor of the municipality. The Act has also been amended to provide that the interim statement for the ten months ending October 31 of the year shall be prepared by the secretary-treasurer of the municipality instead of as formerly by the auditor. This alteration meets the request contained in a resolution passed by the Saskatchewan Rural Association last year.

#### Equalization of Assessment.

The question fo the equalization of assessments for the purposes of provincial taxation, as between urban and rural municipalities of the province, has already received some attention at this convention. As already announced, the Government intends to appoint a Commission to enquire into the whole matter. It would be quite out of place for me to express any opinion respecting this problem of equalization in view of the expressed intention of the Government. No doubt the Commission, when appointed, will give the matter very careful consideration and will make such recommendations as will enable the Legislature to enact legislation that will deal with it satisfactorily. I should like to say a word, however, regarding the assessment of the individual municipality. During the past three years, inspectors attached to the Wild Lands Branch of the Department have made a very careful inquiry into the assessment of each municipality in the province. According to the reports of these inspectors, a very large percentage of the municipalities are inequitably assessed, and re-assessment on a proper and equitable basis is strongly recommended. Some one has said that " a just and equitable distribution of the burden of taxation is a fundamental principle of popular government."

This principle applies quite as forcibly in the matter of municipal taxation as it does in the matter of provincial and federal taxation, and no council discharges its full duty which allows an unfair and inequitable assessment to prevail in the municipality. The time has arrived when we should have a more satisfactory basis of value in the assessment of land. Under the law as it at present stands, land is required to be assessed at its fair actual value exclusive of any increase of such value caused by the erection of buildings thereon or by any other expenditure of labor or capital. The basis of assessment may have been quite satisfactory in earlier days in the province, but we all know that it is impossible now for any person to determine the value of land apart from the expenditure of labor or capital thereon. In the older provinces of Canada, and in most of the states of the American Union, property, both real and personal, is assessed at its full and true value. In the States of Wisconsin, Minnesota, Kansas and Michigan, "true and full value" is defined by statute to mean the usual selling price at the place where the property to which the term is applied shall be at the time of assessment, being the price which could be obtained therefor at private sale and not at a forced or auction sale. The Wyoming State Board of Equalization quotes the United States Supreme Court as saying: "It is a cardinal principle that should never be forgotten that whatever property is worth for sale it is worth for the purpose of taxation."

In discussing new legislation let us not overlook the importance of honest and efficient administration. To use the words of Clinton Rogers Woodruff, Hon. Secretary of the National Municipal League of America, we cannot expect good and efficient government to follow from the mere pressure of law. Reform, in the minds of many, lies in the enactment of their fads into law and imposing them upon the whole community. The wise leader, however, seeks first to arouse the people to a sense of the importance of municipal government as a factor in their lives and of their personal responsibility for it; then to provide proper tools for its expression. No form of government, however excellent, can of itself give a good municipal administration. That must always depend largely on the type of men who fill the places of responsibility. What we require in our municipalities is a deeper sense of civic patriotism. Our reeves and councillors may be thoroughly conscientious and painstaking in the discharge of their duties and responsibilities, but unless they have the loyal and enthusiastic support of the electors they cannot accomplish the best results. We are passing through the readjustment period following the Great War and we require men of sound judgment and unwavering purpose to pilot our municipal institutions safely through the reefs and shoals of a troubled financial sea.

#### CAUSES OF FAILURE IN PRAIRIE TREE-PLANTING.

It is safe to say that at least ninety per cent. of the failures in tree-planting on the prairies are due to the fact that the importance of one or of all of three points has been overlooked. The three points are these:—

1. The soil must be most thoroughly prepared before planting;

2. Only such species of trees should be used as are known to be hardy in the district and suited to grow in the particular kind of soil and in the situation where it is desired to plant them;

3. A certain amount of cultivation of the soil after planting is absolutely necessary. This cultivation must be carried on until the trees are well established and able to grow without further care. — Norman M. Ross, Dominion Forestry Branch Nursery Station, Indian Head, Sask.

#### ROAD BUILDING PROSPECTS IN U.S.

At the second annual Convention of the Asphalt Association, held in New York, April 13, President Draney predicted that, unless reactionary pessimism grips the United States, 700,000 men will be needed in the building of the 35,000 miles of new highways contemplated this year under the billion dollar road programme outlined by the Federal Government and the states and counties. Three hundred thousand more men, he said, will be needed in the quarries, gravel-pits, cement, brick and asphalt plants and factories devoted to the manufacture of road machinery. The road building boom, he thought, will work great benefit to the railroads by bringing into service one hundred thousand idle freight cars to transport one hundred million tons of road materials.

"To get a great army of one million men, now for the most part unemployed," said President Draney, "at building highways is to solve in part not only the acute unemployment problem facing the nation but also part of the rail troubles. Furthermore, money in plentiful quantities would be released for local circulation through wages to local labor and in payments to local producers of stone, gravel, sand and other materials, thus easing the pressure brought about by the reductions in the price and demand for agricultural products. Stimulation in the production of trucks, machinery and raw materials and in engineering and the employment of labor can positively be accomplished with an untramelled road building programme. At the same time we would be reducing the dangers to travel by abolishing railroad grade crossings, more adequately bridging rivers and smaller streams, putting the outlying districts closer to medical and hospital aid and would bring the farmer and his market in closer touch."

Taking the stand that efficient engineering and executive management are essential to the improvement of the nation's highways; that highway expenditure should be proportioned to traffic importance; that advantage should be taken of every opportunity to benefit by the road building experience of other nations; that the unemployed of the nation should receive employment as quickly and extensively as possible, and that a vigorous public works programme will offset industrial depression, the association adopted resolutions as follows:

1. Urging Congress to pass the Federal aid appropriation of \$100,000,000, thus assuring a continuance of road building under the supervision of skilled state and federal engineers.

2. Urging that highway management be divorced from politics and all materials and methods entering into highway construction be placed in open competition.

3. Declaring that every highway be required to show traf-fic justification for its construction, thus guarding against waste and extravagance.

4. Memorializing Congress to authorize the United States to join the Permanent International Association of Road Congresses made up of the highway departments of all nations.

5. Urging the Interstate Commerce Commission to authorize a reduction in freight rates for road materials, thus stimulating the road building programme.

6. Recommending that public officials carry forward road building programmes to the extent permitted by appropriations available, thus giving employment to many hundred thousand men now out of work and utilizing tens of thousands of idle open top freight cars."

#### DRAINAGE AND HOUSING SCHEMES.

It is interesting to note that in some of our housing schemes concrete apparently has to be laid under certain pipes, but not under others, owing presumably to the greater strength possessed by reinforced concrete pipes as distinguished from those which are not so strongly reinforced. In the advice given in the report of the committee appointed by the Local Government Board to consider questions of building construction it was pointed out that economies could be effected by the use of standardized concrete manholes which could be made at centres in parts and put together on the site. It was stated that they could be suitably reinforced and jointed so as to form strong and watertight manholes. This advice has been followed with very satisfactory results. and seems to have led to the increased use of concrete pipes. The high price of stoneware pipes, of cast-iron pipes, and of brick sewers has certainly tended to increase the importance of the concrete pipe. We have the choice of several pipes. Some have the defect that the joints cannot be made watertight-they cannot be used for watertight sewers. Others can only be so used if they are grouted in after they are made; these joints are not good. The question of the strength of the pipe, especially where the pipe is made in long lengths, becomes very important when the cost of concrete required for foundations or for lateral support is considered. If a pipe is strong enough to support itself over a span of, say, 9 ft., as in the case of a cast-iron pipe, and if the joints are of such a character that they will withstand the strains set up by a slight settlement, it is clear that the amount of concrete required to support them will under favorable conditions become a very small matter; but where the joints are of doubtful character or where the pipes are not strong enough to withstand the strains of slight settlement, it is clear that there will be much additional labor expended and material used in grouting round the joints and in putting in concrete. From a casual inspection of work on housing schemes, it certainly does appear that a great deal of concrete and grouting is done which might be avoided if the pipes and joints were of different character. It is even possible to see concrete pipes which had been grouted in and which had been supported on mass concrete, and concrete pipes in other trenches which have simply been laid and jointed without any grouting or concreting, and which appear to be equally satisfactory or more so. One draws the obvious inference that one pipe is very much better than the other. Possibly it may be much more expensive, but even so it is difficult to believe that the final result is not better and cheaper in the case of the pipe that has the greater strength and the better joint. Drainage engineers will do well to take into cacount the manner in which concrete and reinforced concrete are taking the place of the older materials.

#### CITY ZONING IN U.S.

The State Legislature of Minnesota has just passed an Enabling Act, making it possible for the cities of Duluth, Minneapolis and St. Paul to do Zoning under police supervision. In the city of St. Paul a Zoning Survey is now under way which will be submitted to the Council this fall. The survey is being carried on by the local Engineering Office of the Saint Paul City Planning Board. Messrs. Bennett & Parsons, city planners, have been retained as consultants in the preparation of the ordinance.

### THE HOUSING PROBLEM IN GERMANY SINCE THE END OF THE WAR

appeared in the organ of the Garden Cities and Town Planning Association of England, our readers have an opportunity of getting first hand knowledge of the housing situation in Germany and the efforts being made to meet it.

The situation with regard to housing at the end of the war is illustrated by the following facts:

1. There was a deficiency of more than a million dwellings.

2. There was a great deficiency of craftsmen and laborers in the building trade, as during the last three years of the war all buildings, except for war purposes, was forbidden, and the men had entered new occupations; at the close of the war, as the building trade did not offer more chances, they preferred to remain in their new positions.

3. There was an enormous shortage of building material and a great rise in prices and wages.

To encourage building at the beginning of 1919 considerable, but-as was seen afterwards-quite insufficient credits were granted by the "Nationalversammlung." The Government supposed that a general rise in rents of about 30 per cent. over pre-war rents would take place and that the costs of building would come to M.65 the cubic metre as against M.15 in peace time. The difference between these two figures, less the 30 per cent. advance in rents capitalized, was offered as a free gift to builders, subject to certain restrictions, preventing speculation and limiting the grant to small buildings and houses with gardens. This grant was available to private persons and societies of public utility, but not to manufacturers, who were thought to be able to provide for their working people without Government support. The maximum grant was to amount to M.18,000.

It was soon seen, however, that in consequence of the perpetual rise of building material and wages the grant was quite insufficient. It was based on the assumption that building costs were five times greater than before the war. In reality they became ten times higher. No private builders or societies of public utility with experience built at all. Only newly formed societies and private persons without experience started building, with the result that all would have come to bankruptcy if the Government had not increased the grant in proportion to the increased cost of building, making the average grant throughout Germany about M.40,000 for each house or lodging. And even then the rents of these houses had to be 100 per cent. more than pre-war rents. The time of building a house was extremely long for lack of building material and craftsmen. Building work could often not proceed for months, owing to delay in getting cement or timber, for example, or because not enough carpenters could be got. About 50,000 houses have been built from the spring of 1919 till the summer of 1920-that is as good as nothing in face of a deficiency of a million.

For the year 1920, new Government grants were fixed under somewhat changed regulations. The grant is no longer based on the cubic content of the house but on the floor area, and is given only in respect of dwellings containing at most seventy square metres floor space, excepting staircase and passage. The maximum grant for the house or dwelling coming under these regulations is M.16,500, whilst the building costs are about M.80,000: This means that nobody-especially after the bad experiences of the past year-can build. These regulations seem to be the consequence of shortage of funds and of hopelessness in face of the general economic situation. Only in some towns (for example, Cologne), where the muni-

In the following article by Bernhard Kampfemeyer, which cipality has granted considerable credits for this purposeincreasing the amount per square metre of floor space to M.900 instead of M.240, and for the house to M.63,000 instead of M.16,500-building operations can be expected. Here this is done in expectation of a new start of economic development resulting from special circumstances. But in Germany as a whole the situation is quite hopeless.

> The effect of this state of things is general want of employment in the building trade. On July 1st, great demonstrations were organized throughout Germany by the building trade unions, by co-operative building societies, societies of public utility and tenants, to demand from the Government and municipalities more effective support for building, the socialization of cement and lime industries, and of large building enterprises.

> Only in the mining districts can building operations be expected in the next few years. Here it is proposed to build within six years 500,000 houses and to settle a corresponding number of miners' families. This measure is needed to meet the demands of the Entente for coal and by the economic life of Germany itself. The cost of this housing work will amount to five milliards of marks.

> There may and must be also building to a large extent in the country for the interest of a more intensive cultivation of the soil, as we cannot afford to buy food abroad. But for lack of building material and other circumstances it is to be feared that this work will not go on so quickly as it is required.

> In addition to the difficulties of building there is the "unrest of labor," which is much greater in Germany than elsewhere and will require years to remedy. Those industries which have good prospects will remain in the towns and will prefer to work, if needed, in premises formerly used for war purposes or of ruined industries instead of investing the tenfold capital in new premises, and of leaving the town. Without decentralization of industry there can be no garden city movement.



DR. PAGE, Medical Inspector of Immigration, City of Quebec.

### CANADIAN MUNICIPAL JOURNAL TRADE DEPARTMENT

To Municipal Executives, Secretary-Treasurers and Engineers:

We are about to organize a TRADE DEPARTMENT in connection with the Canadian Municipal Journal; the idea being to briefly explain with illustrations, those commodities in the Journal's columns that are applicable to and used in municipal construction, public works and municipal offices. The commodities will cover a wide range, from an electric light standard to a street sweeper, and

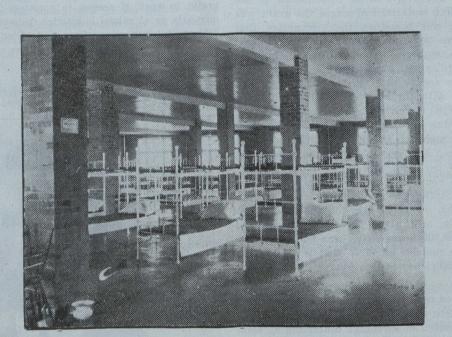
will include:-

Architectural Supplies. Artificial Stones. Automatic Telephones. Batteries. Belting. Boilers. Bond Papers. Bridges. Cables. Cast Iron Pipe. Concrete Steel. Concrete Mixers. Cement Supplies. Concrete Reinforcements. Culverts. Dust Preventatives. Electric Supplies. Electric Motors. Electric Wires. Engineering Supplies. Engraved Bonds. Fire Alarms. Fire Alarm Supplies. Fire Alarm Supplies. Fire Engines. Gas Engines. Gas House Supplies. Jail Cells. Playground Apparatus. Lighting Apparatus. Lithograph Work. Meters. Office Supplies. Office Apparatus. Ornamental Iron Work. Numbers for Streets. Pavements. Police Supplies. Road Machinery. Road Preservatives. Road Rollers. Scientific Instruments. Sewer Supplies. Steam Engines. Street Names and Numbers. Street Names and Numbers. Street Sprinklers. Safes and Vaults. Stationery. Telephones. Telephone Supplies. Vaults. Wire Apparatus.

The purpose of the new departure is not propaganda for any particular commodity or device but to bring to the attention of civic officials and executives a few of the many improvements which are specially adapted for municipal purposes.

The Trade Department will introduce itself by taking up a section of an early issue of the Journal, in which will appear illustrated talks on those things that will help in municipal construction and maintenance.

C. N. ROGERS, Secretary.



A MUNICIPAL LODGING HOUSE This photograph shows one of the dormitaries in the Meurling Institute, Montreal's free lodging house, and where the inmates can secure breakfast and supper for a few cents.

#### PUBLIC UTILITIES IN THE CITY OF EDMONTON.

Comparative Statement 1920-1921.

Showing result of First Quarter Operation of Public Utilities.

	1920.		1921.	
Surplus.	Deficit.	Surplus.	Deficit.	
Power plant \$3,468.54	·	\$22,667.00		
Pumping station . 7,244.56		3,774.39		
Telephone Dept 9,123.64		16,483.51		
Electric light24,428.19		39,212.34		
Waterworks 1,131.69		4,489.37		
Street Railway	17,377.00		12,386.00	
		-		

\$45,396.62 \$17,377.00 \$96,626.61 \$12,386.00

Net surplus or amount to be

applied as taxes against

the Public Utilities...... \$28,019.62 \$84,240.61

During the month of March all the Utilities made a profit, the following is a comparison of results with the same month last year:

	1920	
Surplus.	Deficit.	Surplus.
Electric light and power\$2,947.42	TT (	\$11,643.93
Power house	\$2,470.42	2,724.63
Pumping station		978.03
Street Railway	3,213.68	4,736.24
Telephone 2,737.92	1 24.14.14	5,130.34
Waterworks	1,509.99	538.86
\$5,984.29	\$7,194.09	\$25,752.03

 Net
 Deficit—1920.....
 \$1,209.80
 .....

 Surplus—1921.....
 \$25,752.03
 \$25,752.03

It will be noted from the above that a net deficit in the month of March last year of \$1,209.80 has been converted into a surplus for the month of March this year of \$25,752.03.

This surplus has been made after allowing for all fixed charges including interest, sinking fund and depreciation.

Comparative Statement of Tax Levies Rates 1920, 1921.

and the second	1920.	1921.
General municipal purposes	\$1,375,557	\$ 924,324
General debenture interest and sink-		
Public school board	1,112,900	1,126,006
Public school board	1,112,000	1,126,006
Separate school board	106,015	124,342
Library board	49,098	43,964
	\$3,542,394	\$2,191,967

It will be noted that the tax rate this year is 5.10 mills less than last year and that the expenditure for general purposes has been reduced by \$451,233.

C. J. YORATH,

Commissioner.

#### MUNICIPAL MILK DISTRIBUTION.

The city council of Winnipeg, Canada, recently authorized the publication of an interesting report on municipal milk supply for Winnipeg, which report recommends that "a bylaw be submitted to the ratepayers authorizing the raising of a sum of \$600,000 to establish a fully modern municipal plant for the manufacture, sale and distribution of milk and milk products."

## **Our Services At Your Disposal**

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

#### MUNICIPAL SECURITIES

## Wood Gundy & Company

HEAD OFFICE:

C. P. R. BUILDING Toronto

BRANCHES: New York Saskatoon

- Montreal London

## Service to Municipalities

THE Statistical Department of this Corporation is at all times prepared to assist Municipal officials in the preparation and sale of their debentures.

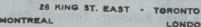
Consult us in regard to the-

- (1) Interest rates most suitable for current markets.
- (2) Form in which debentures should be issued to bring the best price.
- (3) Cost of printing bonds.

DOMINION SE

(4) Bond Market conditions.

CORPORATION-LIMITED



LONDON, ENG

Vol. XVII. No. 5.

# **Municipal Officials**

WHEN YOU .

### NEED A BOND

APPLY TO-

The Dominion of Canada Guarant e and Accident Insurance Company HEAD OFFICE:-TORONTO

## The Security of a Bond

Guaranteed by the "Dominion," A Strong Canadian Company With Large Reserve Funds is Safer, Saner and More Satisfactory in Every Way Than Trusting to the Variable Fortunes of Private Bondsmen.

#### **BRANCH OFFICES:**

MONTREAL. HALIFAX. ST. JOHN. OTTAWA. WINNIPEG. CALGARY. REGINA. VANCOUVER.

## MUNICIPAL DEBENTURES

## BOUGHT

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



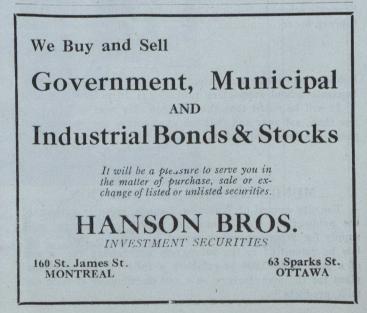


SIR HERBERT AMES,

Financial Member of League of Nations. Sir Herbert, who recently resigned from the House of Commons, is a keen student of municipal affairs, being at one time an alderman of Montreal.

#### THE THEORY OF LOANS.

The provision of the capital required for public works by means of borrowing is usually justified on the ground that this method of raising money insures an equitable distribution of the burden as between present and future ratepayers. Repayment may be made either by equal annual instalments of principal and interest combined, or by equal annual instalments of principal only, together with interest on the outstanding balance. The former method is the one usually adopted because it lightens the burden in the earlier years at the expense of the future body of ratepayers. who are often picturesquely referred to as "posterity." But it is probably not generally realized that the increased payments at the end of the loan period are always considerably in excess of the amount of the early relief, and that the amount of the difference increases with every rise in the rate of interest. It has been pointed out that the arguments that were used to justify repayment of loans by equal annual instalments of principal and interest, when money could be borrowed at 4 per cent., do not necessarily apply at the present time when a much higher rate of interest is in operation .--The Surveyor.



May, 1921



MR. J. H. SINCLAIR, Sales Manager, London Concrete Machinery Company of London, Ont.

Barber, Wynne-Roberts & Seymour MUNICIPAL ENGINEERS & DEVELOPMENT SPECIALISTS Bridges, Structures. Sewers and sewage disposal. Waterworks. Industrial Housing, zoning and town planning Surveys, assessments and arbritations. Roadways and sidewalks

40 JARVIS ST., TORONTO

MORRISON QUARRY CO. ALL GRADES OF CRUSHED STONE Selling Agents,

T. A. Morrison & Co., Limited 128 BLEURY STREET, MONTREAL.

## Quebec Savings & Trust Company

Head Office, MONTREAL

J. N. GREENSHIELDS, K.C., President. J. W. PYKE, Vice-President. F. W. TOFIELD, Manager.

This Company Specializes in the Joint Administration of Municipal Sinking Funds

FULL PARTICULARS UPON APPLICATION.

206 TRANSPORTATION BUILDING, Corner St. Francois Xavier and St. James Streets.

## BANK OF MONTREAL

Estabilshed Over 100 Years

CAPITAL (PAID UP)...\$22,000,000 REST.....\$22,000,000 UNDIVIDED PROFITS.. \$1,251,859 TOTAL ASSETS .....\$560,150.82

BOARD OF DIRECTORS

SIR VINCENT MEREDITH, BART., President. SIR CHARLES GORDON, G.B.E., Vice-President.

R. B. Angus, Esq.	LtCol. Molson, M.C.
Wm. McMaster, Esq.	C. R. Hosmer, Esq.
H. R. Drummond, Esq.	D. Forbes Angus, Esa
Lord Shaughnessy, K.C.V.O.	Harold Kennedy, Esq.
	G. B. Fraser, Esq.
Col. Henry Cockshutt.	J. H. Ashdown, Esa
	Sir Lomer Gouin, K.C.M.G.
Gen Sir Arthur Currie K	CMG KCB LLD

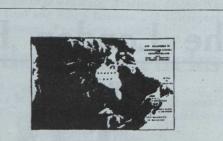
#### HEAD OFFICE: MONTREL

General Manager-Sir Frederick Williams-Taylor.

BRANCHES AND AGENCIES : Throughout Canada and Newfoundland. At London, England, and at Mexico City. In Paris, Bank of Montreal, (France). In the United States —New York, Chicago, Spokane, San Francisco—British American Bank (ownedand controlled by the Bank of Montreal).

West Indies, British Guiana and West Africa—The Colonial Bank (in which an interest is owned by the Bank of Montreal).

A GENERAL BANKING BUSINESS TRANSACTED.



### **Over 500 Municipalities**

in Canada, from the Atlantic to the Pacific are served by the Branches of this Bank.

We offer Public Bodies, as well as private individuals, an efficient Banking System built upon personal service to our depositors.

The Royal Bank of Canada

Total Resources \$550,000,000.

#### GRAND TRUNK RAILWAY - TORONTO - HAMILTON MONTREAL **Double Track All The Way**

The double track route of the Grand Trunk affords the maximum of travel comfort. The "International Limited"-Canada's train of superior service-seven hours and forty minutes Montreal to Toronto.

#### WESTBOUND

Leave Montreal, Bonaventure Station:— 10.00 a.m. daily, "International Limited," arrives Toronto 5.40 p.m.; Hamilton 7.15 p.m. 10.05 a.m. daily, arrives Toronto 10.00 p.m. 7.30 p.m. daily, arrives Toronto 6.00 a.m. 11.00 p.m. daily, arrives Toronto 7.30 a.m.; Hamilton 9.08 a.m.

#### EASTBOUND

Leave Toronto (Union Station) 7.00 a.m. daily, arrives Montreal 7.25 p.m. "The International Limited" leaves Hamilton 7.50

a.m. daily, Toronto 9.20 a.m., arrives Montreal 5.50 p.m.

Leaves Hamilton 7.05 p.m. daily, Toronto 8.30 p.m., arrives Montreal 7.00 a.m. Leave Hamilton 9.20 p.m. daily, Toronto 11.00

p.m., arrive Montreal 7.30 a.m.

Drawing Room Sleeping Car on 11 p.m. train from Montreal to Hamilton, also on 9.20 p.m. train Hamilton to Montreal without change. Club cars on these two trains between Montreal and Toronto. For reservations and further information apply to City Ticket Office, 230 St. James St., Bonaventure Sta-tion Ticket Office or Pullman Office, Bonaventure Station.

ANY INVESTOR OR MANU-FACTURER WHO WANTS THE

FACTS

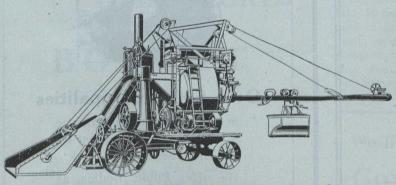
ABOUT ANY CANADIAN CITY OR TOWN WITH THE VIEW OF INVESTING OR ESTABLISHING AN INDUSTRIAL ENTERPRISE :: SHOULD WRITE TO THE ::

## **Bureau of Information**

### CANADIAN MUNICIPAL JOURNAL

Coristine Bldg., - Montreal, P.Q.

# The London Paving Mixer No. 16-B



LONDON PAVING MIXER. No. 16-B-Steam Operated.

is especially suitable for large paving jobs where the roadway is very wide. The Boom is 20 feet long, thereby making it possible to pave roads up to 44 feet in width, the machine operating in the centre of the roadway. Many pavements over 30 feet and up to 44 feet in width are cast in one piece their entire width. For this class of work the No. 16-B. Mixer with Boom and Bucket is indis-Described in Bulletin K-1. pensable.

## London Concrete Machinery Co. Limited Dept. 5, LONDON, CANADA

World's Largest Manufacturers of Concrete Machinery

SALES OFFICES AND WAREHOUSES

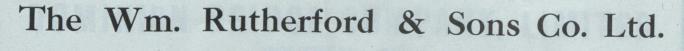
HALIFAX ST. JOHN OUEBEC

SHERBROOKE MONTREAL **OTTAWA** 

TORONTO WINNIPEG SASKATOON CALGARY EDMONTON VANCOUVER

#### May, 1921.

CANADIAN MUNICIPAL JOURNAL



Lumber and Timber Merchants

Sash and Door Manufacturers

**Beaver Board Distibutors** 

**Telephone Victoria 1620** 

BRANCHES

Office: 425 ATWATER AVE.

CRANE MALLEABLE FITTINGS

CRANE

LIMITED

MONTREAL

SALES OFFICIES: HALIFAX, QUEBEC, OTTAWA, CALGARY.

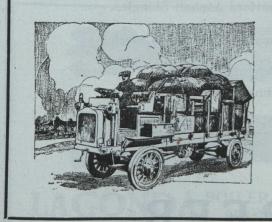
TORONTO, WINNIPEG, VANCOUVER.

BONDS BOUGHT FROM:

LOANS MADE TO:

## MUNICIPALITIES

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



Motor Trucks of 1 ton up to 10 tons capacity, Trailers, Dump-Wagons, Fire Apparatus, Pumps, Coal and Stone Loaders and Conveyors; Auxiliary Equipment, Passenger Autobus.

## **Automobiles and Trucks**

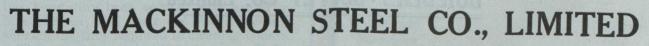
Do you know if it will pay you to use Motor-Trucks on your work? Would you like information as to how other users do similar operations? Let me offer you some useful suggestions FREE! Write in confidence to:

#### JOHN MACMILLAN, 15 Years' Practical Experience.

Motor Truck Specialist 25 MAYOR STREET :: :: .:

MONTREAL

## To Municipal Councils and Engineers



Handle all Kinds of Structural and Steel Plate Work

BRIDGES

POWER HOUSES

And Erect Same in Any Part of Canada

Let them quote you on your next construction. Head Office and Works: SHERBROOKE, QUE.

**STANDPIPES** 

# STINSON – REEB Builders' Supply Co., Limited

WE SPECIALIZE IN PAVING MATERIAL AND CRUSHED STONE.

A copy of our booklet on paving will be sent on demand.

DISTRIBUTORS FOR

## THE BRANTFORD ROOFING COMPANY

Write for samples and information concerning Brantford Asphalt Shingles.

A complete assortment of covering and roofing material always in stock in our Montreal Warehouse.

Will be pleased to quote prices on all kinds of building materials.

# STINSON-REEB,

BUILDERS' SUPPLY CO. Limited

45 Alexander Street,

Montreal

# DOMINION BRIDGE COMPANY, LIMITED

MONTREAL, QUE.

ENGINEERS, MANUFACTURERS AND ERECTORS OF STEEL STRUCTURES

Railway and Highway Bridges, Turntable, Electric and Hand Power Travelling Cranes, Lift Locks and Hydraulic Gates, Transmission Poles and Towers. TANK and PLATE WORK OF EVERY DESCRIPTION. Forgings, Gears Cutting and General Machine Work, Marine Boilers and Engines. P. O. Address: Montreal. HEAD OFFICE and WORKS: LACHINE LOCKS, P.Q. Cable Address: "Dominion" Branch Offices & Works: Toronto, Ottawa, Winnipeg. Sales Offices: Montreal, Toronto, Ottawa, Winnipeg, Regina, Edmonton, Vancouver.

LARGEST STOCK OF STRUCTURAL MATERIAL AT ALL WORKS

ESTABLISHED 1856

J. C. McLAREN BELTING COMPANY, Ltd.

WE ARE HEADQUARTERS FOR ALL KINDS OF

BELTING - LACE LEATHER - CARD CLOTHING AND GENERAL MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

Branches :---

80 LOMBARD STREET, WINNIPEG, MAN. 50 COLBORNE STREET, TORONTO, ONT. Head Office and Factory:--MONTREAL, QUE.

REEDS



The latest Lagonda Water and Air-Driven Boiler Tube Cleaners are the most powerful and efficient tube cleaners made. They develop higher speed and greater power than has heretofore been secured with any Turbine Cleaner, and their use will materially shorten the time required in cleaning boilers.

These new Lagonda Cleaners are built for all sizes of tubes, either straight or curved, and they can be driven by water, air or steam.

Ask for Catalog L.



## MUNICIPAL SINKING FUNDS

For municipal sinking funds no better security can be purchased than Dominion Government, Provincial and Municipal securities which to-day afford unusual yields.

There are at present many indications of lowering interest rates. Every consideration should, therefore, be given to the investments of available sinking funds.

> We shall be glad to consult with Municipal Treasurers, Chairmen of Finance Committees, Trustees, etc., and give the benefit of our 30 years' experience.

Lists gladly forwarded on request.

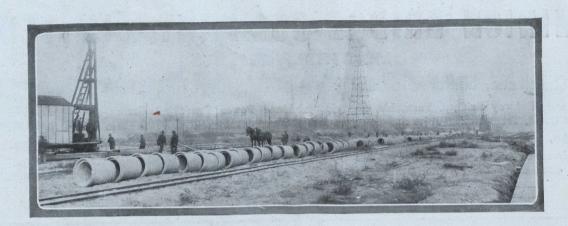
 $\nabla$   $\nabla$   $\nabla$ 

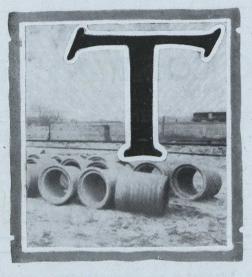
Investment Securities

Established 1889

## A. E. AMES & CO.

Union Bank Bldg. Toronto Transportation Bldg. Montreal 74 Broadway - New York Harris Trust Bldg. Chicago Belmont House, Victoria, B. C.





# he increasing use of Concrete Pipe for Sewers and Culverts,

is developing many industries specializing in this product, and making it in a wide range of sizes.

The permanence of Concrete recommends it for such purposes - properly-made Concrete Pipe being proof against destruction by frost, rot or rust. The Illustration shows one well-known type of Concrete Pipe furnished by the Independent Concrete Pipe Company, Limited, Toronto, Ontario for the Toronto Harbor Commission.

## Canada Cement Company Limited Herald Building Montreal

Sales Offices at:-

Montreal

Toronto

Winnipeg

Calgary

Specify CANADA CEMENT Uniformly Reliable



We maintain a Service Department to co-operate in all lines of work for which Concrete is adapted. Our library is comprehensive and is at your disposal at all times without charge.