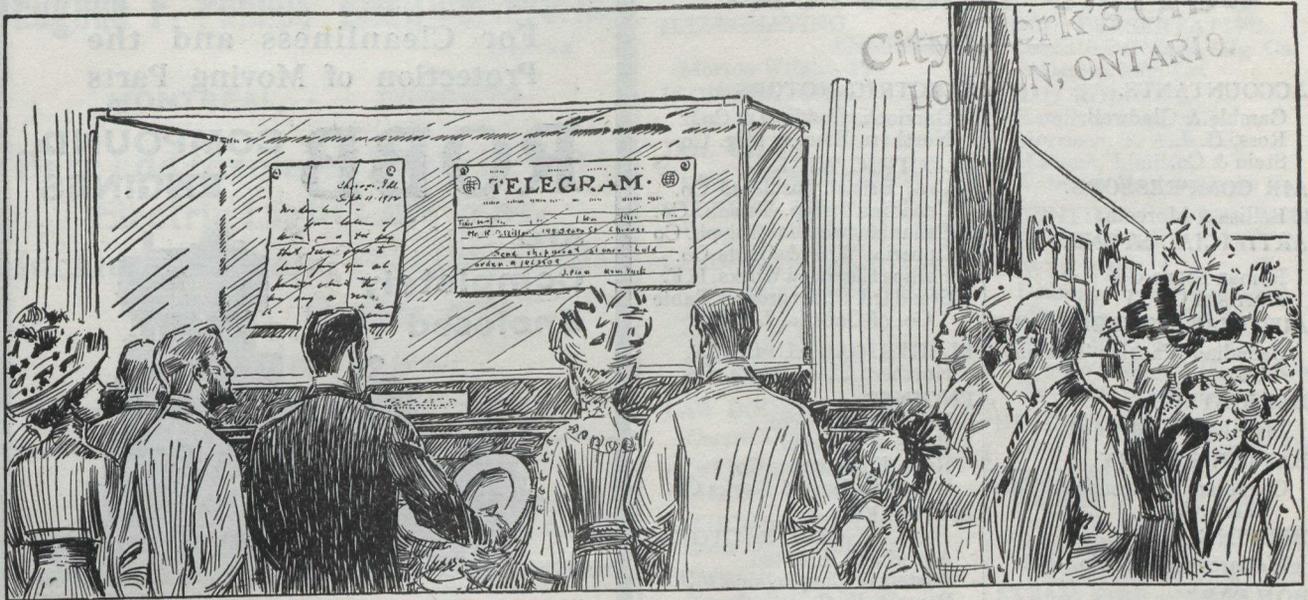


PAGES

MISSING



“Back in the Days of the Telegram and Letter”

¶ The above illustration may seem ridiculous to you. The thought of the telegram or the letter being an antiquity for the museum or the curiosity shop seems remote.

¶ Possibly we are gazing too far into the future, but the fact remains that efficient telephone service has far out-stripped the mails and telegraphy in the rendering of first class commercial service. Don't you think so?

¶ The Kellogg Co. has an enviable reputation for producing high grade equipment and, through all our years of manufacturing, we have been in the front ranks at every stage of advancement, in telephone practice.

¶ Our common battery equipment is the most perfectly devised of any on the market. Our magneto boards, for smaller towns, easily satisfy the popular demand. Kellogg telephones are known from coast to coast—a million transmitters in operation to-day.

¶ For speedy, reliable service there is no other equipment that can compare with it. Let us quote you on municipal service equipment—special telephone systems. Mention this magazine in writing.

KELLOGG SWITCHBOARD AND SUPPLY COMPANY

FACTORY AND MAIN OFFICE, - CHICAGO.

CANADIAN BRANCHES:

Regina, Sask. : DEERING ELECTRIC CO.

Winnipeg : HOUSTON & CO.

BUYERS' DIRECTORY

ACCOUNTANTS.

Gamble & Gladwell.
Ross, H. J.
Stein & Co.

AIR COMPRESSORS.

Belliss & Morcom.

ARTIFICIAL STONE.

Roman Stone Co.
Morrison Co., T. A.

AUTOMATIC TELEPHONES.

Canadian Machine Telephone Co.

BARRISTERS.

Lighthall & Harwood.

BATTERIES, DRY.

Canadian Independent Telephone Co.

BELTING.

McLaren Belting Co., J.C.

BOILERS.

Babcock & Wilcox.
Robb Engineering Co.
Waterous Engine Works Co.

BONDS, ETC.

Bank of Montreal.
Bank of Ottawa
Bank of Toronto.
Brent, Noxon & Co.
Canada Securities Corpor'n.
Can. Bank of Commerce.
City & District Savings Bank.
Dominion Bond Co.
Domion Securities Corp.
Imperial Bank.
Merchants Bank.
Ross, H. J.
Wood, Gundy & Co.

BRIDGES.

Canadian Bridge Co.
Cleveland B. & Eng. Co.
Dominion Bridge Co.
National Bridge Co.
Structural Steel Co.

CABLES.

Brit. Insulated Co.
Can. Indep. Telephone Co.
Imperial Wire & Cable Co.
Phillips Elec. Works, E.F.
Standard Underground Cable Co. of Canada, Ltd.

CAST IRON PIPES.

Can. Iron Corporation.
Canadian Fairbanks Morse Co.

CEMENT,

Canada Cement Company.

CONCRETE STEEL DAMS.

Ambursen Hydraulic Const. Co.

CONCRETE MIXERS.

Canadian Fairbanks Morse Co.
London Concrete Machy. Co.
Mussens, Limited.
Wettlaufer Bros.

CONCRETE

REINFORCEMENT

Can. Wire & Iron Goods Co.
Garrioch, Goddard & Co.

CULVERTS.

Pedlar People.

DUST PREVENTIVE.

Barrett Mfg. Co.

ELECTRIC MOTORS.

Garrioch, Goddard & Co.
Northern Elec. & Mfg. Co.

ELECTRIC WIRE.

Can. British Insulated Co.
Canadian Indep. Teleph. Co.
Canadian Machine Teleph. Co.
Imperial Wire & Cable Co.
Philips Electrica Works, E.F.
Standard Underground Cable Co. of Canada, Ltd.

ELECTRICAL SUPPLIES.

Northern Elec. & Mfg. Co.

ENGINES.

Babcock & Wilcox
Belliss & Morcom.
Robb Engineering Co.
Waterous Engine Works Co.

ENGINEERS &

CONTRACTORS.

Aqueducts, Limited.
Austen & Chapdelaine.
Barrow, E. G.
Bayfield & Archibald.
Beaubien, De Gaspé.
Bowring & Logan.
Bowman & Connor.
Brandeis, Charles.
Brown, W. M.
Burnett, Geoffrey K.
Can. Inspection and Testing Laboratories.
Cartwright, Mathieson & Co.
Chipman & Power.
Cleveland & Cameron.
Dietrich, W. N.
Dutcher, Foreman & Gregory
Fairchild, Jones & Taylor.
Francis, Walter J. & Co.
Frew, J. F.
Fuce & Scott.
Galt Eng. Co., The John Higman & Doctor.
Isdale, John S.
Jacobs & Davies, Incp.
Keefer & Keefer.
Laurie & Lamb.
R. S. Lea and H. S. Ferguson
Leofred, A.
Mace, T. Harry.
Mather, Yuill & Co.
McConnell, B. D.
McCulloch, A. L.
Moon & Silverton
Murphy & Underwood.
Murray, T. Aird.
Phillips, Stewart & Lee.
Potter, Alex.
Ross & Co., R. A.
Smith, Kerry & Chace.
Surveyer & Frigon.
Topp, Charles H.
Wright, P. Mortin.
Young, C.R.

ENGINEERS, TELEPHONE.

Clement, Edw. E.
Dagger, F.
McMeen & Miller.
Zabel, Max. W.

ENGRAVERS.

Amer. Bank Note Co.

FIRE ALARMS.

Northern Elec. & Mfg. Co.

FIRE DEPT. SUPPLIES.

H. K. Martin.
Waterous Engine Works Co.

FIRE ENGINES.

Waterous Engine Works Co.

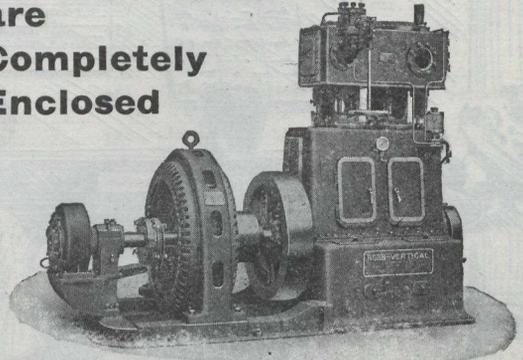
GAS ENGINES.

Can. Fairbanks-Morse Co.

For Cleanliness and the
Protection of Moving Parts

ROBB COMPOUND ENGINES

are
Completely
Enclosed



INTERNATIONAL ENGINEERING WORKS, Ltd.

Owners of works formerly of

ROBB ENGINEERING COMPANY

Works: AMHERST, N. S., CANADA
South Framingham, Mass.

SOLE CANADIAN AGENTS FOR

C. A. Parsons & Co., Newcastle-on-Tyne

Turbines, Turbo Electric Generators, Turbo Pumps, Blowers
and Compressors

39-17

THE DOMINION WOOD PIPE COMPANY LIMITED

New Westminster, B. C.

Manufacturers of

DOUBLE WIRE WOUND



AND

Cast Iron Specials, Valves, Hydrants, Etc.

WELL DRILLING

TOWN WELLS A SPECIALTY

We have the latest scientific instruments for locating subterranean
water courses before drilling.

If you need water, you need us.

SASKATCHEWAN WELL DRILLING CO.
ROULEAU, SASK.

Eugene F. Phillips Electrical Works,

LIMITED

MONTREAL, - - TORONTO

Bare and Insulated Electric Wire,
Electric Light Line Wire,
Incandescent and Flexible Cords,
Railway Feeder and
Trolley Wire.

Jail Cells

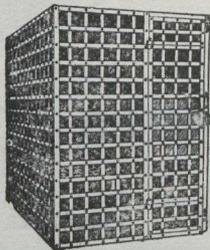
We are Headquarters for all Classes of

PRISON WORK

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

Inquiries Solicited

Canada Wire & Iron Goods Co.
HAMILTON, Ont.



FOR SALE

KYNOCK SUCTION GAS ENGINE

50 H. P. ELECTRIC LIGHT TYPE

COMPLETE WITH GENERATOR
AND ACCESSORIES

IN AS PERFECT ORDER AS NEW

A Bargain for a Prompt Buyer,

APPLY TO :

THE

MODERN PRINTING CO.,

39 Dowd Street, - MONTREAL, Que.

BELL TELEPHONES, MAIN 111-112

BUYERS' DIRECTORY.—Continued

- ILLUMINATING ENGINEERS.**
Morton-Wright, P.
- INCINERATORS.**
Heenan & Froude.
- JAIL CELLS.**
Can. Wire & Iron Goods Co.
- LADDERS, FIREMEN'S.**
Waterous Engine Works Co.
- LANDSCAPE ARCHITECTS.**
Dunnington-Grubb & Harries.
Haylor, Guy W.
Outhet, F. A.
Schlemm, Leonard E.
Todd, Frederic G.
- LAW BOOKS.**
Carswell Co., The.
- LEATHER BELTING.**
McLaren Belting Co., J. C.
- LITHOGRAPHERS.**
Amer. Bank Note Co.
- LUMBER.**
Naugle Pole & Tie Co.
Partridge-Dyer L. Co.
Valentine-Clark Co.
- METAL CULVERTS.**
Pedlar People, The
- METERS, WATER.**
Buffalo Meter Co.
- MUNICIPAL FORMS.**
Modern Printing Co.
- MUNICIPAL VAULTS.**
Office Specialty Co.
- NUMBERS.**
Davidson Mfg. Co., Thos.
Warminton, J. N.
- ORNAMENTAL IRON.**
Can. Wire & Iron Goods Co.
- PAVEMENTS.**
Canada Cement Company.
Carritte-Paterson Mfg. Co.
Paterson Mfg Co.
- PATENTS.**
Clement, Edw. E.
Munn & Co.
- PIPE, IRON.**
Can. Fairbanks Co.
Can. Iron Corporation.
Martin & Co., Jos. R.
- POLES.**
Naugle Pole & Tie Co.
Partridge-Dyer Lumber Co.
Valentine-Clark Co.
- POLICE SUPPLIES.**
H. K. Martin.
- PUBLIC ACCOUNTANTS**
Gladwell, Wilson & Co.
Ross, H. J.
Stein & Co.
- PRINTERS.**
Modern Printing Co.
- PUBLISHERS.**
Carswell Co., The.
- RAILINGS.**
Can. Wire & Iron Goods Co.
- ROAD MACHINERY.**
Amer. Road Mach'y. Co.
Morrison, T. A. & Co.
Mussens, Limited.
Waterous Engine Works Co
Wettlauffer Bros.
- ROAD PRESERVATIVE.**
Carritte-Patterson Mfg. Co.
Patterson Mfg. Co.
- ROAD ROLLERS.**
Hamilton Mach'y Co.
Morrison, T. A. & Co.
Mussens, Limited.
Waterous Engine Works Co.
- SCIENTIFIC INSTRUMENTS**
Isdale, John S.
- SEWER PIPE.**
Dominion Sewer Pipe Co.
Morrison, T. A. & Co.
- SEWER PIPE MOULDS.**
London Concrete Machy. Co.
Wetlanfer Bros.
- STAIRCASES.**
Can. Wire & Iron Goods Co.
- STEAM ENGINES.**
Babcock & Wilcox, Ltd.
Belliss & Morcom.
Robb Engineering Co.
Waterous Engine Works Co.
- STEAM FIRE ENGINES.**
Morrison, T. A. & Co.
Waterous Engine Works Co.
- STONE.**
Roman Stone Co.
- STREET NAMES.**
Davidson Mfg. Co., Thos.
Warmington, J. N.
- STREET SPRINKLERS.**
Mussens, Limited.
- STRUCTURAL STEEL.**
Canadian Bridge Co.
Cleveland Bridge & Eng. Co
Dominion Bridge Co.
National Bridge Co.
Structural Steel Co.
Belliss & Morcom.
- SUCTION GAS PLANTS.**
Can. Fairbanks-Morse Co.
Mussens Limited.
- SUPPLIES & MACHINERY.**
Morrison, T. A. & Co.
Mussens, Limited.
Waterous Engine Works Co.
- TELEPHONES.**
Canadian Indep. Teleph. Co.
Canadian Machine Teleph. Co
Garrioch, Goddard & Co.
Kellogg S. & Supply Co.
McMeen & Miller.
Northern Elec. & Mfg. Co.
- TURBINES.**
Belliss & Morcom.
Robb Engineering Co.
- VAULTS, SAFETY.**
Office Specialty Co.
- WATER WORKS SUPPLIES.**
Buffalo Meter Co.
Can. Fairbanks Morse Co.
Can. Iron Corporation.
Mussens, Limited.
Dom. Wood Pipe Co.
- WELL DRILLERS**
Sask. Well Drilling Co.
- WIRE, ELECTRIC.**
Imperial Wire & Cable Co.
Phillips Electric Works, E.F.
Standard Underground Cable
Co. of Canada, Ltd.
- WINDOW GUARDS**
Can. Wire & Iron Good
- WOOD STAVE PIPE.**
Dom. Wood PipeCo.



FAIRBANKS WAGON SCALES

Every Municipality should have one

Fairbanks Scales present a striking example of goods so highly developed, so thoroughly known and accepted, that they have become a standard of excellence everywhere.

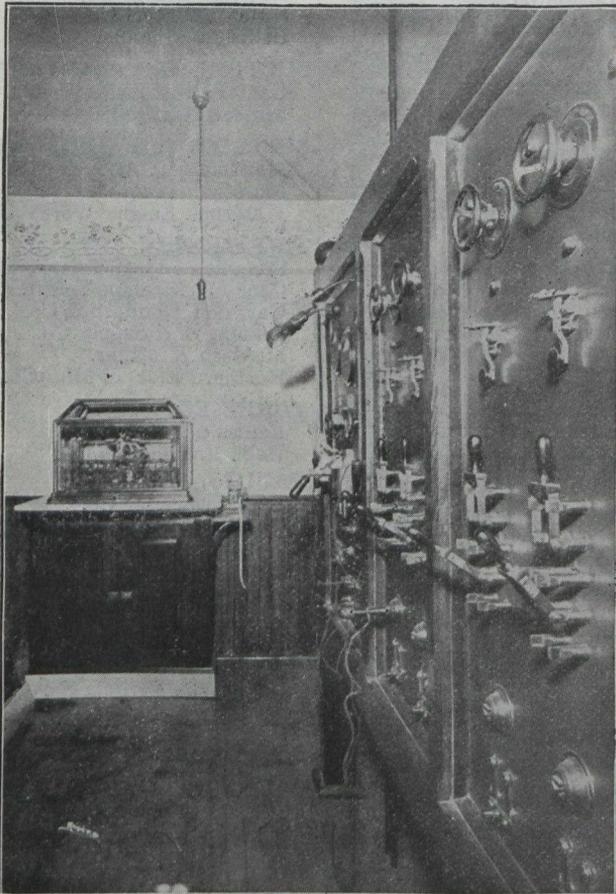
The keenest competition during the past eighty years has failed in any way to affect the progress of our output; our Scales have proved their supreme right through long years of satisfactory service, to the universal confidence in them as representing the Ideal in Honest Weights and Measures.

5000 STYLES

THE CANADIAN FAIRBANKS-MORSE CO., LIMITED

Fairbanks Scales—Fairbanks-Morse Engines—Safes and Vaults

MONTREAL, TORONTO, ST. JOHN, N. B., WINNIPEG, CALGARY, SASKATOON, VANCOUVER



AN IDEAL INSTALLATION

The accompanying cut illustrates a portion of the new Central Office at Port Arthur, Ont. The equipment includes a Northern Electric four circuit storage battery board and a Gamewell four circuit automatic repeater and punch register.

This makes an ideal installation for towns of ten to fifteen thousand population.

At each house are specialists whose services are at your disposal. We have only one standard of quality—the best.

THE *Northern Electric*
AND MANUFACTURING CO. LIMITED



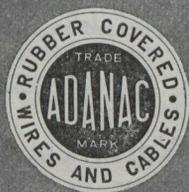
Manufacturer of Telephone and Fire Alarm Apparatus and Distributor of Electrical Supplies for every possible need.

MONTREAL TORONTO REGINA EDMONTON
HALIFAX WINNIPEG CALGARY VANCOUVER

ALPHABETICAL INDEX OF ADVERTISERS

	PAGE		PAGE		PAGE
Ambursen Hydraulic Cons. of Can.....	104	Dunnington-Grubb & Harries.....	119	Naugle Pole & Tie Co.o.....	102
American Bank Note Co.....	113	Dutcher, Maxwell & Co.....	117	Northern Electric & Mfg. Co.....	84
Aqueducts, Limited.....	115	Fairchild, Jones & Taylor.....	118	Office Specialty Co.....	86
Austen & Chapdelaine.....	117	Francis Walter, J. & Co.....	116	Outhet, R. A.....	119
Babcock & Wilcox, Limited.....	86	Frew, J. F.....	115	Partridge Dyer Lumber Co.....	102
Bank of Montreal.....	110	Fuce & Scott.....	115	Paterson Manufacturing Co., Limited.....	106
Bank of Ottawa.....	112	Galt, Eng. Co., The John.....	118	Pedlar People.....	Cover Page
Bayfield & Archibald.....	114	Gladwell, Wilson & Co.....	104	Phillips Electrical Works, Eug. F.....	83
Beaubien, DeGaspé.....	115	Higman & Doctor.....	116	Phillips, Stewart & Lee.....	118
Bellis & Morcom.....	112	Haylor, Guy Wilfrid.....	119	Potter, Alexander.....	117
Bowman & Connor.....	105	Imperial Bank of Canada.....	112	Reed, G. W.....	105
Bowring & Logan.....	117	Imperial Wire & Cable Co.....	85	Robb Engineering Co.....	82
Brandeis, Charles.....	115	Isdale, John S.....	116	Robertson Limited, J. M.....	117
Brent, Noxon & Co.....	111	Jacobs & Davies.....	118	Roman Stone Co., Limited.....	105
Brit, Insulated & H. Cables Co.....	102	Keefer & Keefer.....	115	Ross, H. J.....	105
Burnett, Geoffrey K.....	119	Kellogg Switchboard & Supply Co.....	81	Ross & Co., R. A.....	114
Canada Cement Co.....	Cover Page	Laurie & Lamb.....	112 & 114	Royal Bank of Canada.....	110
Canada Iron Corporation.....	120	Lea, R. S. & H. S. Ferguson.....	116	Saint-Cyr, J. B.....	114
Canadian Bank of Commerce.....	110	Lighthall & Harwood.....	105	Sask. Well Drilling Co.....	82
Canadian Bridge Co., Ltd.....	120	London Concrete Machinery Co., Cover Page	4	Schlemm, Leonard E.....	119
Canadian British Insul. and H. Cable Co.....	102	Leoped, A.....	115	Smith, Kerry & Chace.....	115
Canadian Fairbanks-Morse Co.....	84	Martin & Co., Jos. R.....	104	Standard Underground Cable Co. of Can...	102
Canadian Wire & Iron Goods Co.....	85	Mather, Yuill & Co.....	118	Stein Co., W. T.....	102
Can. Independent Telephone Co., Limited.....	107	McLaren Belting Co., J. C.....	Cover Page	Structural Steel Co., Limited.....	86
Can. Inspection & Testing Laboratories.....	116	McMeen & Miller.....	118	Surveyer & Frigon.....	114
Carswell Co., The.....	104	McCulloch, A. L.....	114	Tidd, Frederick G.....	119
Carritte-Paterson Manfg. Co.....	106	Merchants Bank of Canada.....	110	Topp, Charles H.....	114
Cartwright, Matheson & Co.....	116	Modern Printing Co.....	83	Trussed Steel Concrete Co.....	109
Chipman & Power.....	116	Moon & Silvertown.....	115	Valentine-Clark Co.....	102
City & District Savings Bank.....	111	Morrison & Co., T. A.....	105	Warmington, J. N.....	120
Cleveland Br. & Eng. Co.....	Cover Page	Murphy & Underwood.....	117	Waterous Engine Works Co., Limited.....	86
Clement, E. E.....	118	Murray, T. Aird.....	117	Wood, Gundy & Co.....	113
Cleveland & Cameron.....	114	Mussens, Limited.....	Cover Page	Wright, P. Morton.....	119
Dagger, F.....	118				
Davidson Mfg. Co., Ltd., The.....	120				
Dietrich, W. N.....	116				
Dominion Bridge Co., Limited.....	Cover Page				
Dominion Securities Corporation.....	113				
Dominion Sewer Pipe Co., Limited.....	120				
Dominion Wood Pipe Co.....	82				

ADANAC RED CORE RUBBER COVERED WIRES AND CABLES



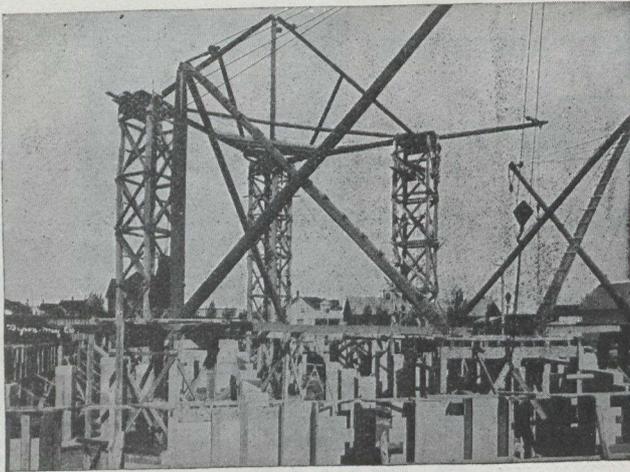
Are made according to the specifications of the National Board of Fire Underwriters. The conductors are drawn from copper of the highest conductivity and are covered with two thicknesses of thoroughly vulcanized rubber compound of high quality. The wires are braided over insulation and the smooth high finish they receive makes them specially desirable for conduit work.

IMPERIAL WIRE AND CABLE COMPANY

Limited
MONTREAL

The Northern Electric
AND MANUFACTURING CO. LIMITED
Sales Agents

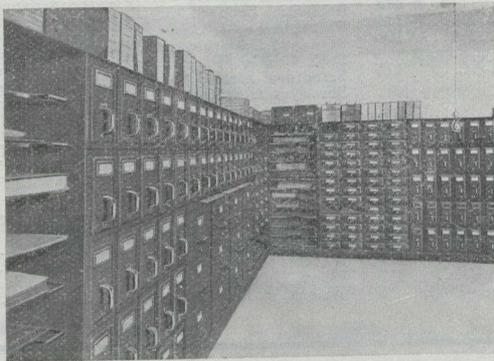
TORONTO REGINA WINNIPEG
CALGARY EDMONTON VANCOUVER



Structural Steel Co., LIMITED MONTREAL

General Offices : New Birks' Building.

5000 Tons Structural Shapes
in Stock for prompt delivery



Steel Filing Equipment

is essential for the safeguarding of valuable municipal records.

We specialize in the making of Steel Filing Cases and Vault Equipment for Municipal Buildings, Registry Offices, Banks, and all public buildings.

Let us plan your filing and record room arrangement. Our experience of more than 25 years is at your service.

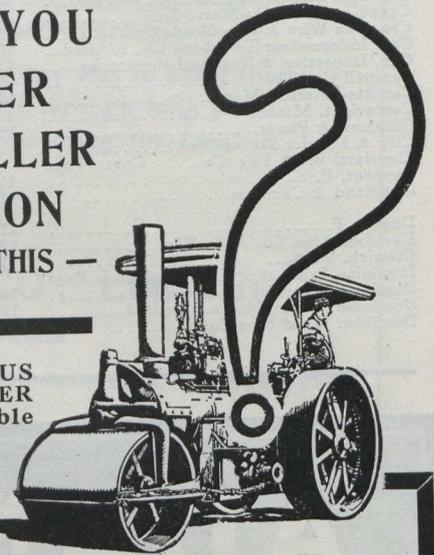
Head Office : 97 Wellington St. West, TORONTO

Complete Filing Equipment Stores,—Montreal, Halifax, Ottawa, Winnipeg, Calgary, Edmonton, Vancouver.

Factories: NEWMARKET, Ont.



WHEN YOU
CONSIDER
THE ROLLER
QUESTION
REMEMBER THIS —



THE WATEROUS STEAM ROLLER carries a double cylinder, double crank engine.

THE WATEROUS ROLLER is fitted with a locomotive type boiler tested to 165 lbs.

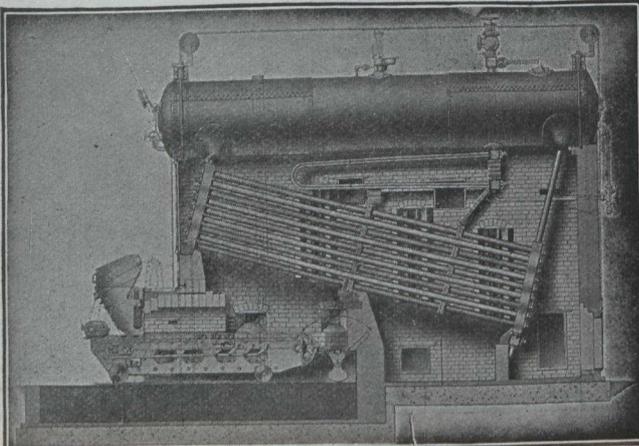
THE WATEROUS ROLLER has two speeds, forward and reverse, with all gears cut from the solid steel.

THE WATEROUS ROLLER is fitted with locomotive link valve motion, wearproof rolls, shaking grates, dumping ash pan, and is operated entirely from the engineer's platform.

Over 150 Waterous Rollers will be used in Canada this year.

The Waterous Engine Works Co., Ltd.

Brantford, - Canada



Babcock & Wilcox, Ltd.

PATENT

WATER-TUBE BOILERS

Highest Economy, Absolutely Safe up to the Highest Pressures.

OVER 8,000,000 H. P. IN USE

Our book "Steam" sent on request.

Head Office for Canada

ST. HENRY, MONTREAL

Branch Office : TRADERS' BANK BUILDING, TORONTO

Babcock & Wilcox Patent Water Tube Boiler Superheater and Mechanical Stoker

THE CANADIAN MUNICIPAL JOURNAL

AND TELEPHONE AND BUILDING NEWS

HARRY BRAGG, EDITOR

THE SETTLERS IN THE PEACE RIVER DISTRICT

At a recent meeting of the Canadian Division of the Institute of Journalists in Montreal, Mr. F. S. Lawrence, F.R.G.S., gave a most graphic and interesting address on that newest portion of the Dominion of Canada, the Peace River country, which, in the last couple of years, has become such a subject of conversation and enquiry both in this country and in Great Britain.

The subject is a large one, for the District covers not only the upper part of Alberta, but also the Western side of Northern Saskatchewan, and the Eastern side of Northern British Columbia.

Up to even a few years ago, this great district,—sufficiently extensive and fertile to form an Empire,—has been beyond the edge of the world, and the suggestion that it was within the wheat-growing belt would have been treated as the idea of a lunatic. Mr. L. O. Armstrong, of the Can. Pac. Ry., recalled the statement of a grain man only a few years ago that wheat would never be grown successfully as far north as St. Paul! The ignorance of the country, its climate and possibilities was dense; and the knowledge that the isothermal (or heat) line sloped away to the north as the influence of the soft Chinook winds of the Pacific was felt, was not known; while the factor of sunshine that lasts nearly the whole day was not reckoned with. All these data have come into view lately.

Mr. Lawrence is specially well qualified to talk on this subject, for when he was not five years old, he accompanied his father, who went out as a missionary-teacher to Fort Vermilion, when the journey from Montreal took five months, and the Lawrence family and the Hudson Bay factor were the only white people to be found there; and there he grew up. Since that time, some thirty years ago, Mr. Lawrence has seen marvellous changes; he heard his father laughed at for trying the foolish experiment of growing wheat so far North; and then saw the enterprising missionary follow the successful experiment by bringing in a grist mill, the first in the far North West and the pioneer of others; for to-day, wheat grown at Fort Vermilion has taken the first prize in a world-wide competition, and the flour mills in that district ship their products down the great Mackenzie River system to the Arctic Ocean.

Mr. F. S. Lawrence, following his father's policy of showing what the district could do, established an Experimental Farm at Fort Vermilion and proved that tomatoes and squash could be grown there, along with other vegetables; while apples have also ripened.

It is due to his persistence that reindeer were introduced into the far North by the late Government, for his experience showed the value of animals who could withstand the cold, and who are useful, even necessary, for transportation and for food in the waste land north of the fertile belt.

Few settlers went in in the early days, but they proved what the country could do, and now, even without railways, thousands have "trekked" in, in wagons and sleighs, while no less than five railways are being rushed into the land of promise.

The value of land is increasing and town lots at Grouard, Athabaska Landing and other centres of life, are fetching prices that would have seemed fabulous for acres, or even farms, a few years ago.

There can be no doubt that this vast area of valuable land is a great addition to the possibilities of the Dominion.

But there is one question that ought to be settled, and in a statesmanlike way, as quickly as possible, for it has been too long left undone; and that is the deed-ing of their farms to the original settlers.

No less than fifteen years ago a Commission appointed by the Government was sent into the country for this purpose. They took evidence as to the claims of the settlers and others, and promised that those claims which they had examined and approved would be granted.

The Missions have received their lands properly deeded to them. The Indians have been granted their Reserves. The half breeds have received their lands or scrip. Politicians have secured choice portions.

But the white settlers, who were the real pioneers, and who demonstrated the value of the district, have got nothing. And have even been told that if they want any land, they must take it up by homesteading on a quarter section, like newcomers.

All the work of Mr. Lawrence, the missionary, for instance, has resulted in none of the land he reclaimed from the wilderness becoming his personal property; while other early settlers find that the surveyor's lines will cut their buildings in two.

The temper of these early settlers is roused, as can be imagined, and some old country men will resist any attempt at taking from them lands which they naturally believe they have acquired by the right of settlers.

We have learned from other sources, of certain politicians, now out of office, fencing in hundreds of acres recently, with a view of exercising "settlers' rights".

Edmonton offer a good example of how one settler was treated—and very properly; the Groot estate consists of a thousand acres (less what has been sold), and represents a block of land given over in the Government to one of the early settlers. Why should this be done in Edmonton and not at Fort Vermilion?

The whole matter, though so important, is really a very small one. For the total claims of the settlers are only about fifty thousands acres, out of hundreds of millions. If these were granted, the result would be that those who have opened up the country would feel that they had been justly treated, and newcomers would be impressed with the justice of the Government under which they are becoming citizens.

THE CANADIAN MUNICIPAL JOURNAL

OFFICIAL ORGAN
UNION OF CANADIAN MUNICIPALITIES.

Provincial Unions of
MANITOBA, BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN
NOVA SCOTIA AND NEW BRUNSWICK.

CANADIAN INDEPENDENT TELEPHONE
ASSOCIATION.

CHIEF CONSTABLES' ASSOCIATION OF CANADA.

MONTREAL, MARCH, 1913

CONTENTS

	PAGE
FEDERAL DISTRICT OF OTTAWA.....	90
Ex-Mayor Fred. Cook, M.J.J.	
THE SHORT BALLOT.....	95
Special written for the Journal.	
WINNIPEG CHARTER.....	98
PEACE RIVER SETTLERS.....	87
ENGLISH AND CONTINENTAL TOWN PLANNING. W. G. Wilkins, Derby, Eng.	99
THE GUILD HALL, LONDON, Eng.....	92
Illustrated.—(Continued).	
FUNDAMENTAL PROBLEMS OF TOWN PLANNING B. Antrim Haldeman, Asst. Eng., Philadelphia, Pa.	117
Civic Notes.....	104
Editorials.....	87
Engineering News.....	114
Equipment and Engineering.....	108
Financial Notes.....	113
Financial Echoes.....	111
Telephone News.....	101

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

PUBLISHED MONTHLY BY

The Canadian Municipal Journal Co., Limited.

G. S. WILSON Pres. and Mang. Director
H. BRAGG, M. J. I. Vice-Pres. and Mang. Editor
H. WISELY BRAGG, M. J. I. Assiat. Editor and Secretary

CORISTINE BUILDING, MONTREAL
Telephone Main 4362—Cable address "Wilbrag".

WESTERN TRAVELLING REPRESENTATIVE: J. GRISDALE.

SUBSCRIPTION RATES

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

NOTICE TO ADVERTISERS

Change of copy should reach this office on 18th of month preceeding date of issue, 10th if proof is wanted.

Entered according to Act of the Parliament of Canada, in the year 1913 by the CANADIAN MUNICIPAL JOURNAL COMPANY, LIMITED, at the Department of Agriculture.

13th ANNUAL CONVENTION

OF THE

UNION OF CANADIAN MUNICIPALITIES

SASKATOON, Sask.

JULY 15th, 16th and 17th, 1913

Winnipeg, Man., Advancing.

The alterations in the Charter of the City of Winnipeg, Man., given elsewhere, are very interesting; one or two of them are very progressive. Winnipeg is to be congratulated upon securing power to expropriate more land than is necessary for any improvement, to the extent of 300 feet on each side. This is based upon the English system, and the result will be that this extra land can be sold after the improvement is complete so as to reduce the cost. This was done in a very marked degree in the Kingsway in London, Eng., where the sale of the excess land on each side brought in at once £18,000,000 out of the £25,000,000 which the street cost, while the balance was rented at figures which paid high interest. In the United States a fight is on for "excess condemnation," while Montreal and Toronto are suffering from the want of such powers.

The publication of all plans, after their acceptance by the City Surveyor, is also a good thing and will prevent any advantage being taken of changes.

But it seems peculiar that the Legislature refused to grant any municipal control of bill boards. That civic authorities should have control over bill boards is accepted as proper by all advanced communities in Europe, for it is agreed that bill boards are often—if not always—a nuisance, and therefore should be under legal authority. If the City of Winnipeg wishes to control, or even abolish, the hideous bill boards which disfigure her streets, why should the Legislature object? It is simply a matter of taste; and the Legislature might equally dictate to Winnipeg what kind of pavements she shall have, and whether she shall have iron or wooden poles for her electric current. In a question such as this the country members should leave Winnipeg to do exactly as she likes.

Saskatoon Convention

The Thirteenth Annual Convention of the Union of Canadian Municipalities will be held in Saskatoon, Sask.

For the first time this Convention will be held in the Province of Saskatchewan. Up to this, the Conventions have been held in Ontario, Quebec, Manitoba, Nova Scotia and Alberta. The arrangement to meet in different parts of the country broadens the knowledge of what the Union really means and increases the admiration for its work.

In Saskatoon the delegates will have an opportunity of seeing one of the most progressive of Western cities, and it will be a revelation to those who have not paid a visit to the most advanced section of our country.

It is expected that the delegates from the East will form a party and have the opportunity of seeing some other cities on the way, as was done when the Convention was held in Medicine Hat and Calgary, Alta., when stops were made at Fort William and Port Arthur, Winnipeg and Regina.

Every LIVE municipality will be represented.

Union of Canadian Municipalities

Municipal Railway

The city of Toronto and other municipalities interested are anxious to secure the construction of an electric line from Toronto through Uxbridge to Port Perry, and after securing the assistance of the Union of Canadian Municipalities, proceeded to Ottawa to interview the Government and ask for a grant of \$6,500 per mile.

The road will be about 70 miles long, so that the grant requested would be \$455,000; while the total cost is estimated at \$7,500,000. The usual grant is \$3,200 per mile where the construction averages \$15,000 per mile; but in this case the cost will be \$25,000 per mile.

Those forming the deputation were: Mayor Hocken; Controllers Foster, McCarthy, and Church; Aldermen Rowland, Wanless, Wickett, Maybee, Robbins, Walton, Spence, May, Rawlinson, Burgess, Meredith, McBride, Riding, and Anderson; Commissioner of Works Harris; Assistant City Clerk Summers, of Toronto.

W. D. Lighthall, K.C., Hon. Secretary Union of Canadian Municipalities.

W. Smalley, Reeve; D. Morgan, Dep. Reeve, and H. Cook, delegate of Uxbridge Township.

J. Blanchard, Reeve, and W. O. Webster, delegate, of Scott Township.

R. McIntyre, Reeve, and W. Dobson, Clerk, of Reach Township.

W. W. Sparks, Reeve; E. B. Hoover, Dep. Reeve; W. Barnes, Treasurer; and R. R. Mowbray, Councillor, of Pickering Township.

L. Parish, Ex-Warden, Ontario County; W. H. Harris, Solicitor, and G. Gerow, Reeve, of Port Perry.

A. F. Wilson, Councillor; Capt. H. S. Adams, President; A. Wideman, Councillor; R. J. Corson, delegate; T. Willis, delegate; C. H. Stiver, Clerk; A. Somerfeldt, Councillor, and W. M. Smith, Councillor, of Markham Township.

Dr. Dales, President Board of Trade; J. Ratcliffe, T. Billinger and J. Heisie, Councillors, of Stouffville.

J. T. Stewart, Councillor and W. H. Patterson, Ex-Dep. Reeve, of Scarboro Township.

E. N. Sinclair, M.P.P., for South Ontario.

At the preliminary meeting Mayor Hocken requested Controller McCarthy to take the chair.

The Chairman explained the object of the meeting. Mr. Wilson, of Markham Township, who had acted as secretary of the movement, spoke for the municipalities interested, and outlined a line of action in making the request of the Government, and referring specially to examples, such as the Quebec Railway, Light Company line, which got a bonus from the Dominion Government when a provincial line, and practically a municipal one; another was the Port Dover line; another the Guelph Junction; another the Oshawa line. Others were mentioned; also it was analogous to a good roads movement, and an assistance to agriculture. Quebec Province has had \$5,000,000 from the Dominion for railways.

The arrangements for speakers were:—Mayor Hocken for Toronto; Controller McCarthy, as chairman, and Councillor Wilson, as secretary of the delegation; Mr. H. Cook, Mr. H. Harris, Mr. Mowbray, Mr. Stewart and W. D. Lighthall, K.C., Hon. Secretary U.C.M., for the outside municipalities.

The points to be raised were then discussed.

The speakers then met to arrange the speeches.

The meeting then adjourned to 12.15 at the Commons Lobby.

The delegation met Rt. Hon. R. L. Borden, Premier, Hon. Frank Cochrane, Minister of Railways and Canals, and Col. Sam Hughes, Minister of Militia.

After full discussion, the Premier asked for a statement in writing, and promised an early consideration.

Another Provincial Union

The Executive of the Union of Canadian Municipalities has decided upon the formation of a Provincial Union for the Province of Quebec, to be affiliated with the parent Union as are all the others. Accordingly, invitations have been sent out to the municipal councils asking them to send delegates to Montreal on March 18th, when a meeting will be held in the City Hall, at which Mayor Lavallee, President of the Union, will preside. Mr. Talbot M. Papineau, B.C.L., is secretary, pro-tem, his address being 51 Canada Life Building, Montreal.

Up to this time, the good work in the Province of Quebec has been carried on by the Federal Union, but it is felt that the time has arrived for a Provincial Union to be formed.

Municipal Ownership Succeeds

Municipal ownership of public utilities in Edmonton resulted in a net surplus of more than \$60,000 during the twelve months ended October 31, 1912, according to the annual report of City Auditor Richardson, submitted to the council at its last meeting. The report shows the city has assets valued at \$15,982,205, the assets in cash totalling \$642,095. There was a net deficit of \$10,033, due to over expenditures. There is \$2,021,162 in unexpended debenture funds on hand, against which there is an allowance of \$600,000 for the city's share of street-paving and sewer construction. Debentures authorized and unsold amount to \$1,267,260. The principal surpluses for the year are given as follows: Electric light and power, \$85,656.75; power house, \$13,311.60; telephone department, \$4,324.63. The deficits, largely as the result of over-expenditures for construction and betterment, are: Street Railway, \$32,549; water department, \$3,064; stores and works department, \$8,618.

The Criminal Code.

The Chief Constables' Association appeared by a delegation before the Minister of Justice, Hon. C. J. Doherty, to ask for certain amendments to the Criminal Code, as follows:—

To restrict the right to appeal in the cases of disorderly houses;

Better provisions to follow up the White Slave Traffic;

More latitude in issuing warrants for gambling houses;

Better provisions for punishing wife deserter, with power of deporting the fugitive husband.

The delegation was composed of Col. Percy Sherwood, C.M.G., Commissioner of the Dominion Police; Chief Constable Campeau, Montreal; and Deputy Chief Constable Stark, of Toronto, who is Hon. Sec. Treasurer of the Association.

Federal District of Ottawa

Ex-Mayor FRED COOK, M.J.I., Ottawa.

An interesting *causerie* on municipal topics was given by Mr. Fred. Cook, M. J. I., Ex-Mayor of Ottawa, at the first social gathering of the year of the Canadian Division of the Institute of Journalists, held in Montreal. Mr. Cook's experience, gained by many years' service in municipal life; his wide knowledge of Canadian conditions; his acquaintanceship with all the public men of the Dominion by reason of his thirty years' consecutive occupancy—the record for Canada—of a seat in the Parliamentary Press Gallery, admirably qualify him to speak as an authority on "Municipal Problems." While some may not agree with Mr. Cook's conclusions, yet, we think, he did a service to Canada in emphasizing the difference in conditions between the cities of Canada and the United States, and in urging caution before adopting forms of civic Government, which, while finding fertile ground across the boundary, might not be so well suited to the soil of the Dominion. The chair was occupied by the Editor of this Journal, who is Chairman of the Canadian division, and there was an excellent attendance of the representative newspaper men and women of Montreal.

Mr. Cook said a journalist was usually regarded as a walking encyclopaedia; he was supposed to know something about everything. Many of those present, at different times in their professional capacity, were brought into contact with civic legislators. He thought it well, therefore, to talk to them on municipal affairs with special reference to the creation of the proposed "Federal District of Ottawa." The movement had its inception in a suggestion to adopt for Ottawa what is known as the Commission form of government. There was no phase of politics, taking the wider definition of the term as "the science of government," that went more closely home than effective civic administration—pure water, pure air, clean streets, good transportation municipally—all those matters that came close to the citizen. Aside altogether from this phase, there was the aesthetic aspect, such as town-planning, widening of streets, construction of buildings, driveways and parkways, the establishment of playgrounds, and generally the removal of civic eyesores.

Those who followed municipal affairs would admit that one of the most remarkable developments in the past ten or twelve years on this continent is the establishment of the Commission form of Government, as distinct from the old type of elective council. It started in the city of Galveston, Texas, after the great tidal wave of 1900, which overwhelmed the city, and five years' later was adopted by Houston. From Texas the movement spread northward to Dakota, westward to California, eastward to the New England States, until now nearly two hundred cities and towns of the United States are governed by paid commissioners. To a certain extent we in Canada had adopted it in a modified form. There is only one city in the Dominion governed purely and simply with the commission form—St. John, N. B. Other cities had adopted it in the modified form of Boards of Commissioners or Boards of Control, such as in Montreal, Toronto, Ottawa, Winnipeg, Calgary and other places.

The change of government in the cities of the United States is the result of the apathy of the citizens, and, in many instances, the real root of municipal inefficiency is to be found in the lack of interest by the citizens as a whole. Conditions in Canada are largely dissimilar

from those in the United States. Reading and observation with regard to American cities, said Mr. Cook, inclined him to the belief that, apart from the apathy referred to, there is also a revulsion of feeling against the election of men to municipal office by popular vote. By this system a city might get good men, but, on the other hand, officials were often elected to office who were absolutely unfitted for the position to which they were chosen, with the result that there was created a system of graft and maladministration, until the citizens rose in their might and devised a means to restore normal civic conditions. Such maladministration had, in large measure, led to the adoption of this form of civic government in the United States.

Those who had carefully considered forms of municipal government well knew that no particular form could be an absolute panacea for the ills from which cities suffered. At the same time the duty of Canadian legislators should be to select the best features of civic administration and apply them to existing conditions. The methods employed might result in a council so large as to be unwieldy, but, on the other hand, a council might be so small as to make the members dictators, and unless some check were put on these members it might be found difficult to displace them.

In Canadian cities, such as in Montreal, where there is a Board of Control charged with all the administrative duties, and behind them, the City Council, confined absolutely to legislative functions, to his mind, Mr. Cook said there was the ideal form of civic government. The City Council is an admirable training ground for public life. When men are secured for the City Council, and they must be good men, they should be kept in their positions, and an attempt made to preserve continuity of service in municipal life.

There is an unexplained anomaly in the municipal law of Ontario. The Province of Quebec Legislature had wisely given the Montreal Board of Control terms for four years. In Ontario, members of City Councils were allowed to hold office for one year only. The result is that from the day when a City Council is installed, some members commence the hand shaking business for the following year. On the other hand School Boards in Ontario had terms of two years. Mr. Cook could not see why Ontario should not adopt the Quebec method, or even that of the Homeland, where continuity of service was obtained by three-year terms, one-third of the council retiring annually.

After referring in complimentary terms to the part played in Montreal's civic affairs by the press of the city, Mr. Cook said, that in Ottawa, after a meeting of the Board of Trade, some of those interested in the federal scheme had approached the City Council and asked whether or not they thought that, in place of the commission form of government, the time was ripe for the creation of a federal district. As a result, a memorial was submitted to the Government in February of last year, and was now being considered by a sub-committee of the Cabinet.

One of the reasons the movement was suggested for Ottawa was that in all other federal countries of the world,—the United States, Brazil, Mexico, Argentina, Germany, Venezuela, and the United States of Columbia—the capital city was declared a Federal District. In the memorial submitted to the Dominion Government the request was for a Federal District for Ottawa to include within the boundaries a large area of the surrounding country; the city to be planned, developed, and beautified by a paid commission, partly nominated

by the Government, but the majority elected by the people; the Dominion to contribute a fair proportion of the necessary revenue, and federal representation in Parliament to be retained.

The lack of town planning by the fathers of Confederation was referred to, Mr. Cook quoting the opinion of Hon. George Brown expressed in 1864 that the three original buildings at Ottawa would furnish accommodation for the country's business for five hundred years to come, and yet, within twenty years another large building, the Langevin Block costing one million dollars had been erected, while to-day the public service in addition, was carried on in thirty separate rented buildings, this number being exclusive of the three central blocks.

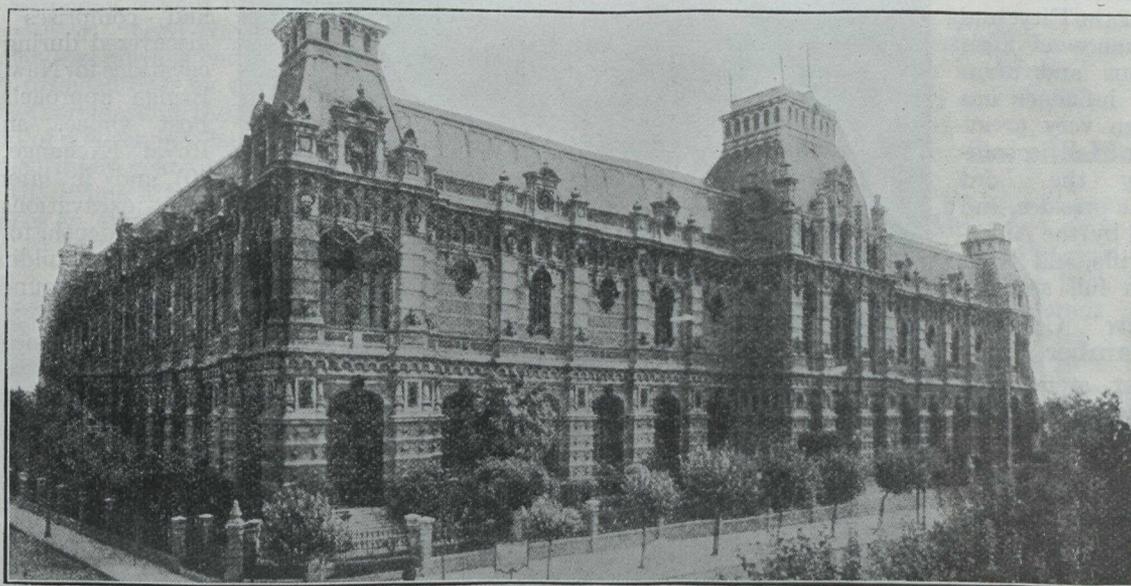
To meet the demand for accommodation for the public service the Government had recently expropriated additional property on Wellington St., at a cost of nearly three million dollars, so that for nearly half

representative in the Senate and House of Commons should be given.

As to the area of the proposed district, twenty miles square was Mr. Cook's idea. Taking the Parliament buildings as the pivotal point the area would comprise ten miles, north, south, east and west, and would include ten miles square from the Province of Quebec, including the City of Hull.

This was Mr. Cook's own proposal, and for it he had been anathematized by the parish priest of Hull, who declared that the French-Canadians were to be deprived of their rights. Whatever rights the people of Hull and the surrounding country had would be interfered with especially in the matter of school laws.

If his idea were carried out one residential town, the town of Alymer, would be included in the area. Alymer, said Mr. Cook, is, through its sewage, a menace to Ottawa, just as Ottawa might be regarded as a menace to Montreal. Before many years were passed the ques-



Water Tank in Buenos Ayres — An ornament, not a disfigurement.

a mile along the cliffs above the Ottawa River, stretching westward, from the Rideau Canal, there would be seen, within the next few years, a magnificent series of Government buildings.

One of the reasons for a Federal District is the desire to get rid of the dual administration now existing. To-day the Federal Government is bound by Provincial laws, though within the Parliament Buildings' area, the Ottawa Police had no jurisdiction. They desire also the absolute control of both banks of the Ottawa River so that the source of Ottawa's water supply would not be polluted, as is the case to-day. The Commonwealth of Australia is profiting by the experience of other federal countries, having set aside 900 square miles in New South Wales, near the border line of Victoria, and is creating a Federal District. Plans for the laying out of this District had been called for, and the prize won by a Chicago man. (1)

In the District of Columbia the Commissioners are paid a yearly salary of \$5,000 each, one retiring annually, so that continuity of service is obtained. In the Ottawa scheme it is proposed that the commissioners should be partly elected by the vote of the people and that a

tion of the treatment of sewage would, he felt sure, have to be properly dealt with, as Parliament in time would enact that cities must not pollute rivers and streams with sewage. A Bill on these lines had passed the Senate on two occasions.

On the question of taxation Mr. Cook said that in Washington, D.C., a larger sum is derived from land values than from improvements. The assessment figures of Washington for 1911 were, on land, \$150,000,000; on improvements, \$142,000,000. The receipts of the city of 350,000 or 400,000 population were \$13,750,000, of which sum Congress furnished \$5,689,000. The citizens paid a tax rate of fifteen mills on the dollar: Congress furnishing a like amount.

As a result of the memorial to the Government nine months ago, it is hoped that some tangible working scheme will be evolved which would commend itself to the judgment of the electorate and to the country at large. This is not a local matter; it is one of national concern. In the movement for the betterment of conditions at the national capital, Mr. Cook said he felt sure they would have the cordial support of the press of Montreal.

A hearty vote of thanks was passed to the speaker.

(1) No English architects competed, Ed.

The Guildhall of the City of London History, Ceremonials and Government

(Concluded from February issue)

The Common Hall

The Common Hall may be briefly described as an assembly of the Members of the various "Livery Companies" of the City. In addition to the Common Hall on Midsummer Day, for electing Sheriffs, and that on Michaelmas Day for the election of Lord Mayor, Common Halls are also held in the Guildhall in times of trouble and discontent, when the opinions of the citizens require to be expressed. The full title of the Common Hall is "The Meeting or Assembly of the Mayor, Aldermen, and Liverymen of the several Companies of the City of London in Common Hall assembled." There are 77 Companies or Guilds in the City, containing about 8,650 Members who are Liverymen and Freemen of the City, and in consequence of their social status and numbers, their influence has always been very great. A Common Hall is summoned by the Lord Mayor, who presides, and is attended by the Aldermen, Sheriffs, and High Officers, in full state.

The "New" Council Chamber

The first stone was laid on the 30th April, 1883, and the first meeting within its walls was held on the 2nd October, 1884. It was built from the designs and under the superintendence of Sir Horace Jones, P.R. I.B.A. the City Architect, upon the north side of the Guildhall, and upon the site formerly occupied by the old Court of Exchequer, and the offices of the Chamberlain, Town Clerk and Architect.

Arranged round the corridor are marble busts of distinguished men.

There is sitting accommodation for the Lord Mayor, 25 Aldermen, the Recorder and the Sheriffs and 206 Common Councilmen, in addition to the high officers and the Clerk who sit by the table below the dais.

The Aldermen's Court Room

This room may be appropriately described as the "Guilded Chamber" as it is certainly the most sumptuously decorated and attractive apartment in the Guildhall. The room was probably built in the early part of the 17th century and was restored a few years after the great fire. In 1807 the room seems to have been re-embellished. It replaces the "Old Council Chamber" which was demolished in 1908 to make room for the other offices, where a six storey building now stands used by the Rates Office.

The Art Gallery

In the group of buildings the Art Gallery must be mentioned, but we cannot describe the many beautiful and priceless gems that are to be found hung on its walls, which are viewed by thousands annually.

The Library

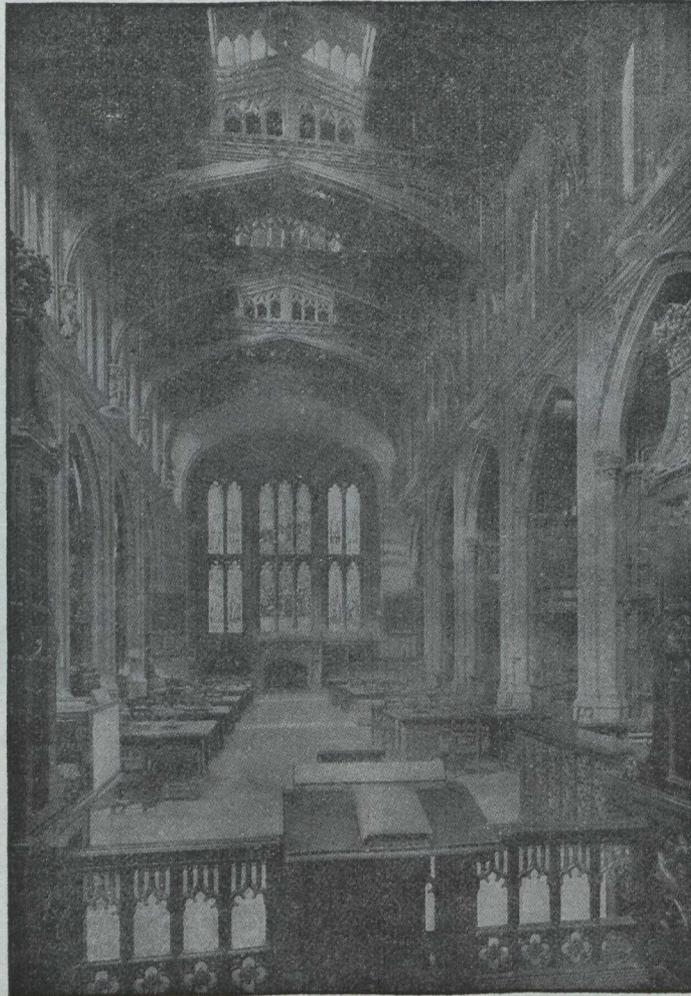
The Library which dates from Henry VI, 1425, is also of special note, and it likewise has a most interesting history. The original collection was loaned by the Duke of Somerset, Lord Protector to furnish his mansion in the Strand, which was never returned and as a result of this for many years or till 1824 nothing was done. Then it was re-established, and in 1869 \$500,000 was spent on a new library and museum.

The Museum

The collection of antiquities is almost entirely composed of "finds" within the City walls, and comprises objects discovered during the excavations for New London Bridge approaches, the Post Office, and the Royal Exchange, (1825-40), and in later years from excavations, often of great depth, for public and other buildings and for underground railways.

One of the most striking objects is the superb Roman mosaic pavement, 20 feet long and 13 feet 6 inches wide, found in Bucklersbury (close to the Mansion House) at a depth of 19 feet below the present surface. It is in an almost perfect state of preservation.

The Museum is very rich in relics of mediaeval times, and contains specimens of pottery, armour, swords and daggers of various kinds, and leather work, including a series of shoes, illustrative of the changes of fashion in different periods.



The Principal Library

The Crypt of the Guildhall

The public entrance to the Crypt is through a fine, bold doorway under the small gallery on the north side of the east end of the Hall. On passing down the modern staircase the Eastern Crypt is seen in all its massive and elegant design. The whole of the Crypt is of the same date as the Great Hall above (1411-1425), and occupies the same area. It is divided into two parts, known as the Eastern and Western Crypts, the former being considered to be the most perfect in condition of all its members and the most extensive in London. The Eastern Crypt (1411-1425) was thrown open to the public for the first time on 8th August, 1910, and now forms an admirable adjunct to the Museum, being connected therewith by means of an oak-panelled passage way.

Officials, Ceremonies, &c.

The survey of the Hall and its various objects of interest being now completed, a short description of some of the sights witnessed nowadays therein, may be welcome.

The Lord Mayor

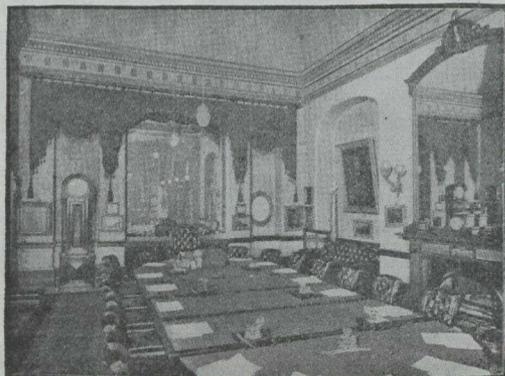
The earliest mention of a Mayor in a formal document occurs in a writ of Henry II. The commonly received opinion, however, is that a change in the name of the Chief Magistrate of the City was made at the accession of Richard I. (1189.)

In 1546, 13th October was the day fixed for the election of Lord Mayor which has remained until the present time.

It is especially to be noted that, before any Citizen of London can attain to the ancient and distinguished office of Lord Mayor, he must have been elected by a different body of electors on four distinct occasions, finally being elected by the Court of Aldermen, who select one of the two nominated to that office.

The Election of Lord Mayor

This ceremony is kept up to-day as it has been for many centuries. "Lord Mayor's Day" in London is still a big event and always ends with the famous banquet which is presided over by the new Lord Mayor, and at which the foremost in the realm are present. On the accession of a sovereign, he is always present, a custom established many years ago, and still kept up. To-day usually the Prime Minister or a member of the Cabinet pronounces an opinion on some important question of the day.



A Committee Room

On the night of the Banquet, the general body of guests assemble in a specially constructed crush room in the Guildhall Yard, pass through the corridor on the right to the Library, where they are received by the Lord Mayor and the Lady Mayoress. They then take their seats on either side of a roped-off gangway, and await the arrival of the more important personages, the most distinguished of whom are met at the entrance of the Hall and conducted by the Reception Committee, preceded by the City Marshal and State Trumpeters, to the Lord Mayor, their names being loudly announced.

Liberal provisions having been made for the needs of the guests, whatever is left unused is on the day following, distributed among the poor.

Each Lord Mayor receives from the Corporation out of the City's cash the sum of £10,000 (in exchange for dues and other emoluments originally appertaining to the office), but so many and so great are the claims upon him, that he has to expend a much larger sum than this during his year of office. The Lord Mayor [is looked upon as the dispenser of national hospitality, which for many years has almost exclusively devolved upon the

Corporation of London. In all cases of public calamity—at home as well as abroad—the Lord Mayor of the day is the acknowledged Public Receiver and Almoner of donations. Taking only the period comprised in the last fifty years, the Lord Mayor has raised no less a sum than £7,250,000, or an average of £145,000 per annum; this includes the Hospital Sunday Fund, which amounts to about £40,000 annually. The amount collected in 1897 continues to be the record one for charitable contributions, viz., £659,923.

The "Swearing in" of a Lord Mayor

is probably the most interesting ceremony in connection with the Lord Mayor Elect. This takes place the day previous to Lord Mayor's Day, when the Lord Mayor Elect takes upon himself the office of Mayor, although, until he has made his declaration before the Judges on November 9th, he has no power to act in any matter appertaining to his office.

The Lord Mayor and Sheriffs' Committee numbering sixteen, act as Masters of the Ceremonies and attend to the general comforts of the guests. The cost of the "show" and the Banquet usually amounts to about \$20,000, half of which sum is defrayed by the Lord Mayor, and the other half by the Sheriffs.

Officers of the Corporation

The duties of the Sheriffs are almost as multifarious, and incessant as the Lord Mayor's. It is a very old office and second to that of the Lord Mayor.

The officers engaged in carrying such a gigantic corporation must necessarily be numerous, and it may prove an interesting comparison to give a few of the duties of the more well known officers so as to compare the work and responsibilities in that Corporation with our administration of Canadian municipalities in big cities.

The Recorder holds the Principal and most ancient office of any in the Corporation. He is Senior Law Officer and the representative of the Lord Mayor and Aldermen in their judicial capacity.

The office of the Chamberlain of London is of great antiquity and responsibility and in addition to his ceremonial duties has been from time immemorial and now is the Banker or Treasurer of the City.

The Town Clerk is an ancient and chartered officer, and forms a component part of the Corporation. The office can be traced back as far as the 13th century. The following duties are among those delegated to him: To attend the Court of Aldermen, advise the Court on its procedure, conduct its business and enter on the Minutes and in the Repertories the business transacted by the Court, and issue its orders. To attend the Court of Common Council and advise the Court on its procedure, conduct its business and enter on the Minutes and in the Journals the business transacted by the Court. To attend on the Lord Mayor and Aldermen on all public and ceremonial occasions.

The Common Serjeant is more or less a judicial representative.

The Comptroller of the Chamber is custodian of the deeds, leases, plans &c., of the City's property.

The duties of the office of Remembrancer are divided into three classes, viz.: Ceremonial, Parliamentary and Legal. The office has been filled continuously from Elizabethan times, and although it was originally, and continued for many years to be a ceremonial and secretarial character only, it apparently involved constant communication with the Court and Ministers.

Then there are the Offices of City Solicitor and City Surveyor, the latter's duties being the making of plans and valuations of all Corporation property, in addition to which there is a City Engineer, &c.

The Work of the Common Council

Having now described the Guildhall, the Ceremonies, Officials, it now remains to give an account of the work carried on in Guildhall in the government of the "one square mile."

The work of the Corporation is chiefly carried on by means of a number of Committees, which are entrusted with certain powers, but which are required to report to the Court of Common Council on all important matters, receiving its sanction before putting the same into execution. Among other matters, all lettings of property must be submitted to the Court for approval. The composition and formation of these Committees is as follows:—

Every Committee of the Common Council (with the exception of two or three) consists of six Aldermen and 29 Commoners; the first named are nominated by the Court of Aldermen, and the Commoners by the members for the 25 Wards (or sides of Wards), each nominating one of their number to the Court of Common Council, which usually confirms such nominations. Subject to annual re-election on St. Thomas's Day, each member serves for four years, and cannot continue longer to be a member of the same Committee unless with the consent of all his colleagues in his Ward, and also with the approbation of the Court of Common Council. This rule acts most beneficially, ensuring as it does, that, by passing from one Committee to

another, members obtain a general knowledge of all branches of Corporation work. A chairman is elected at the first meeting of the Committee in each year and acts for the year, and only in most exceptional cases is the term extended, but he remains (as late Chairman) a member of the Committee for another year.

The work of the Committees may be conveniently divided under the following heads:—Estates; Domestic; Educational; Open Spaces; Public Health; Public Service; and Additional.

Lands Committee

The City Lands Committee is the premier one of the Corporation, not only by reason of its antiquity, but by the importance of its work. The members comprising it have usually served upon most of the other Committees. Upon this Committee devolves the management of the land and buildings belonging to the Corporation with the exception of the few which fall within the special province of other committees.

The Revenue derived from the Corporate Estates forms, mainly, the fund which is known as the City's Cash, out of which all the ordinary expenses of Civic Government are paid. Among these may be men-

tioned those connected with the Mayoralty, the Official Staff, the Central Criminal Court, the Magistracy, the Mayor's Court, the Guildhall and offices and buildings connected therewith, and also a contribution of one fourth part of the expenses of the City Police Force, this amounting to over £50,000 per annum. The net average revenue for the last three years of the City's Estate is about £176,000 per annum, and the average annual rental of the property for the same period under control of the Committee amounts in the gross, to about £223,000. The number of houses belonging to the Corporation under the control of this Committee is over 2,500.

The Bridge House Estates Committee

This Committee has the control of what are known as the Bridge-House Estates, out of which are maintained London, Blackfriars, Southwark, and the Tower Bridges.

The Irish Society

Although the business of the "Honourable the Irish Society" is not managed by the Common Council, it is thought that, as all the Members are appointed by that body, from among themselves, an account of its work may appropriately be mentioned.

Until the year 1903, when the Irish Land Act came into force, the Society's property consisted of the City of Derry, with 4,000 acres, the Town of Coleraine, with 3,000 acres, the lands of Culmore, containing about 470 acres, and the Rivers Foyle and Bann in Ulster, but under the provisions of that Act the Society agreed to sell their agricultural holdings to the tenants, and only a few of these now remains in the Society's hands.



The Aldermen's Court Room

The Markets Committee

The management and supervision of the City Markets are entrusted to three different Committees.

The Market rights and privileges of the Corporation of London originated in very remote times. Markets have been in existence in the City of London for more than 1,000 years, and the Corporation has for many centuries been the Market Authority for London.

While the Corporation has from time to time waived its rights in order to permit of the establishment of markets in London by private enterprise where a demand apparently existed, its franchises as the Market Authority for London have been frequently recognized and confirmed in recent years by Acts of Parliament and decisions of the High Courts of Justice.

The Public Health Department

It is somewhat difficult in a limited space to detail the multifarious duties appertaining to this branch of the Corporation, or to give an adequate idea of the scope of its work, which is carried on by the means of four Committees, each reporting, like all other Committees of the Corporation, to the Court of Common Council.

The due administration of the work, which is carried out under upwards of fifty Acts of Parliament involves the employment of a regular staff of some nine hundred persons and an annual outlay of about £350,000.

The Port of London Sanitary Committee

The work of the Port of London Sanitary Committee properly comes under the head of Public Health, but it is placed in its present position, for the reason that the whole of the expenses attendant in carrying on the duties assigned to it are discharged by the Corporation out of its own Funds, and not out of the Rates, as are all the expenses in carrying on the work of the Health Department.

This Committee was originally appointed in 1872, and has since been annually re-appointed, under the various Public Health Acts. To it is delegated the duty of carrying into execution the powers of the Corporation, as the Port Sanitary Authority for the Port of London. The Committee has the management of the Port Sanitary Hospital, at Denton, near Gravesend, and the dealing (through their medical officers) with all cases of infectious disease brought into the Port of London by any vessels.

The City Police Committee

This Committee is the largest Committee of the Corporation, and consists of the Lord Mayor, all the Aldermen, the Aldermen's Deputies, and 29 Commoners—85 members in all.

The Committee carries the various Acts relating to the City Police into execution (except as to the disciplinary portion, which is under the control of the Commissioner), it has the general management and control of all the buildings in the occupation of the Force, Police Stations, Hospitals, &c., and provides all the necessary accoutrements. It appoints the Surgeon. The City Police Force is under the command of a Commissioner, and the authorized strength is 1,280 officers and men. The expenses of maintaining the force (about £200,000 per annum) are met by a contribution from the City's Cash of one-fourth part, and the remainder by a rate levied on the City.

The Force under the Commissioner is as follows:—

One Assistant Commissioner, 1 Chief Superintendent (Chief Clerk), 1 Superintendent (Executive Department), 1 Superintendent (Detective Department), 5 Chief Inspectors, 23 Inspectors, 23 Sub-Inspectors, 96 Sergeants, and 1,029 Constables. In addition, 150 Constables are authorized for private service, to be employed at the expense of the persons engaging their services.

The Benevolence of the Corporation

Reference is made to the part the Corporation has taken in relieving distress in every shape and form, and the assistance given in promoting and assisting philanthropic and patriotic enterprises of every kind. There is a total of amounts given for these purposes from the year 1781 to the end of 1910, which shows the Corporation's benevolence to be £1,305,856. This does not include the special funds that have been raised on behalf of the sufferers of every form of disaster by the Lord Mayor in all parts of the world.



Armorial Bearings of the City of London

The Short Ballot

(Written specially for the Journal by the U. S. Expert.)

Canadians of either English or French origin will have considerable difficulty in understanding why such an issue as the "Short Ballot" should ever have arisen. Why should ballots ever be anything but short?

The lengthening of the ballot is one of the visible signs of the tortuous course of politics on the other side of the line. The "States" conceived a mighty zeal for democracy in the third decade of the nineteenth century. It was the fruit, originally, of some unpleasant experiences which they had with a too aggressive British monarch. It was largely, too, a reaction against the seemingly aristocratic temper of the Federalist party, whose leaders were most influential in fashioning the fundamental law of the union.

The "new" men, those whose imaginations were fired by the opportunities in the great expanses of the West, went thence to "grow up with the country", and they took with them no preconceived notions of political practice or theory. Their notions of politics were rooted and grounded in, and limited by, an unbounded faith in "the people" to govern themselves. Their democracy was emotional; it was sincere; but it was of the unscientific character which was to be expected in an undeveloped country, which had no history or experience of its own to draw upon.

These early radicals were immersed in the idea that democracy was synonymous with office holding. They did not see that the key to popular control lies in making the thing so clear and simple that plain people, without special and intricate knowledge of politics, cannot consistently fail to play the citizen's part. So they began, under the inspiration of Andrew Jackson, and men of his type, to "bring the government closer to the people" by turning out of office capable men to make room for men who were "in sympathy with the administration." A clerk in a government office was short in his qualifications unless he could talk and work for the particular type of democracy which was then rampant.

Of course, it would have been very "democratic" if the theory could have been carried out and all of the thousands of government employees could have been made elective. Fortunately the people had enough sense of humor not to permit the perpetration of any such anarchical scheme. But they went just as far in this direction as the extra legal party organizations, which assumed the responsibilities of government, could persuade them to go. They have never elected government clerks, but are constantly doing what seems to Canadians an equally anomalous thing in electing coroners, secretaries of state, state printers, state dairy inspectors, city treasurers, county surveyors, etc.—officers whose functions are purely professional, or clerical in a dignified sense.

All this was not sprung on the electors at once. It was a case of making a false step, and then getting deeper and deeper into the mire. The politicians who fattened on the spoils system were quick to see the ever widening opportunity which accrued to their class from the inability of the voter to wield his ballot. A "Boss" played upon the "democratic" idea and actually convinced the people that the cure for corrupt politics was more "democracy", meaning more officials chosen by popular election.

The lengthening of the ballot which resulted from this specious plea has gone on steadily till the number of offices to be filled at one time sometimes reaches as

high as fifty-two. A ballot with forty offices to be filled and two hundred candidates to be chosen from is no oddity.

It would seem therefore that the long ballot is at once the creator and the creation of professional politics and politicians. It is obvious that a busy, active people have neither the time nor the facilities for doing what, in the usual scheme of governmental organization, is committed to responsible single officials, or small boards. The work had to be done somehow. Hence the national growth of an extra-legal irresponsible, and perforce, corruptible, though not necessarily corrupt, class of expert, professional politicians. The master mechanic, the "Boss" is a unique product of "American" politics.

The main idea seems to have been that of extending the election of public officials as widely as possible. In Illinois, for example, a state which sometimes confronts its voters with a ballot of fifty-two offices, the "machine" politicians were narrowly blocked in a recent attempt to make the Civil Service Commission and the Warehouse and Railroad Commission elective.

Fortunately, owing to the difficulty of amending the Constitution, and the other obvious difficulties, the long ballot evil has never made its way into the Federal Government. This fact is, without doubt, responsible for its relatively greater success over the other political divisions. But even this branch seems to suffer, since the constituent parts of the national political parties are the local organizations.

In the administration of public affairs, the fruit of the long ballot system is inefficiency. This is due in part to the character of the men who are able to get themselves elected to office. Politicians have come to know that the average voter can only vote intelligently for only four or five important candidates. The rest he usually votes for blindly by putting his stamp in the party circle without any adequate knowledge of their qualifications. Thus it happens that the minor offices are often filled by a discreditable type of politician who possesses the one virtue of having rendered a service to one of the two great party organizations. Possibly they have thrown their strength in the party convention according to the order of the "Boss." Their political fortunes are severally balanced against those of other party servants and they are traded into office accordingly.

Another source of inefficiency is the frequent lack of harmony in the administration. An elective official has, in a sense, a commission direct from the people. A Secretary of State, for example, can throw this fact into the face of his superior, the Governor. And yet, the Governor must see that the laws of the state are faithfully executed. Even a Governor of predominant personal force like ex-governor Hughes, of New York, is comparatively helpless under these conditions. When the Governor on the other hand is a weak brother, the "Boss" sees to it that there is harmony, in another, sinister, sense—the kind of harmony which directs the forces of the administration, one and all, in the interests of the party "machine."

Against this whole galaxy of conditions there has arisen an organized revolt. "We now see that making every office elective was exactly the way not to make popular control effective." In these words the newly elected President Wilson voices a sentiment which is rapidly gaining the attention of public leaders and the press throughout the entire United States. The most prominent embodiment of the new movement at the present time is the so-called "Commission Government" idea in the cities, which is sweeping over the

country like a prairie fire. The essence of this type of government is the control of the city's affairs by a few—(three or five) men, who are the only elective officers. This movement has already been discussed in the columns of this JOURNAL. This is only the beginning. The great work ahead is the extension of the principle to the large cities, and to the state and county governments. Much of it will have to be worked out by the slow process of constitutional amendment. The Short Ballot Organization which is taking the lead in promoting a greater simplicity in politics, lays down these principles as its fundamental articles of faith:

"First—That only those offices should be elective which are important enough to attract (and deserve) public examination.

Second—That very few offices should be filled by election at one time, so as to permit adequate and unconfused public examination of the candidates."

Aside from the adoption of the Commission plan by 141 cities, a beginning has been made in the other political divisions. The California legislature has already taken action which will shorten the state ticket. It has also enacted a home rule law which enables the people of a county to provide for the appointment, instead of the election, as at present, of administrative officials. The work at present consists principally in educating the people in the general principle. Constructive legislation will doubtless follow in due course.

Desirable Immigrants

Canada has now arrived at the pleasant position where she can choose the class of immigrants whom she admits as citizens.

During the last few months of last year, a movement was being pushed forward that would secure to the Dominion a class of men that is most desirable. Mr. E. T. Scammell, the Hon. Secretary of the Naval & Military Emigration League, toured Canada, to lay its claims to support, and succeeded in making many believe in the good which was possible.

The objects of the League are:

10. "To give advice and information to ex-soldiers and sailors who desire to emigrate;
20. "To find openings for them in the Dominions, and
30. "To advance, as far as its funds may allow, the passage money of deserving men who, through stress of circumstances, cannot pay their own fares."

Already some 600 or 700 have been sent out to Canada and all appear to have given satisfaction. During the next two years, an unusually large amount of men will be discharged from the army, owing to the special recruiting for the South African war.

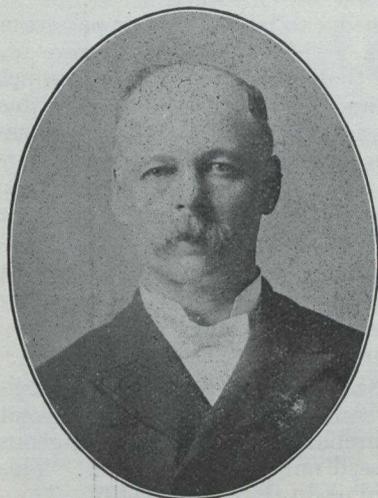
The gain to Canada in securing these men is twofold. First, they have had the great advantage of having been under discipline, and military drill—both admirable from the civic point of view. Second, they would form the nucleus of a Reserve Force, which would ultimately give Canada a Reserve that would be worth while.

From the municipal point of view, this class of men would make specially good immigrants for two classes of work. The ex-soldier would do well to fill in the numerous vacancies in the Police Service; while the ex-sailor would be a "handy man" for the Fire Brigade.

That the League has a splendid standing is seen in the fact that H. R. H. the Governor General is Patron and Field Marshal Earl Roberts is Honorary President.

Further information can be secured by writing to Mr. Scammell, c/o the Royal Colonial Institute, Northumberland Avenue, London, W. C.

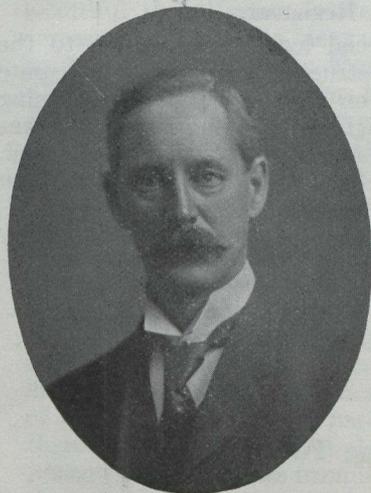
Mayor of Campbelltown, N.B.



Dr. Frank M. Murray, M. D., Mayor of Campbelltown, N.B., died of pneumonia on the 10th of last month, aged 44 years. The late Mayor passed through an experience that few civic dignitaries are called upon to face, when his beautiful town was almost entirely destroyed by fire some years ago. Mr. Murray

was an active member of the Union of New Brunswick Municipalities.

Mr. John Cardale



One of the veterans in municipal work in Manitoba has decided to return to his native country, after a quarter of a century's experience.

Mr. John Cardale has just resigned the position of Reeve of Blanshard, Man.; and also the more important and public position of Secretary-Treasurer of the

Union of the Manitoba Municipalities, which he has filled from its inception ten years ago.

The Provincial Union has passed the following resolution:

Moved by Reeve Henderson, seconded by Councillor McDonald and carried unanimously:

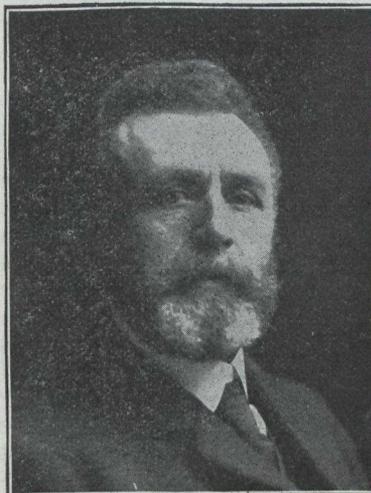
"That in accepting the resignation of Mr. John Cardale, Secretary-Treasurer, the Executive Committee of the Union of Manitoba Municipalities desires to place on record their hearty appreciation of his services since the formation of the Union; and while congratulating him upon his appointment to an important appointment under the Dominion Government in England, feels that this Union is losing the services of a capable, courteous and efficient officer."

This resolution has been endorsed by the Executive of the Union of Canadian Municipalities, for Mr. Cardale was well known in the Conventions of that body by his attendance as representative of the Manitoba Union.

Mr. Cardale will represent the Department of Immigration at Exeter, Eng., and will carry with him the best wishes of the Journal, as well as of his many friends all over Canada.

Reeve Forke, Pipestone, Man., has been appointed as Secretary of the Manitoba Union.

Victoria, B.C. Mayoralty.



The mayoralty of Victoria, B.C., has been a matter of considerably more interest this year than ever. At the election in January, Ex-Mayor A. J. Morley was declared elected by a majority of 5 votes. A recount before the City Court Judge reversed this, and the other candidate, Ex-Mayor J. L. Beckwith, was declared to be elected by one vote. An appeal was taken

and the Court of Appeals ordered a new election to be held. This was held on February 22nd, when Ex-Mayor Morley received 2595 votes, and Ex-Mayor Beckwith 2485, thus giving the former a majority of 110 votes. This election is the sixth in which Mayor Morley has been chosen to be the Chief Magistrate of the Capital City of British Columbia.

The City

"The city is a peril to the nation. It has replaced the simple life with the intense struggle for existence. For the home it has destroyed, it has substituted the unspeakable flat and the yardless tenement. Vice and crime, greed and graft, pauperism and disease, flourish luxuriantly in the city. In short, the extraordinary development of the material element in life, without the corresponding knowledge of the moral and spiritual, has made the city a menace to our whole civilization."

So says the Baptist Home Mission Board of Toronto. "Strange is it not, that the workings of an impulse so universal, a thing mankind has been doing over and over again from the very beginning, in every land and age, should so persistently be called artificial? As well call the bee-hive or the beaver's dam an artificiality as the city. It is the most natural thing in the world, an elemental form of human association, like the family or the tribe, built in obedience to some divine, if obscure, instinct. It is the expression of man's determination to free himself from the slavery of an obdurate isolation, and from the thralldom of primitive fears, the symbol of his titanic effort to conquer nature, to rise above the merely physical, and to release the spirit to higher flights."

So says Brand Whitlock.

Which view is Correct?

It does not matter much really, for the City has come to stay. It is no use calling it a curse; it is no use preaching "return to the land," it is no use decrying it. The only possible thing that can be done is to make the best of it.

The City has been allowed to drift. The well-off people for years shut their eyes to the slums and the misery. But the awakening of public interest in the conditions of other people, and the desire to become our Brother's Keeper, arouses belief that the City will not always be what the Mission Board declares it is, but that it may become a place of homes of self-respecting and comfortable citizens.

Amendments to Winnipeg Charter, 1913.

The following brief summary of the legislation procured of the local Legislature by the City, was presented to the Council by City Solicitor Hunt:—

- 1.—The boundaries of the City are extended west and south from the Assiniboine River so as to take in the land up to the Agricultural College.
- 2.—Power was given to the City to enforce payment, to pass by-laws and regulations for the management of the electric light and power works of the City, both within and without the City, but the City was deprived of the right of distress and sale of goods and chattels for non-payment for electric current.
- 3.—The City was authorized to have the signatures to the coupons on its debentures lithographed instead of being signed by hand.
- 4.—Power was given to the City to have a civic charities endorsement bureau, but the City was not given the power to prohibit the solicitation or collection for charities within the City unless authorized by the bureau.
- 5.—Power was given to the City to prohibit the erection of apartment or tenement houses and public garages in certain areas or on certain streets, when three-fifths of the owners petitioned for such prohibition. This prohibition exists in the Ontario Municipal Act and also in the Tuxedo Town Act, but in these cases there is no petition necessary.
- 6.—The limitation as to the amount of money that may be used for the construction of public baths, &c., as provided in section 72A, was removed. Of course, this still necessitates the submission of a by-law to the ratepayers.
- 7.—The question of prohibiting, and licensing of bill boards provoked such a storm of protest that the clause was stricken out altogether, and the Act stands as it did before.
- 8.—Power was given to the License Inspector and the Chief of Police to cancel licenses where a business is being conducted improperly. The Appeal, however, was taken from a Board consisting of the Mayor, a member of the Police Commission and a member of the Council, as provided in the bill, and given to a County Court Judge.
- 9.—The clause respecting the construction of sewers outside of the City limits was stricken out entirely and a new clause substituted, enabling the City to enter into an agreement with the Rural Municipality of Kildonan upon terms to be agreed upon between the two parties.
- 10.—Authority was given to the City to acquire land for a distance not exceeding 300 feet on each side of a proposed street, highway, boulevard, parkway, driveway, market square, public place, park, exhibition, playground or public building. This gives very wide powers to the City for the expropriation of land for special purposes. The section, viz., 708E, stands substantially as drafted in the Bill.
- 11.—Provision is made that after the assent of the City Surveyor has been had to a plan, it must be submitted for filing in the Land Titles Office within one month after it has been certified to. This will prevent parties from getting the Surveyor to approve of the plan and then hold same up for a long period until a change in conditions arises which enures to the benefit of the party having the plan.
- 12.—Special powers were given to the City relating to public health, and for the taking of samples for chemical and bacteriological examination and analysis, and the

right to enter upon premises, etc. It will be necessary before these powers which are embodied in Section 14 of the Bill can be enforced, to have a by-law passed in the terms of the section. I wish to point out, however, that it is just possible that there would be a conflict between the Dominion and Provincial legislation in this respect, and occasion might arise where, if the powers exercised under such a by-law were contested, they might be found ultra vires of the local Legislature. This is a suggestion merely, and I do not want to be taken as expressing a positive opinion.

13.—The clause prohibiting the naming of streets in adjoining municipalities the same as those in the City was stricken out, as was also the clause respecting trial by a judge without a jury.

14.—The City now has power to take land in addition to that which is required for the site of a street opening if it can be purchased on more advantageous terms than if it purchased only a portion of it. This clause, viz., 783A, passed as drafted in the Bill.

15.—A further clause was passed and made part of the Charter which provided that the Treasurer must give a certificate as to the moneys paid in to him in respect of exemptions of land. This was introduced at the instance of the District Registrar.

16.—Under the special legislation relative to the right of the City to construct a power plant, a dispute that might arise between the City and any adjoining municipality as to the right of stringing wires there was referable to the Lieutenant-Governor-in-Council. The Public Utilities Commissioner has now been substituted for the Lieutenant-Governor-in-Council, and the question, I presume, will be much more easily handled.

Preventing Tuberculosis.

The 13th Annual Meeting of the Canadian Association for the Prevention of Tuberculosis, of which Hon. Adam Beck, M.L.A., is President, will be held at Ottawa on the 12th and 13th of March, when a very interesting programme will be presented including: President's Address: Hon. Adam Beck; Address by Hon. Martin Burrell, Minister of Agriculture; "What the Daughters of the Empire are doing towards the Prevention of Tuberculosis": Mrs. Albert E. Gooderham, Regent of the Imperial Order of the Daughters of the Empire; Formal Opening of the New Ottawa Sanatorium, (The Gift of Hon. Geo. H. Perley.); "How the Municipality may best deal with Tuberculosis": Dr. Chas. O. Hastings, Medical Health Officer, Toronto; "Some newer features of the Anti-Tuberculosis Campaign": Dr. A. J. Richer, Ste. Agathe, Que.; "Tuberculosis in Childhood": Dr. J. H. Elliott, Toronto; "Tuberculin in Dispensary Treatment": Dr. E. S. Harding, Montreal; and "The Tuberculosis Problem in Ontario." Dr. J. W. S. McCullough, Chief Health Officer of Ontario.

H. R. H. the Duke of Connaught is Patron of the Association and has promised to attend the first session.

Full particulars can be obtained from the secretary, Mr. George B. Porter, M.B.

English and Continental Town Planning

W. G. Wilkins

Member of the Town Council and Chamber of Commerce of Derby; and Treasurer of the British National Housing and Town Planning Council.

An Address before the City Club, Chicago, Ill.

The English idea of town planning is slightly different from the German idea. The Germans have had their walled cities until within the last fifty or sixty years, and their corporate life in those cities had been bounded by their walls, so that when the walls were broken down the cities merged into the light and air of the open country. In England there has not been an attack upon a walled town for the last two hundred and fifty years, and therefore, English towns have grown, as it has sometimes been said, haphazard. There had been building by-laws, but the growth of the towns was mainly caused by idle indolence, or by the greed of industry, whichever it might happen to be, of private landowners who had very largely controlled the destinies of towns and cities upon whose boundaries their states lay.

Town vs. City Planning

There is a slight difference between many of the beautiful, magnificent pictures which you have sent out across the sea and the ideas upon town planning which we have in our minds in England at the present time.

We are not planning for the building of enormous cities, we have no special Acts of Parliament, we have no special facilities at the present time even for developing huge cities, nor for reconstructing or replanning them. What we are after is to try with many of our smaller towns to link up and to afford opportunity to the very humblest citizens of those towns for a more ample and complete possession and enjoyment of the beauty of nature and the grandeur of all creation. We are not, however, out for big city development. Many of us feel that the cities of to-day are quite sufficiently large, and we would rather see an interlacing network of towns—not quite, yet partially, covering the land—than to see gigantic cities through which men have to journey long distances from the center in order to reach the open country.

The form of town planning sometimes called the chess board system is fairly well known, I believe, to all of you here. At any rate, it has this similarity to the chess board: It has its black and white squares whereon the various moves of the men are made. The old system of medieval city planning, where cities were bounded by their walls, can also be compared to the chess board. The chess players could while away their time by setting up their castles, their pawns, and their kings and queens at the center of the board and thereby making a fair imitation of an old medieval city. The next idea of town planning was that of the concentric, and the concentric vision has held sway in England and with some German town planners. That was the idea of zones encircling the city; a large proportion of the streets and roads being circular. But this idea has largely been changed with us and we are looking forward now to radiating towns.

Town and Country

Our idea of town planning is that towns should radiate out into the country and the country radiate into the towns, bringing life, freshness and vigor to the inhabitants of the towns, thus lacing the towns and country together, putting into practical use the old-fashioned formula that 'those whom God hath joined together, let no man put asunder.'

Those of us who are members of the Housing and Town Planning Council owe a very great debt of gratitude to Mr. T. Horsfall of Manchester, who is the foremost town planner in the old country. We call him, with justice, the father of the movement. He went with us, Mr. George Cadbury and the Bishop of Wakefield, to interview our dear old revered leader, Sir Henry Campbell-Bannerman, to ask him that we might have a bill introduced in Parliament giving us town planning. Sir Henry was just then approaching the end of his days, and I shall always remember that interview—the lines of care and pain that marked his face. So the act, which was called the "Housing and Town Planning Act of 1909," was introduced by Hon. John Burns, and it will be forever associated with his name. It is a purely town planning act. It is not a city planning act. It has but very few and small powers of demolition. It is not so very much concerned with the internal economy of our present towns as the saving of our suburbs and our suburban districts from spoliation by the building speculators. It is a town-planning act in that sense. It gives us small powers of land purchase, but we are hoping to do a great deal more by negotiation, even, if you like to call it, by compromise, more so than by actual purchase, or by magnificent schemes of municipal development. We are not after building huge cities, but after developing our small towns, to give larger, fuller and freer life to all their inhabitants.

The Town Planning Act is intended to be the means of promoting a scheme which will have the force of an Act of Parliament as to the development of land. And here is what is called the most important clause of our Town Planning Act: "For the development of land likely to be used for building purposes," in which the land owner has to secure the very best interests of the coming generation, thus indeed bringing about the co-operation of all citizens for the good of all.

The Machinery of Town Planning

You may desire a few words as to the machinery whereby it is intended to try to bring about this result. First there has to be by any urban or district council, borough or city council, an application to the local government board, with a prima facie case, why that council should have liberty to prepare a plan. If that council can show that there is land likely to be used for business purposes upon its suburban area it can obtain permission. It has only to submit an ordinance survey plan of the district; one of the printed plans provided by the government, with a red line drawn around the area that it proposes to deal with, the area that it proposed to plan. And then after a few weeks' or months' delay and after notices have been served upon all the authorities within that area—because that area will in nearly every case far exceed the municipal boundaries, and the authority which is making the scheme will trench on the limits of the country or another authority, very likely, upon all sides of the town—a second plan is submitted after considerable negotiations have taken place. This second plan is to show the beginnings and the ends of the road which it is proposed to construct and to give an idea as to what is in the minds of the promoters of this scheme. Then there are more negotiations and more opportunity given for the landlords of the district to meet the local authority and see whether the objections can be remedied and the difficulties overcome.

Then a third map is produced, giving much more detail, and a local government board inquiry is held in the district, and the landowner can be represented either personally or by counsel and ultimately if the scheme seems reasonable and fair it receives the sanction

of the local government board and then it has all the force of an act of parliament which has received the royal assent. That is done for the purpose of reducing the very large number of more or less miniature acts of parliament and save local authorities bringing all their petty grievances and small annoyances to the attention of parliament, enabling them to co-operate with the landowners and enabling the landowners to co-operate with the municipal and urban and district council, so that the plan which is prepared may be as fair as human ingenuity and skill can make it for the good of all the inhabitants of the district.

Progress Under Town-Planning Act

This is the scheme that we have been looking forward to for a number of years in England, and we are hoping that it may receive very kindly welcome at the hands of all municipal administrators. At the present time about one hundred local authorities in England have received permission to prepare their scheme. No scheme is yet completed. It is estimated and expected that it will take three years for all the negotiations to be gone through and all the difficulties to be smoothed over before any scheme can be finally and completely adopted. But we consider on our side of the Atlantic that it is well worth this slight delay and that it is a very great advantage for landowners and municipal administrations to be brought face to face on either side of the table and to feel that they are endeavoring not only to secure bargains each from the other but to promote the public weal.

If you ask us what effect it has on the landowners we reply that they are afforded an opportunity of showing their objections to the scheme which the municipality may propose. This is conducive to harmony. If those objections are overcome, if it can be shown that their fears are groundless, and if ultimately those schemes receive approval from the local government board and a scheme is adopted by the local government board as a fair scheme, then that scheme represents the only method whereby that landowner can develop his land.

That is a very important phase of the subject. I have no doubt whatever that you will hold varying views this morning as to whether that is democratic or undemocratic, as to whether it is desirable in a free country or whether it is undesirable, but it remains the fact: that in the future, when those schemes are finished, the municipality is master of the situation in being able to say to the landowner: "Here is the plan; when you want to make these streets and roads and bridges in order to develop your land, these are the directions, and these are the streets and roads which we desire you to make."

Scheme Not New in Germany

This has been in force in Germany for some considerable period. Lord Rothschild, for example, is the owner of large estates in West Frankfort, and he can develop those estates only along lines already laid down by the municipal authorities in Frankfort. It seems to us after the opportunity has been given to the landowner to state his case that it is only fair and reasonable that the rights of the present generation and of the coming generation shall overcome any scruples which the landowner may have in that direction. It is of the highest importance that the problems of fresh air, ventilation, sewerage and transit should be faced and faced honestly and squarely at the same time. Our towns have too long grown up in thoughtless, careless, haphazard fashion, and we feel that the time has now come when order and method should take the place of the careless

method or absence of method which has up to this time prevailed. And the towns in formulating these schemes are bound to consult the greatest authorities upon the subject of town-building. They must consult financiers before the local government board will attempt to pass such a scheme. They must consult antiquarians and historians for the preservation of all monuments of historical interest. They must most certainly bring the best medical testimony to bear on the problem of the town of the future. They must have the best advice as to the wind and weather currents, and they must be able to call for not only the best architectural advice but the best geological advice as to the ways and methods whereby their town shall grow. It has to be by a combination of the best brains of the best inhabitants of the district that the future of the town shall be assured. And then I need not say to you, gentlemen on this side of the Atlantic, that they will be obliged and must call in the advice of the skilled commercial men of their neighborhood. However desirable it is to house the people properly, and I believe you are all enthusiastic on that great question, it is also desirable to find the people occupations, and the commercial development of every district ought to be carefully studied.

At the end of the Town Planning Act, almost by a fluke, we got in a few words which are to us in England the real key to the whole situation, and many of us consider them to be worth about as much as the rest of the act. At the end of the last schedule as to the powers of the Local Government Board, and the rules and regulations which it shall guard and enforce, we had words inserted just at the last passing of the bill which give power under this scheme to determine the number and kind of buildings which may be erected on any site and the height and character of those buildings. We consider that the power to limit the height of buildings and to say how many people shall live or herd together on an acre, and the occupations which shall be carried on in any given locality is the most important part of the measure. We consider that it is only justice to the inhabitants of the town which is about to arise that those powers should be held and used. We feel that the health of the community ought to be the supreme law, and that it ought not to be at the caprice of any manufacturer or band of manufactureres establishing work shops to plant obnoxious occupations anywhere, and that powers should be given to regulate the manner in which business of that kind shall be conducted.

The Purpose of Town Planning.

We desire to give the people full and free access to their work and the fullest opportunity to quickly go from and to their homes in following their work. We desire that they shall lose as little time as possible, and yet that they may have access to light and air and the fullest opportunity to develop their own and their children's lives in the country fields. We desire to have the experience of the past united with the experience of all our fellowmen in our towns and cities to provide such dwellings for the future race as shall make the dirt squalor and disease of the slums pass away like an ugly dream of the night. And therefore, while I feel utterly unable to pronounce any opinion upon the vast schemes which you have sent to us, we hope that it will not be so much a question of palatial buildings as of seeing that everyone, even the poorest inhabitant within your borders, has the health, wealth and development of human life fitting him to a good citizen of this community.

City Clerk's Office
LONDON, ONT.



TELEPHONE NEWS



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

AUTOMATIC TELEPHONE SYSTEMS

We take pleasure in announcing to all the municipalities throughout the Dominion that our automatic telephone systems have proved, and are proving to be, very successful, both from the standpoint of operation, and from the great satisfaction given to the telephone subscribers and users.

We are manufacturing in Canada, employing Canadian labor and capital, complete automatic telephone systems, switchboards, substations and supplies of a very superior type. We are prepared, and offer, to supply on reasonable notice, complete automatic telephone equipment for any size of exchange from 100 lines up to 10,000 lines or more, and at reasonable cost.

Our automatic telephone system lends itself to any desired subdivision desired for the purpose of saving in trunk line installation, cheapening of service and installation, and for flexibility, adaptation to conditions, economy in operation, durability, positive contacts and superior talking circuits, automatic party line telephone service where required, together with all of the other advantages and savings afforded by the superiority of automatic over manual telephone apparatus and operation.

We take this occasion to again inform the officers and all municipalities throughout the Dominion, as well as the general public, that the Canadian patents owned and controlled by our company, cover the essential principles of automatic telephony, and that it is our opinion and belief that no system of automatic telephones or semi-automatic telephones of any considerable size can be operated without infringing upon the claims of our Canadian patents, and that we are manufacturing in Canada under our patents and are selling and offering for sale automatic telephone equipment in accordance with the rules and practice and Patent Laws of Canada and that we will hold all infringers, both public and private, responsible.

The great saving in cost of installation and operation of automatic telephone systems over manual telephone systems is becoming generally recognized both by the public and by telephone engineers and experts generally. The superiority and general desirability of automatic telephone service over that of manual telephone service has been so thoroughly demonstrated that it is now recognized generally, and we will be pleased to correspond with any and all municipalities and individuals, corporations and associations desiring further information or contemplating the installation of telephone apparatus.

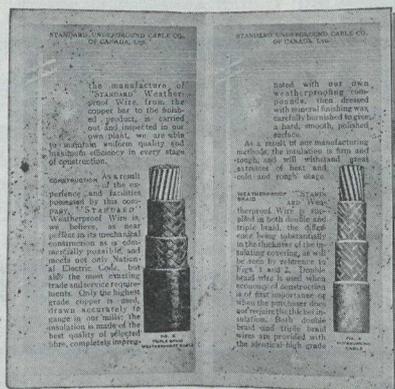
All of our telephones and telephone equipment, both manual and automatic, are fully guaranteed both as to quality and workmanship.

Canadian Independent Telephone Co.,
LIMITED

18-20 Duncan St., TORONTO, Ont.

H.W.B.

Telephone Exchange System.—The invention relates particularly to trunk line equipment employed for uniting substations whose lines extend to different exchanges. Among the objects of this invention are, first, the provision of a trunk circuit extending between exchanges, which serves metallicly to separate the batteries at the two exchanges; second, the provision of means whereby proper control is had over supervisory apparatus where a trunk circuit fulfilling the first object of the invention is employed. — Elmer R. Corwin, Chicago, Ill., Assignor to Corwin Telephone Mfg. Co., Chicago, Ill. — 1,040,634.



It will be profitable for you

to read this booklet describing how high quality weatherproof wire is made. We control every step in the manufacture of our wire from the copper bar to the finished product and can afford to stand back of it with our reputation.

“Standard” Weatherproof Wire

has been tested by over 30 years of successful service under various and exacting conditions. In addition to superior quality we offer all the advantages of a home-made product — adaptability to your service, economical prices, prompt shipments, in short, *better service.*

Write for Weatherproof Wire Booklet No. 226

Standard Underground Cable Co. of Canada, Limited
Hamilton, Ont.

Montreal, Que. Winnipeg, Man.
Boston, Mass. Seattle, Wash.

The oldest established firm of Chartered Accountants in British Columbia

W. T. STEIN & COMPANY
CHARTERED ACCOUNTANTS

Chartered Accountants, Edinburgh, 1889
“ “ British Columbia, 1905
“ “ Canada, 1909



**MUNICIPAL
AUDITING
A SPECIALTY**

With our staff of trained experts, we are prepared to handle any Municipal work, and submit complete and accurate Reports before the elections for the ensuing year.

319 Pender Street,
P. O. BOX 816

Vancouver, B. C.
PHONE 461

MICHIGAN WESTERN
CEDAR POLES
SHIPPING FROM MAIN YARDS ASSURES OUR CUSTOMERS PROMPT DELIVERY AND SELECTED STOCK AT LOWEST PRICES CONSISTENT WITH QUALITY AND SERVICE.
THE VALENTINE-CLARK CO.
MINNEAPOLIS MINNESOTA

NAUGLE POLE & TIE CO.
5 SO. WABASH AVE.
CHICAGO, ILL.
The Trinity in Poles
“Service”-“Price”-“Quality”
POLES

PARTRIDGE-DYER LUMBER CO.
Dealers in White Cedar Products.
POSTS, POLES, PILING.
WRITE FOR PRICES
BEAUDETTE, Minneapolis

Head Office :
PRESCOT, England

PAID UP CAPITAL \$8,500,000.00

Works : PRESCOT, HELSBY
and LIVERPOOL, England

British Insulated & Helsby Cables

LIMITED

ELECTRIC LIGHT AND POWER CABLES

Sole representatives for Canada

CANADIAN BRITISH INSULATED COMPANY
LIMITED

MONTREAL, QUE.

**CANADIAN INDEPENDENT
TELEPHONE ASSOCIATION**

OFFICERS FOR 1912-13 :

President : G. W. JONES, Clarke, Ont.

Sec.-Treas : F. DAGGER, 21 Richmond St. W., Toronto

Temiskaming Telephone Co.

The financial statement for 1912, (the eighth year) shows:—

Receipts.....		\$32,725.02
Expenses:		
Maintenance.....	\$7,049.83	
Salaries.....	7,221.49	
Interest and Discount.....	1,285.82	
Other Expenses.....	4,661.92	
		\$20,219.06
Profit.....		\$12,505.96

Dividends at 8 per cent. have been paid; depreciation has been credited with \$8,788.55; the Emergency Reserve stands at \$25,000, and there is a balance of \$88,793.93.

The assets are \$108,949.09, and the liabilities (including the emergency reserve, \$25,000; and the subscribed stock, \$50,124) are \$100,55.16; leaving a balance of \$8,793.93 as a surplus.

The Company has 952 subscribers and a good feature is the successful attempt to secure an exchange of business with the T. & N. O. Ry. and this over the Bell System, which last year was urged as a concession which the Ontario Government would do well to grant.

The officers elected at the annual meeting were:

President, T. McCanns; Vice-President, Geo. Taylor, Secretary-Treasurer, P. R. Craven.

**Abstract of Telephone Patents
granted in the United States**

Prepared for *The Canadian Municipal Journal* by

Edward E. Clement,

Telephone Patent Expert, Washington. D.C.

Telephone Transmitting Appliance.—This invention relates to telephonic apparatus for the deaf and specifically to a transmitting appliance to be worn as an attachment to the clothing or apparel. It combines a telephonic transmitter of great sensitiveness with an apparatus for regulating the sensitiveness so as to suit all conditions of practice, and yet make the outfit simple in appearance and not suggestive of electrical switch-board apparatus. — John K. Rhodes, Assignor to Kelly Monroe Turner, Jamaica, N.Y. — 1,039,443.

Cordless Jack Box.—The invention relates to cordless jack boxes and has for its object the provisions of improved means for interconnecting various circuits. One embodiment of the device comprises a plurality of jacks adapted for association with plugs to interconnect a plurality of circuits associated with a jack by the insertion of a plug. — Ellis Eugene Dildine and James A. Rugh, St. Paul, Minn., Assignors to Sandwich Electric Co. of Sandwich, Ill. — 1,039,656.

Emergency Signalling Device for Telephone Exchange Systems.—The main object of this invention is to enable any telephone subscriber to send an emergency call over the telephone line circuit to the central station independently of the subscribers' telephonic instruments through the medium of the usual audible or visual signal without in any way altering or interfering with the construction or operation of the telephone system and in such manner that the central operators may instantly distinguish such call and notify the police. — Irving D. Fellows, Syracuse, N.Y., Assignor of one-half to James H. McCartney, Rochester, N.Y. 1,039,667.

Controlling Apparatus.—This invention pertains to electromagnetic circuit controlling apparatus, and is especially directed to means for governing the movement of automatic telephone selecting switches. The invention makes use of an impulse sending device on the stepping magnet of the switch which sends impulses to a series of controlling relays actuated successively by the impulses, the last relay in the series operating to disable the stepping magnet. Means are provided for starting the stepping magnet and for determining the number of steps by causing the impulses to effect the controlling relays at a predetermined point in the series. — Edward C. Molina, East Orange, N.J., Assignor to American Telephone and Telegraph Co. — 1,039,988.

Electric Signaling Device.—This invention relates to a signaling device for sending electrical impulses, and its particular object is to provide a device easily applied to the ordinary telephone for use with automatic telephone systems, and also for fire alarm signaling. Another object of the invention is to provide means whereby the timing of the impulses in the circuit may be regulated, an air cushion being used for the purpose of regulating the movement of the circuit breaker. — Roy C. Nevin, Berkeley, Cal. — 1,040,389.

Device for Aiding the Hearing.—The chief object of this invention is to provide improved connecting devices for the purpose, which will permit of the battery being instantly and easily connected or disconnected at will. A fresh battery can thus be substituted for an exhausted battery with the greatest ease by even an unskilled person; while the ease with which the substitution can be effected materially simplifies the use of the apparatus and makes a user's lack of skill or knowledge less liable to result in derangement or imperfect operation of the apparatus. — Eugene W. Schneider, New York, N.Y., Assignor to The Mears Ear Phone Co. New York, N.Y. — 1,040,428.

Device for aiding the Hearing.—This invention relates to apparatus for aiding the hearing, operating on the telephone principle, and pertains more particularly to the devices for receiving the sound valves, and translating the same into pulsating electric current for transmission to the earpiece or receiver. — Eugene W. Schneider, New York, N.Y. — 1,040,429.

Coin Collector.—The invention relates to a coin collector for telephone pay stations, and its object is to provide apparatus of increased efficiency adapted for use either as a local or a toll coin-collector. The principal feature of this invention relates to an electromagnet and a circuit arrangement therefor, whereby the charging of the call is controlled. — Amos F. Dixon, New York, N.Y., Assignor to Western Electric Co., Chicago, Ill. — 1,040,526.

Telephone System.—The principal objects of the invention are to provide an improved automatic-ringing arrangement for telephone systems; to provide improved means for operating the supervisory signals in such systems; and to provide improved means for automatically controlling the operator's circuit in connection with the plug-cord connecting circuits. — Elmer R. Corwin, Chicago, Ill., Assignor to Corwin Telephone Mfg. Co., Chicago, Ill. — 1,040,629.

Telephone System.—The objects of the invention are to provide an improved automatic-ringing arrangement for multiple telephone systems; to provide improved means for controlling the line signals in such systems; to provide improved means for controlling the supervisory signals in such systems; and to provide improved means for automatically controlling the operator's circuit in connection with the plug-cord connecting circuits. — Elmer R. Corwin, Chicago, Ill., Assignor to Corwin Telephone Mfg. Co., Chicago, Ill. — 1,040,630.

Busy-Test for Telephone Systems.—This invention deals principally with the busy-test for telephone systems. The principal objects are to provide an improved busy-test arrangement for multiple telephone systems; and to provide improved means for automatically controlling the busy-test arrangement. — Elmer R. Corwin, Chicago, Ill., Assignor to Corwin Telephone Mfg. Co., Chicago, Ill. — 1,040,631.

Telephone System.—The invention relates to telephone systems of the type in which there are no operator's listening or ringing keys employed in connection with the connecting circuits. The principal objects are to provide a system in which the called party is automatically signaled when connection is made with his line; to provide improved means for controlling the signaling currents sent over the called party's line and for automatically producing intermittent signaling over such lines; to provide improved signaling mechanism and improved means for controlling the operation of same; to provide a signaling pilot in connection with such a signalling system; to provide improved means for automatically controlling the operator's telephonic connection with the various connecting circuits of the system; and to provide improved jack and plug connections. — Elmer R. Corwin, Chicago, Ill., Assignor to Corwin Telephone Co., Chicago, Ill. — 1,040,632.



WESTERN CIVIC NOTES

CUDWORTH, SASK. The population is 300 and is steadily increasing. A mile of street has been cleared and three quarter of this has been graded; half a mile of sidewalks has been laid out.—The municipal hall is the largest between Dauphin and Rostern.—Two or three miles of streets will be graded during the summer and cement sidewalks laid in the principal streets.

DAUPHIN, MAN. The Bank of Montreal has opened a branch here.

DUNMORE, ALTA. American capitalists, organized under the name of the Dominion Clay Products Company, are starting a plant here on the industrial site.—Work on the waterworks system is being commenced.

EDMONTON, ALTA. Two municipal model farms are to be established here for criminal and for indigent persons, the official in charge being designated as Superintendent of Charities and Reforms; one farm is for short-term prisoners, the other being for persons, who, from circumstances or sickness, cannot obtain suitable employment, but do not wish to become public charges.

MEDICINE HAT, ALTA. The Dominion Bank has opened a branch here, making eight banks now.—The Alberta-Saskatchewan Paper and Strawboard Products Company, Limited, will erect a large factory on a site given by the city.

MELVILLE, SASK. The new town hall costing \$55,000, is almost completed.

REDCLIFF, ALTA., near Medicine Hat, is now an incorporated town with a population of 917.—Four banks have secured sites and will build premises in the spring.—Nine big factories are now in operation or under construction; free sites, free gas and in some cases free raw materials are furnished to the factories.—Natural gas is supplied for heating and lighting, at a flat rate, the consumers using as much as they desire, for no meters are installed.

PRINCE ALBERT, SASK. The C. N. R. is adding to its chain of trans-continental hotels, by building one here, costing \$500,000.—The Bank of Montreal has opened a branch here.

REGINA, SASK. The new official residence of the Lieutenant-Governor is to be situated near the Parliament Buildings, and will be built this spring.

REGINA, SASK. It is reported that the street railway and electric light commissioners will be appointed during the year.

ROCHE PERCEE, SASK. The Anglo-Canadian Brick and Coal Company is establishing a big briquette plant, where the company will develop the immense coal areas.

SASKATOON, SASK. The largest reinforced concrete bridge in the Dominion is to be built here; the Provincial Government will pay two-thirds of the cost and the city will pay the remainder.

SCOTT, SASK. The Royal Bank will erect a fine two-storey building this spring.

ST. VITAL, MAN. The by-law to amalgamate with St. Boniface was defeated by a majority of 34.

TABER, ALTA. In four years this place has sprung from a hamlet to a town of 4,000 inhabitants.

WILKIE, SASK. The Board of Trade has decided to employ a publicity manager. — The town is arranging to reserve considerable land for industrial purposes.—The building of the Union Bank of Canada is nearly completed.

WINNIPEG, MAN. The new city directory gives the population of Greater Winnipeg as 260,436, an increase of 33,097 over the population last year, reckoned on the same basis.

YELLOW GRASS, SASK. A Winnipeg firm is wiring the streets for the town's electric lighting system.

PERSONAL

Mr. C. J. Ford has been appointed City Solicitor of Calgary, Alta.

Mr. Richard Mitchell, former city clerk of Guelph, Ont., died recently, aged 82 years.

Mayor Anresasen, of Humboldt, Sask., has been appointed superintendent of civic works in the town, with a salary of \$1,800.

Ex-Mayor John Chamberlain, of Colingwood, Ont., died recently; he served as Councillor, as Mayor for three terms, and was Chairman of the Water and Light Commission.

M. J. Grant Henderson is resigning his position as Industrial Commissioner of London, Ont.

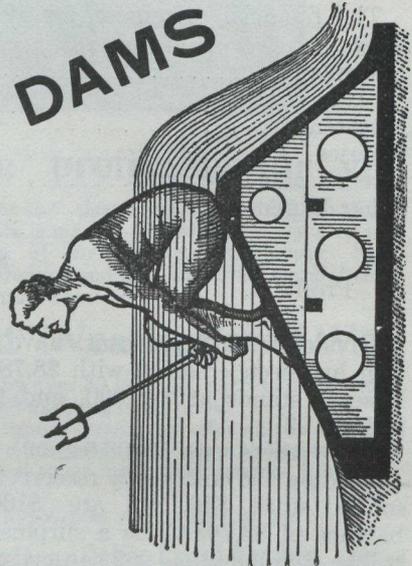
N. F. W. Clayton has been appointed clerk of Oak Bay Municipality, B.C.

Mr. J. Fairweather was appointed assessor and water commissioner of Oak Bay Municipality, B.C.

**AMBURSEN
HYDRAULIC
CONSTRUCTION
COMPANY**
OF
**CANADA,
Limited.**

405 Dorchester St., West,
MONTREAL, Que.

**TIGHT, PERMANENT
and inexpensive**



Cast Iron Water Pipe

SEND YOUR ENQUIRIES

TO

JOS. R. MARTIN & CO.

Board of Trade Bldg., Montreal

DALY'S CANADIAN CRIMINAL PROCEDURE

1911

The model work for Magistrates
in every Province

HALF-CALF, \$6.50

The Carswell Company, Limited
TORONTO, Canada

The Oldest Established Accountant Firm
in Saskatchewan

GLADWELL, WILSON & CO.

Successors to GAMBLE, GLADWELL & CO.

Chartered Accountants

Auditors, Liquidators and Trustees

MUNICIPAL AUDITING A SPECIALTY.

Dominion Trust Building, Regina.

CHAS. V. GLADWELL,
C. A. Auditors.
Offices at Weyburn and Swift Current

City of Regina,
Towns of Mooseomin,
Arcola, Melville,
Lumsden, Estevan,
Swift Current,
Carlyle,
North Battleford.

F. J. WILSON,
C. A.

NEWS—NEWS

Boom your "Town".
 Advertise in the "Civic Notes."
 There is no charge.

ROMAN STONE

is specified by the most fastidious Architects and recommended by the most careful Engineers. Made from pure white marble and machine tooled after casting, Roman Stone has proven itself a building material worthy to be used in the finest structures.

Send your plans for an estimate and write for descriptive literature.

The ROMAN STONE CO. LIMITED

50-100 Marlborough Avenue. TORONTO

Montreal Representatives:

T. A. MORRISON & CO.
 204 St. James Street

H. J. Bowman, D.L.S., M. Can. Soc. C.E.
 A. W. Connor, B.A., C.E.,

BOWMAN & CONNOR

Consulting Municipal and Structural Engineers
 Concrete and Steel Bridges and Buildings

Cement Testing | 26 Toronto St., TORONTO
 Branch Office: BERLIN

A VENDRE

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



W. D. Lighthall, K. C., M. A., F. R. S. L., etc.
 C. A. Harwood, B. C. L.

CABLE ADDRESS: "LIGHTHALL"

LIGHTHALL & HARWOOD

BARRISTERS, SOLICITORS,
 ADVOCATES, ETC.

CHAMBERS

New York Life Building,
 Place d'Armes, - Montreal

H. J. ROSS,

ACCOUNTANT TRUSTEE

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

Municipal Audits a Specialty.
 Municipal Bonds Negotiated.
 Estates Managed.

180 St. James St., Montreal

SEND
TENDERS
NEWS

SUBSCRIPTIONS

TO

CANADIAN MUNICIPAL JOURNAL

CIVIC NOTES

EASTERN CIVIC NOTES

BERLIN, ONT. The concrete stand-pipe, said to be the largest on the continent, is ready for use; its capacity is 500,000 gallons and was erected to increase the water pressure for fire protection.

CHATHAM, ONT. The Dominion Cannery, Limited, is to erect a \$65,000 factory here the coming summer.

COLLINGWOOD, ONT. The water and Light Commission has decided on a new intake and filtering system.—The connection for the Hydro-Electric is almost completed.

ELORA, ONT. The first steps towards securing Hydro-Electric power have been taken, and the scheme will be energetically pursued until the village has its own lighting plant.

FORT WILLIAM, ONT. A big cordage company is considering a proposal to establish a warehouse, and eventually a branch factory here.

GODERICH, ONT. A new industry, the Rice-Knight, Limited, of Toronto, is proposing to establish a plant here to manufacture electric fixtures.

HASTING COUNTY, ONT. The Warden of the County will pay the fares of all members of his council who will attend the good roads convention this year.

LONDON, ONT. The long-standing problem of bridging the Thames at Wharnclyffe Road, joining West and South London, has been settled, and the bridge will be constructed.

MONTREAL, QUE. A big campaign for better housing conditions is planned by the City Improvement League, the Anti-Tuberculosis Society, etc.

OTTAWA, ONT. The lakes in the Gatineau Hills are recommended as a source affording a pure water supply to the city; should the cost prove too much the alternative is the Ottawa River, which would have to be purified by chemical treatment (mechanical filtration); a final report will be made later.

OTTAWA, ONT. The Government has adopted a comprehensive scheme for the further beautifying of Parliament Hill, consisting of an imposing group of new buildings with a splendid landscape scheme and vista along Wellington street. It will probably take several years to gradually carry out the general scheme of parks and vistas.

PETERBOROUGH, ONT. Two new industries are locating here, one manufacturing metal door and window frames, and a dairy supply company, occupying a site of fifteen acres and employing five hundred men.—The Peterborough Lock Company has extended its plants.—A firm manufacturing yarns and thread is planning to double its capacity and triplicate its dye-house.

RICHMOND HILL, ONT. The by-law to authorize the Council to enter into an agreement with the Toronto and York Radial Company for a supply of electric energy, was passed.

SEAFORTH, ONT. The by-law granting aid to the Duncan Legging Company, was passed.

ST. JOHN, N.B. The Board of Trade started a campaign to increase its membership to 1,000 members who would pledge themselves for three years to boost the city; an industrial commis-

sioner of experience will be engaged and a systematic campaign started to secure for the city those industries for which its location and available raw material are best adapted.—The Quebec Bank has opened a branch here.

ST. LAMBERT, QUE. Work on the Grand Trunk Railway roundhouse is nearing completion; the structure as a whole comprises:—roundhouse, machine shop, boiler house, fan house, office and stores, casting store, and sundry accessories; this yard when completed will be one of the largest on the system and will accommodate 2,100 cars.—The Canada Brick Company has been turning out about 20,000 brick a day since the beginning of the year.—Carter's Ink has secured a site for a factory.

ST. THOMAS, ONT. A structural steel plant is to be erected here, costing \$100,000 that will employ 160 men.

TILLSONBURG, ONT. Two of the four by-laws were passed, as follows:—Oxford Linen Mills passed; Waterworks improvement, passed; park by-law defeated; Vending Machine Company, defeated.

TORONTO, ONT. The Mayor, Controllers and a number of Aldermen visited Montreal to inspect the filtration plant.—The City can have an eighteen-foot subway on Yonge street if it pays the cost.—A flaw was discovered in the filtration plant meter.—The first woman's police court in Canada has been opened here; and two women have been appointed for police duties.

TRENTON, ONT. The Canadian Creosoting Company has bought 38 acres and will erect a \$250,000 plant, starting with 100 employees.

WELLAND, ONT. The Town Council has authorized the purchase of the Ontario Power plant here, which is supplying power to a number of factories, and will use it in connection with the Hydro-Electric system being installed by the town.

WINDSOR, ONT. The city has now sold all its available factory sites and the Council is negotiating the purchase of some more land for this purpose.—The by-law to authorize the purchase of several acres of ground, to be used for incoming factories, was passed.

**Perfect Ventilation
 for Large Buildings.**

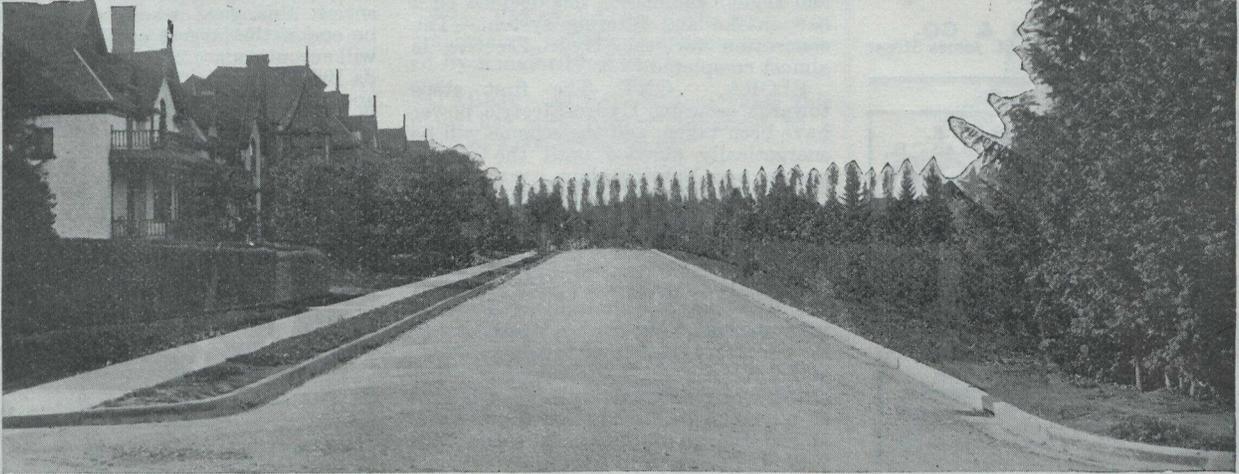
There is no excuse, now, for schoolhouses, factories, or municipal buildings not being thoroughly ventilated, when, at a comparatively small cost, a Burt Ventilator can be installed. The Burt has completely solved all ventilator difficulties.

Write to-day for special catalogue fully describing it.

**GEO. W. REED, Limited
 MONTREAL**

Tarvia

*Preserves Roads
Prevents Dust~*



Roland Street, Berlin, Ont., Constructed with Tarvia Modern Pavement.

Berlin's Experience with Tarvia

THE above street in Berlin, Ont., was built in 1912 with a five or six inch base course of broken field stone laid on a well rolled subgrade. The stone was filled with sand and rolled and then three-quarters of a gallon of Tarvia X per square yard was applied. A second or wearing course of stone about 2½ inches in depth was spread on the Tarvia and about 1¼ gallons of Tarvia X was spread over each yard of this stone. Screenings were then added to fill the voids and thoroughly rolled in. A seal coat of approximately ½ gallon per yard was then applied, covered with coarse sharp sand and rolled.

This is the method which the city of Berlin has used in all its construction work for the past three years. The oldest roads of this type

are giving excellent satisfaction and in fact, their success is the reason for their steady extension.

A road so constructed is bonded for seven inches of its depth with the densest and most viscid of bitumens. The road will not change its contour for many years and if the surface screenings are occasionally renewed, the maintenance cost of the road will be less than for any other type. The surface is smooth, waterproof, quiet, cleanly and handsome. In fact, the layman finds it difficult to believe that these are macadam roads at all.

The foregoing is the most thorough type of Tarvia work. For surface treatment and dust prevention, there are the lighter grades of Tarvia—Tarvia A and Tarvia B, the cost of which is less and the work of application simpler. Booklets on request.

THE PATERSON MANUFACTURING COMPANY, LIMITED
MONTREAL TORONTO WINNIPEG VANCOUVER

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

MUNICIPAL NOTES—Continued

SAULT STE. MARIE, ONT. British and foreign capitalists are interested in a \$1,500,000 dry dock and shipbuilding plant; they will buy their own site, but will be given concessions.

ST. CATHARINES, ONT. Three large factories have located here during the last year; there are about one hundred industries here, and more will be added during 1913.

ST. JOHN, N.B. The City Commission has decided to reclaim a large area at the south end of the city for industrial sites; it will be expensive, but already two companies are waiting for sites there, a brass and iron industry employing a thousand hands, and a wood-working plant. — There will be a new sugar refinery in the same neighborhood. — The city has appealed to the Federal Government to increase by 300 feet the length of the new piers to be constructed in West St. John. — There is a rumor that natural gas will be piped into the city during the year. — The N. B. Hydro-Electric will make a large expenditure to provide another source of light, heat and power. — A superstructure is to be added to the \$300,000 bridge to connect East and West St. John, and provide continuous Street car service. — The Partington pulp mill is making important enlargements.

STRATFORD, ONT. The by-law giving a 25-year franchise to the Stratford Railway Company (virtually the C.N.R.) was carried.

ST. THOMAS, ONT. The Michigan Central Railway has presented the Y. M. C. A. with a 99 year lease of a plot of ground for a \$50,000 building.

THREE RIVERS, QUE. The Government has called for tenders for a new public building. — A huge dam is to be built by the Dominion Government on the upper St. Maurice River, for generating electricity; it will be three times as big as that at Assuan, the area of the proposed reservoir is to be 300 square miles, and the amount of the water stored to be about 160 billion cubic feet; it will drain a basin of more than 16,000 square miles, and is expected to bring in \$100,000 per year.

TORONTO, ONT. The Council decided to abolish three committees. Island, Fire and Light; Legislation and Reception. — On a recommendation of the Board of Control the Police Board has been increased from three to five members. — The first civic street railway car was put in operation by Mayor Hocken; Sunday cars will be operated on this line, as there is no opposition to Sunday cars on the Toronto Street Railway lines. — The filter plant leaks 5,000,000 gallons daily, so a British expert is to be called on to report on the water proposals now under consideration. — A new Post-Office, Customs House, Immigration and Agricultural, Military and Public Works buildings, will be built. — The Woodbine sewage disposal plant must be replaced by a new one, owing to cracks which may cause its collapse. — The proposal that the Board of Control should devote their whole time to civic affairs, has been supported by the Council. — The nine

important by-laws were passed with large majorities; they were as follows: — Bloor Street Viaduct, storm sewers, National Sanitarium, Sick Children's Hospital, Good Roads, Island Filtration, Scarboro Extension, Garbage Disposal, Assessment Reform. — Fire broke out in the City Hall, but did small damage. — There is a suggestion for the city to build two-family houses within walking distance of the business district to rent at economic rates for workingmen.

WALKERTOWN, ONT. The by-law to extend the electric light service was carried.

WEST VANCOUVER, B. C. It is proposed to have a bridge over the Capilano. — Arrangements are underway for the B. C. Electric Railway to run a light and power line into the municipality; the council has voted in favour of a municipally owned power plant, this being in line with their policy of having as many as possible of the public utilities owned and operated by the people. — A new by-law for the regulating of traffic has been brought forward.

WINNIPEG, MAN. The city and the Winnipeg Electric Company will have the electric poles and conduits in joint use and the city will pay for removing the company's lines to the city poles. — Work will commence in the spring on the enlargement of the Royal Alexandra Hotel and the C. P. R. Station — It is proposed to establish wells at the disused stone quarry near Stony Mountain, from which an inexhaustible supply for the city could be obtained. — A request has been received for the establishment of a municipal morgue.

DAUPHIN, MAN. The new branch of the Bank of Montreal has been opened for business. — Over 300,000 bushels of grain have been shipped from this point to the East. — The annual Seed Fair was extended over three days to be devoted to lectures given free by the staff of the Manitoba Agricultural College.

EDMONTON, ALTA. A three-storey market will be erected at a cost of \$100,000, from designs by city architect Jeffers. — City Engineer Latornell has been instructed to prepare plans for a civic paving plant, and engage a paving engineer; half a million square yards of permanent will be laid this year.

HALIFAX, N. S. It is stated that the Federal Government will spend \$20,000,000 on terminals, making the port one of the best on the Continent.

QUEBEC, QUE. The issue of 4 per cent. debentures, made for the city by the Bank of Montreal in London, was over subscribed. An action has been taken by a tax payer to set aside this transaction, as he claims that the necessary number of Aldermen were not present when the by-law was passed, and that commission and other expenses make the interest 4.64 instead of 4 per cent.

WILKIE, SASK. The by-laws for the expenditure of \$79,000, were carried.

WOODSTOCK, ONT. The by-law giving power to the Board of Education to spend \$30,000 was carried.

SAULT STE. MARIE, ONT. The city will grant a bonus of 2½ per cent. on the investment of the British capitalists who are building a dry dock and shipbuilding plant, and the company will be exempt from all taxation but school taxes for 20 years.

SOURIS, MAN. The by-law authorizing the expenditure of \$40,000 for electric lighting system was defeated by one vote, the majority being one vote less than the sixty per cent. necessary to sanction the by-law. — The by-law granting exemption for assessment of \$25,000 to McCulloch and Sons, Millers, was passed. — The by-law authorizing the expenditure of \$5,000 for school purposes was passed by a large majority.

ST. MARY'S, ONT. The by-law to raise \$17,000 to meet the civic overdraft was carried.

STRATFORD, ONT., has sold \$10,000 4½ per cent. 20-instalment (guaranteed) to Messrs. G. A. Stimson and Company. — The by-law to raise \$15,000 for athletic grounds, was carried.

TORONTO, ONT. The Council voted \$43,000 to carry on the Balmy Beach sewage scheme as recommended by the Works Commissioner. — The total assessment for 1913 is \$423,535,623, a net increase of \$79,937,478 over 1912. — There is a deficit of about \$300,000 in the civic accounts, as the tax rate of 18 mills did not meet expenses again this past year. — The seven by-laws for the expenditure of \$13,046,000 were all passed. — A plebiscite vote on tax reform was carried in the affirmative, the question was whether or not the voter was in favor of applying for legislation to assess buildings, business and income on a lower basis than on income.

TRURO, N.S. The Dominion Government, the Town, and the Province are expending a total of \$261,000 on construction work; this includes a complete brick freight shed for the Intercolonial Railway, \$41,000; a new stone railway station, \$74,000; a new addition to the buildings of the Agricultural Farm (appropriated by the Dominion Department of Agricultural), improvements to railway property, a new Town Hall, and office structure, \$43,000; \$13,000 for permanent streets, water and sewerage extensions.

VANCOUVER, B. C. According to the plans and report presented to the Burrard Peninsular Joint Sewerage Committee, an annual expenditure of \$1,000,000 for five years will be required for the plans of the sewerage system of Greater Vancouver; considerable sums will be required annually until 1950, when the whole peninsula will have a complete system.

WALKERTOWN, ONT. The by-law for \$1,000 to purchase a site for a library was carried.

WINNIPEG, MAN. The report of the civic light and power department for 1912 light and power department, showing the whole power and light plant already on a sound profit making basis, although but a little over a year in actual operation; actual cash receipts amounted to \$303,620, increasing month by month.

Equipment and Engineering

Interesting Notes on the latest Municipal and Telephone Appliances.

Water for Western Towns.

Next to the air we breathe water is of first importance and its importance is fully recognized in only too many of the towns and villages of the West where an adequate supply for domestic use is not always obtainable by ordinary methods.

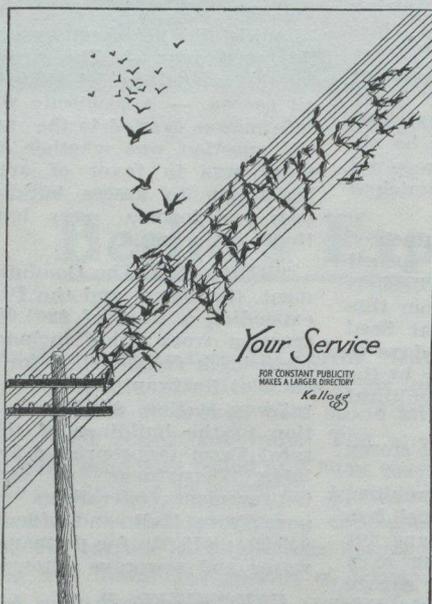
However, the requirements of these places are now being looked after. Drilling outfits of the kind most suitable to the particular requirements of the West are being operated by responsible concerns and the latest scientific instruments designed to locate subterranean water courses are being tested and utilized where practicable by these progressive concerns.

In this issue appears the card of the Saskatchewan Well Drilling Company, of Rouleau, Sask. As a result of the operations of this Company, many places reputed "dry" (as to water) have become very wet.

Western towns that need water should communicate with this Company.

Real co-operation, that is the idea received upon reading through the latest Kellogg Switchboard and Supply Company bulletin entitled, "Advertise Your Service." While this twenty four page bulletin is simply and unpretentiously made up, every page contains a valuable suggestion to the telephone man who is interested in a growing exchange.

As the title suggests, the key is, "Advertise Your Service, for Constant Publicity Makes a Larger Directory."



Beginning with the introductory paragraph illustrating some early Kellogg advertising cuts, this bulletin emphasizes the importance of assistance in advertising and the importance of news copy."

Local features in advertising cuts to interest people in a town in their most important institution, the telephone exchange.

There is a page of plates familiar to readers of telephone journal advertising, which can be combined with the local news stories in the home paper.

Then following is a dozen or more original and uniquely illustrated advertising plates.

Covering the more important needs of the telephone from the standpoint of the subscriber, such forceful titles, as, "Are You On the Map? "Phones and Opportunities," "Stop! Don't Cross the Street," "Is Your Home an Oasis?" show that these are messages that will be read. Most of them are suitable for every size exchange. There are paragraphs on, "Selling Telephone Service," "The Value of Repetition," "The Need of Your Service," "A Word About Cuts," "The Telephone Directory," "The Local Bradstreet."

The last four pages show some of the well known Kellogg plates, among them being the attractive farm telephone scene

"Neighborhood News," the cartoon, "Some Modern Pirates," illustrating the "nerve" of the telephone borrower. Notes on lantern slides and miscellaneous advertising cards and novelties. Four of the new "Way to Talk" half tones appear on the last page.

This book shows not only the aggressive spirit of the Kellogg Company, but their policy of real co-operation with their customers in helpful sales service. A copy of this book will be sent to those interested. As the edition is limited, it will be wise to send for your copy at once.

Big Contract Awarded.

Chief Commissioner Morrissy has awarded the contract for the superstructure of the new spandrel arch bridge to replace the present suspension bridge at St. John, N. B., to the Dominion Bridge Company, of Montreal.

The new bridge is to be the longest spandrel arch bridge in the world and the cost of the superstructure will be about \$275,000. The superstructure will contain about four and a half million pounds of metal, the bridge having a width of fifty feet and provision for two street railways services, two driveway services and two sidewalk services.

The contract also calls for the construction of reinforced concrete flooring for the bridge with a creosoted block-wearing surface on the drive-way. The bridge is to be completed and ready for use by June 1, 1914, under the terms of the contract.

The Kellogg line of Pole Changers and apparatus is admittedly unequalled not only for its reliability and practicality but for its value with every type of equipment. Equally efficient is the line of circulars and instruction folder that go out with this apparatus. For instance, take the instructions for installing No. 9-A pole changer.

In a great deal of electrical apparatus the buyer's information is limited by a set of blue prints and blurred letter copies. The No. 9-A Instruction folder is printed on high grade paper, large clear type, with two excellent half-tone illustrations of open and closed views of the apparatus; the open view listing all the various parts, while the type matter describes in a comprehensive way how the pole changer should be mounted and operated.

If you are interested in this subject, write the Company, stating the type of your equipment and its needs and the appropriate bulletin and folders will be sent promptly, with full information.

In addition to sending out a New Year's edition of Telephone Facts to the trade containing some interesting tales items and publicity stunts, with readable telephone articles, by different members of the sales and other departments, the Kellogg Company have been sending to their customers and friends, the beautifully engraved card, 6 x 3½, the upper left hand corner of which is a fine reproduction of the Kellogg Desk Telephone, surrounded by green holly sprays, sprinkled with red berries.

Only the exchange man, who has experienced the misfortune of having his switchboard and equipment destroyed by fire, can realize how long a time forty eight hours can seem.

One's state of mind vastly affects the apparent length of the minutes. Five minutes before work begins and five minutes before quitting time are two wonderfully different propositions. Two days can seem almost a week to the man who is furnishing the most important service to the people in any city, when he surveys the smoldering ruins of what was once his at least serviceable exchange.

Our files show repeated testimonials to the efficient manner in which we have shortened the days to these unfortunate operators by getting to them, in the most expedient manner, brand new equipment.

A case of this kind happened last week, when an enterprising telephone company in Michigan unfortunately lost their switchboard by fire. This was a special 200 line magneto board, equipped to nearly half its capacity and the rush order called for complete cable and rack equipment. Exactly forty eight hours after the order was received, this new equipment was on its way, to the Michigan city.

Kellogg Sales Service certainly proves its reliability in emergency requests for all types of installations.

Records Company of Canada, Limited.

Public Notice is hereby given that under the First Part of chapter 79 of the Revised Statutes of Canada, 1906, known as "The Companies Act," letters patent have been issued under the Seal of the Secretary of State of Canada, bearing date the 20th day of November, 1912, incorporating Charles Hazlitt Cahan, the younger, barrister-at-law, Orick Burrughs MacCallum, advocate, Mostyn Lewis and William Edward Brown, accountants, and James Louis Finlay, stenographer, all of the City of Montreal, in the Province of Quebec, for the following purposes, viz:—(a) To acquire, edit, compile, print and publish newspapers, books, journals, magazines or other publications, pamphlets, pictures and advertising matter of all kinds, and generally to carry on the business of publishers, printers, engravers, lithographers, binders, advertising agents and book-sellers; (b) To acquire, use, dispose of, buy, sell and deal in copyrights of every kind; (c) To subscribe for, purchase or otherwise acquire the shares, bonds, debentures or other securities of any other company or corporation, not with standing the provisions of section 44 of the said Act, and to pay for the same in shares, bonds, debentures or other securities of this company, and to hold, sell, with or without guarantee, or otherwise deal in the shares, bonds, debentures or other securities so purchased; (d) To consolidate or amalgamate with any other company or corporation having objects similar in whole or in part to those of this company; (e) To acquire and take over the whole or any part of the business, property and liabilities of any person or persons, firm or corporation carrying on any business which this company is authorized to carry on, or possessed of any property or rights suitable for the purposes of this company, and to pay for the same wholly or partly in cash or wholly or partly in paid-up shares of this company or otherwise; (f) To sell, lease, exchange, dispose of, turn to account or otherwise deal with the property, rights and undertaking of the company, or any part thereof, for such consideration as the company may think fit and in particular for shares, bonds, debentures or securities of any other company having objects altogether or in part similar to those of this company; (g) To do all such other things as are incidental or conducive to the attainment of the above objects and to all or any of the above things as principals, agents or attorneys; (h) To distribute in specie or otherwise, as may be resolved, any assets of the company among its mem-

bers and particularly the shares, bonds, debentures or other securities of any other company that may take over the whole or any part of the assets or liabilities of this company; (i) The business or purpose of the company is from time to time to do any one or more of the acts and things herein set forth, and any power granted in any paragraph hereof shall not be limited or restricted by reference to or inference from the terms of any other paragraph. The operations of the company to be carried on throughout the Dominion of Canada and elsewhere by the name of "Records Company of Canada, Limited," with a capital stock of twenty-five thousand dollars, divided into 250 shares of one hundred dollars each, and the chief place of business of the said company to be at the City of Montreal, in the Province of Quebec.

Dated at the office of the Secretary of State of Canada, this 21st day of November, 1912.

THOMAS MULVEY,
Under Secretary of State.

Tax according to Fireproof Qualities

The continuous construction of firetraps continues in spite of the awful loss of life that is the too frequent result. Building Laws do not curtail this stupid habit, but the question of cheaper construction is allowed to prevail over safety. A means of encouraging genuine fireproof building is suggested by a Mr. Hobbie in "Fireproof Digest." His idea is that taxes shall be graded to a certain extent according to the construction of a building, and he argues that just as the rate of insurance varies according to the material used, so the taxes ought to be graded. This is logical, for on the character of the buildings depends largely the cost of the protection against fire which has to be provided, while the more important point, the security of the lives of the citizens, is almost entirely dependent of the construction of the buildings.



CONCRETE
PAVEMENTS

ARE HERE
TO STAY.



Kahn Steel Expansion Joints

INCREASE THE LIFE OF CONCRETE PAVEMENTS. WRITE FOR INFORMATION.

Concrete Bridges, Retaining Walls, Silos and Buildings are strongest and most economical when reinforced **ACCORDING TO THE KAHN SYSTEM.**

OTHER PRODUCTS. Hy-Rib—for Concrete Walls, Partitions, Floor and Roof slabs. Rib Metal—for Concrete Sewers, Floors, etc. Trus-Con Chemical Products—for Waterproofing and finishing concrete. Kahn System Sash—for Strength, Fireproofness and Maximum Light. All Sizes of Lights and Ventilators.

LET US QUOTE YOU

Trussed Concrete Steel Co.

OF CANADA LIMITED.

Head Office and Works - Walkerville, Ont.

BRANCHES: 23 Jordan St., Toronto. Coristine Building, Montreal. Union Bank Building, Winnipeg. Hutchinson Bldg., Vancouver. Chronicle Bldg., Halifax.

BANK OF MONTREAL

(Established 1817)

INCORPORATED BY ACT OF PARLIAMENT.

CAPITAL Paid-up \$16,000,000.00
 REST \$16,000,000.00
 UNDIVIDED PROFITS \$802,814.94

HEAD OFFICE—MONTREAL

BOARD OF DIRECTORS:

Rt. Hon. Lord STRATHCONA AND MOUNT ROYAL, G.C.M., G.C.V.O.

Honorary President.

R. B. ANGUS, Esq., President.

H. V. MEREDITH, Esq., Vice-President.

E. B. GREENSHIELDS, Esq., Sir WILLIAM MACDONALD,
 JAMES ROSS, Esq., Hon. ROBERT MACKAY,
 SIR THOMAS SHAUGHNESSY, K.C.V.O. DAVID MORRICE, Esq.,
 C. R. HOSMER, Esq., A. BAUMGARTEN, Esq.,
 C. B. GORDON, Esq., H. R. DRUMMOND, Esq.,
 D. FORBES ANGUS, Esq.

H. V. MEREDITH, Esq., General Manager.

A. MACNEIDER, Chief Inspector and Superintendent of Branches.

C. SWEENEY, Supt. British Columbia Branches.

A. D. BRAITHWAITE, Supt. Ontario Branches.

F. J. COCKBURN, Supt. Quebec Branches.

E. P. WINSLOW, Supt. North West Branches.

D. R. CLARKE, Supt. Maritime Provs. and Nfld. Branches.

BRANCHES:

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

IN NEWFOUNDLAND:

ST. JOHN'S BIRCHY COVE GRAND FALLS

IN GREAT BRITAIN:

LONDON, - - 47 Threadneedle St., E. C.,

SIR FREDERICK WILLIAMS-TAYLOR, Manager.

IN THE UNITED STATES:

NEW YORK, R. Y. HEBDEN, W. A. Bog, and J. T. MOLINEUX,
 Agents, 64 Wall Street.

CHICAGO, ILL. SPOKANE, WASH.

IN MEXICO:

MEXICO, D. F.

The Canadian Bank of Commerce

PAID-UP CAPITAL - \$15,000,000
 REST - - - - - 12,500,000

HEAD OFFICE - TORONTO

BOARD OF DIRECTORS:

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

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

Hon. George A. Cox.
 John Hoskin, Esq., K.C., LL.D.
 J. W. Flavelle, Esq., LL.D.
 A. Kingman, Esq.
 Sir Lyman M. Jones.
 Hon. W. C. Edwards.
 E. R. Wood, Esq.
 Sir John M. Gibson, K.C.M.G.,
 K.C., LL.D.

William McMaster, Esq.
 Robert Stuart, Esq.
 G. P. Galt, Esq.
 Alexander Laird, Esq.
 William Farwell, Esq., D.C.L.
 Gardner Stevens, Esq.
 G. G. Foster, Esq., K.C.
 Charles Colby, Esq. M.A., Ph.D.
 A. C. Flumerfelt, Esq.

ALEXANDER LAIRD - - General Manager

JOHN AIRD, Asst. General Manager

BRANCHES IN EVERY PROVINCE OF CANADA AND IN THE UNITED STATES, MEXICO AND ENGLAND

Montreal Office, H. B. WALKER, Manager

London (England) Office, 2 Lombard Street, E. C.

H. V. F. JONES, Manager

New York Agency, 16 Exchange Place,

WM. GRAY and H. P. SCHELL, Agents

This Bank transacts every description of Banking Business including the issue of Travellers' Cheques, Letters of Credit and Drafts on Foreign Countries, and will negotiate or receive for collection bills on any place where there is a bank or banker.

THE ROYAL BANK OF CANADA

Capital Authorized - - - - - \$ 25,000,000
 Capital Paid up - - - - - 11,560,000
 Reserve and Undivided Profits - - - - - 13,000,000
 Total Assets - - - - - 180,000,000

Head Office - MONTREAL.

BOARD OF DIRECTORS:

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

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

OFFICERS:

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

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE — Princes St., E. C.

NEW YORK AGENCY — Corner William and Cedar Sts.

SAVINGS DEPARTMENT AT ALL BRANCHES

THE MERCHANTS' BANK

OF CANADA

HEAD OFFICE, - - - - - MONTREAL

Capital paid-up \$6,747,680. Reserve Fund and Undivided Profits \$6,559,478

Pres.: Sir H. MONTAGU ALLAN; V.-P.: K. W. BLACKWELL,
 E. F. HEBDEN, General Manager.

LIST OF BRANCHES AND AGENCIES:

Ontario—Acton, Addison, Alvinston, Athens, Belleville, Berlin, Bothwell, Brampton, Brantford, Chatham, Chatsworth, Chesley, Creemore, Delta, Desboro, Eganville, Elgin, Elora, Finch, Fort William, Frankville, Galt, Gananoque, Georgetown, Glencoe, Gore Bay, Granton, Guelph, Hamilton, Hanover, Hespeler, Ingersoll, Kincardine, Kingston, Lancaster, Lansdowne, Leamington. Little Current, London, London South, Lucan, Lyndhurst, Markdale, Meaford, Mildmay, Mitchell, Muirkirk, Napane, Newbury, Newington, Oakville, Orillia, Ottawa, Owen Sound, Perth, Prescott, Preston, Renfrew, Stratford, St. Eugene, St. George, St. Thomas, Tara, Thamesville, Tilbury, Toronto, (Wellington St., Dundas St., Parliament St., Parkdale), Walkerton, Walkerville, Wallaceburg, Watford, West Lorne, Westport, Wheatley, Williamstown, Yarker.

Quebec—Montreal (Head Office, St. James St., 1255 St. Catherine St. E., 320 St. Catherine St. W., 1330 St. Lawrence Boul., 1866 St. Lawrence Boul., 672 Centre St.), Beauharnois. Bury, Lachine, Quebec, Rigaud, Shawville, Sherbrooke, St. Agathe, St. Jerome, St. Johns, St. Jovite, St. Sauveur.

Manitoba—Austin, Brandon, Carberry, Gladstone, Griswold, Hartney, Macgregor, Morris, Napinka, Neepawa, Oak Lake, Portage la Prairie, Russell, Souris, Sidney, Winnipeg, ditto, Bannerman Ave.

Alberta—Acme, Big Valley, Botha, Brooks, Calgary (do. 2nd Street E), Carstairs, Castor, Coronation, Chauvin. Daysland, Delburne, Donalds, Edgerton, Edmonton (do. Namayo Ave. and Alberta Ave.), Edson, Hanna, Hughenden, Inlay, Killam, Lacombe, Leduc, Lethbridge, Mannville, Medicine Hat, Munson, New Norway, Okotoks, Olds, Pincher Station, Rumsey, Redcliff, Red Deer, Ryley, Sedgewick, Strome, Stettler, Tofield, Trochu, Vegreville, Viking, Wainwright, Walsh, Wetaskiwin.

Saskatchewan—Antler, Arcola, Battleford, Carnduff, Frobisher, Gainsborough, Gull Lake, Kisbey, Maple Creek, Melville, Moose Jaw, Oxbow, Regina, Saskatoon, Unity, Whitewood.

Nova Scotia—Halifax.

British Columbia—Elko, Chilliwack, Nanaimo, Sidney, New Westminster, Victoria, Vancouver, (do. Hastings St.).

New Brunswick—St. John.

New York Agency: 63 and 65 Wall St.

A general Banking Business transacted. Savings Department at all Branches. Interest paid at best current rates.

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

ECHOES FROM MUNICIPAL FINANCE

WE BUY
AND SELL

MUNICIPAL DEBENTURES

If YOU wish to dispose of this class of bonds do not fail to write us.

Brent Noxon & Co.

Canada Life Building,
TORONTO, Ont.

ST. JOHN, N.B. The contract for the superstructure of the new arch bridge, replacing the present suspension bridge, has been let; this will be the longest arch bridge in the world.

Montreal City and District Savings Bank

One of those senseless and inexplicable panics suddenly seized the depositors of this Bank, and a run on it was the result but as will be seen by the statement below, the finances are in an exceptionally healthy condition while the fact that it does only a savings business, makes its security even stronger. The Hon. J. A. Ouimet, President and the Directors did all in their power to alleviate the conditions, and succeeded after a couple of days in restoring confidence, so that the money drawn out by depositors during the panic was re-deposited.

Mr. Lesperance, the Manager, is to be congratulated not only upon the result of this management, but particularly upon the successful resistance to the "run" which very few Banks—even if they were sound—could stand.

LOANS MADE TO:
BONDS BOUGHT FROM:

Municipalities

A. P. LESPERANCE

MANAGER

City and District Savings Bank

MONTREAL

PORT McNICOLL, ONT. The Board of Trade has taken steps to have incorporation within the year; as soon as incorporation is effected Hydro-Electric light and power will be secured and necessary public improvements, pavements, sidewalks, waterworks and sewerage, will be proceeded with.

SARNIA, ONT. The Imperial Oil Company will build a large factory for the manufacture of perfection heaters.

SHERBROOKE, QUE. Plans are being prepared for a new hospital building which will be erected during the summer.

MONTREAL CITY AND DISTRICT SAVING BANK

SIXTY-SIXTH ANNUAL REPORT

STATEMENT

of the affairs of the Montreal City and District Saving Bank on the 31st December, 1912

ASSETS

Cash on hand and in chartered Banks.....	\$3,301,365.54	
Dominion of Canada Government Stock and accrued interest.....	2,547,845.83	
Provincial Government Bonds...	484,785.86	
City of Montreal and other Municipal and School Bonds and Debentures.....	15,727,528.59	
Other Bonds and Debentures...	1,727,804.27	
Sundry Securities.....	227,000.00	
Call and Short Loans, secured by collaterals.....	8,768,046.65	
Charity Donation Fund, invested in Municipal Securities approved by the Dominion Government.....	180,000.00	
		\$32,964,376.74
Bank premises (Head Office and thirteen Branches)	\$475,000.00	
Other Assets.....	23,147.87	498,147.87
		\$33,462,524.61

LIABILITIES

TO THE PUBLIC:

Amount due Depositors.....	\$30,713,948.34
Amount due Receiver-General	93,341.86
Amount due Charity Donation Fund.....	180,000.00
Amount due Open Accounts...	201,752.15
	\$31,189,042.35

TO THE SHAREHOLDERS:

Capital Stock (amount subscribed \$2,000,000), paid-up.....	\$1,000,000.00
Reserve Fund.....	1,250,000.00
Profit and Loss Account.....	23,482.26
	2,273,482.26

\$33,462,524.61

J. ALDERIC OUIMET,
President

A. P. LESPERANCE,
Manager

THE BANK OF OTTAWA

ESTABLISHED 1874

HEAD OFFICE, - OTTAWA

Capital Authorized - \$5,000,000
 Capital Paid Up - - 3,500,000
 Rest - - - - - 3,900,000

The Bank transacts every description of banking business and gives the most careful attention to any business entrusted to it.

BRANCHES AND AGENTS
 THROUGHOUT THE DOMINION

IMPERIAL BANK OF CANADA

Capital Authorized - - - - - \$10,000,000.00
 Capital, paid-up - - - - - 6,425,000.00
 Reserve Fund - - - - - 6,425,000.00

DIRECTORS:

D. B. WILKIE, President, Hon. R. JAFFRAY, Vice--Pres.
 Wm. Ramsay of Bowland, Elias Rogers, J. Kerr Osborne,
 Peleg Howland, Sir Wm. Whyte, Winnipeg; Cawthra
 Mulock, Hon. Richard Turner, Quebec; Wm. Hamilton
 Merritt, M. D., St. Catharines; W. J. Gage.

HEAD OFFICE, - - - - - TORONTO.

BRANCHES:

Ontario	Nashville	Quebec	Alberta
Amherstburg	New Liskeard	Montreal	Athabaska Landing
Belwood	Niagara Falls	Quebec	Banff
Bolton	Niagara on the Lake		Calgary
Brantford	North Bay	Manitoba	Edmonton
Caledon East	Ottawa		Red Cliff
Cobalt	Palgrave	Brandon	Rocky Mountain
Cottam	Port Arthur	Portage la Prairie	House
Cochrane	Porcupine	Winnipeg	Lethbridge
Elk Lake	Port Colborne		Red Deer
Essex	Port Robinson		Strathcona
Fergus	Ridgeway	Saskatchewan	Wetaskiwin
Fonthill	Sault Ste. Marie		British Columbia
Fort William	South Porcupine	Beaumont	Arrowhead
Galt	South Woodsee	Broadview	Chase
Hamilton	St. Catharines	Fort Qu'Appelle	Cranbrook
Harrow	St. Thomas	Hague	Fernie
Humberstone	St. David	Moosejaw	Golden
Ingersoll	Thessalon	North Battleford	Kamloops
Jordan	Timmins	Prince Albert	Michel
Vineland	Toronto	Regina	Nelson
Kenora	Welland	Rosthern	New Michel
Listowel	Woodstock	Saskatoon	Revelstoke
London		White	Vancouver
Marshville		Wyand	Victoria
			Wilmer

SAVINGS DEPARTMENT.

Interest allowed on Deposits at all Branches of the Bank throughout the DOMINION OF CANADA. Drafts, Money Orders and Letters of Credit Issued Available in Any Part of the World.

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

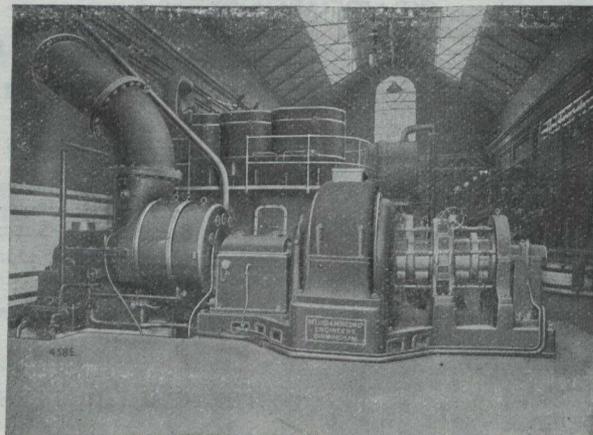
Agents in United States. — New York, Bank of the Manhattan Company; Chicago: First National Bank; San Francisco: Wells Fargo Nevada National Bank.

Agents in France. — Credit Lyonnais.
 Agents in Germany. — Deutsche Bank.

BELLISS & MORCOM

ENGINE AND EXHAUST TURBINE
 PLANTS FOR MUNICIPAL USE

INCREASE THE CAPACITY OF YOUR PLANT 50% BY INSTALLING AN EXHAUST TURBINE WITH CONDENSER.



A BELLISS RECIPROCATING ENGINE COMBINED WITH AN EXHAUST TURBINE GIVES UNPARALLELED ECONOMY.

RECIPROCATOR AND EXHAUST STEAM TURBINE
 DARLINGTON CORPORATION

MANUFACTURED BY MESSRS. BELLISS & MORCOM
 BIRMINGHAM, Eng.

REPRESENTED BY

LAURIE & LAMB

211-212 BOARD OF TRADE

MONTREAL

FINANCIAL NOTES

DEALERS IN HIGH GRADE BONDS & DEBENTURES

CORRESPONDENCE
SOLICITED

DOMINION SECURITIES CORPORATION, LIMITED

MONTREAL, LONDON, TORONTO
P.Q. ENG. ONT.

ALMONTE, ONT. The county council passed two by-laws, one for \$40,000 for good roads, and the other for \$13,000 for general purposes for the county.

CUDWORTH, SASK.—This town is financed on the single tax principal.

BEAVERTON, ONT. The by-law to raise \$10,000 for a local electric plant, was passed.

BELLEVILLE, ONT. The Board of Education has asked the city council to pass a by-law to borrow \$50,000 to erect a new public school on the west side where a site has already been secured.

BURNABY, B.C. The by-laws to raise \$300,000 for roads, \$100,000 for waterworks, \$28,000 for school purposes and \$84,000 for school improvements were passed.

CHATHAM, ONT. The by-law granting \$2,000 for a site and a fixed assessment of \$3,500, to the Chatham Auto Wheel Company, was passed by a majority of 821.

EDMONTON, ALTA. The municipally-owned street railway showed a deficit of \$26,495.22 for last year; after this a straight five-cent fare will be charged, except during limited hours, when the yellow labor tickets will be available.

ELMIRA, ONT. The by-law to raise \$10,000 as a loan to the Elmira Furniture Company, Limited, was passed.

GODERICH, ONT. The by-law to grant assistance to the Misner Manufacturing Company, was passed.

HAMILTON, ONT. The tax rate will be 21 mills, the same as last year.

HUMBOLDT, SASK. The Council has granted \$5,000 for publicity purposes.

KAMLOOPS, B.C. The by-law to raise \$15,000 for street improvements, has been passed.

MEDICINE HAT, ALTA. The city has arranged a temporary loan of \$200,000 for improvements until money could be realized from the sale of debentures.

MELVILLE, SASK. The Council has decided to spend \$7,000 for publicity purposes during the coming year.

MIDLAND, ONT. The by-law to raise \$25,000 as a bonus to the Midland Dry Dock Company, Limited, was passed.

MOOSE JAW, SASK. The Council will spend \$160,000 on new cement sidewalks this year, besides \$150,000 on waterworks system extension, \$75,000 for fire fighting apparatus and \$185,000 on ex-

tensions to the electric light and power system.

ORANGEVILLE, ONT. The by-law to raise \$5,000 as a bonus to a manufacturing concern commencing operations here, was carried.

PENETANGUISENE, ONT. The by-law to raise \$25,000 as a loan to the Dominion Stove and Foundry Company, was passed.

PETROLEA, ONT. The by-laws to raise money for a public market and to bonus a motor car concern, were passed.

POINT GREY, B.C. By-laws for \$150,000 for roads, \$10,000 for sidewalks, \$5,000 for parks, \$740,000 for sewerage, and \$200,000 to improve water system, were passed.

PORT ARTHUR, ONT. The following by-laws were recently passed: \$6,550 for electric railway; \$6,500 to complete the service dam at Current River; \$12,000 to purchase a motor generator; \$30,000 for improvement of electric light system; \$32,000 to lay rails on Cumberland street, etc.; \$8,000 to improve street lighting system; \$10,000 for city markets and \$7,260 for sewers; \$314,830 waterworks system improvement: and to raise money as a bonus for the Wire Nail Works.—The by-laws defeated were: to aid Inter-Cities Quarries Company, and to aid Pulp and Paper Mill.

REGINA, SASK. The present indebtedness of the city is \$4,528,289.—The city has appointed the Bank of Montreal as its fiscal agent.

RICHMOND HILL, ONT. The by-law to raise \$7,000 for repairing sidewalks and roads, was passed.

ROSETOWN, SASK. The Council has granted \$2,000 to the Board of Trade for publicity purposes.

SAULT STE. MARIE, ONT. The result of the voting on the money by-laws was as follows: passed—to raise \$15,000 for an incinerator plant; \$10,000 for culverts; defeated—money for Board of Education, \$8,000 for a police court and \$25,000 for a public market.

ST. LAMBERT, QUE. There is a balance on hand of \$1,986; the revenue for the year was \$123,252, the expenditure \$121,266; the assets amounted to \$431,792, the liabilities to \$421,359.

ST. THOMAS, ONT. The two by-laws, to raise \$8,000 to pay moving expenses of Sneider and Hathway Shoe Company from Detroit to this town and \$30,000 to guarantee the bonds of the Thomas Bros.' brush and broom factory, were both passed.

SYDNEY, N.S. Four money by-laws were passed:—\$40,000 for new water

WOOD, GUNDY & Co.

6 KING ST. WEST, TORONTO

Purchasers of

MUNICIPAL DEBENTURES

We especially invite correspondence.

main; \$10,000 for street paving; \$72,000 for a new city hospital; and \$106,000 for a pumping station.

TAVISTOCK, ONT. The by-law granting \$10,000 as a bonus to the New Hamburg Felt Boot Company, was passed.

THOROLD, ONT. A by-law to raise \$15,000 of debentures to relieve the town's indebtedness, was passed.

TORONTO, ONT. The City Council is considering a municipal banking institution, paying about 4 per cent. on a deposit by the citizens and running under the direction and supervision of the civic financial authorities, or a special board of directors.

UXBRIDGE, ONT. The by-law to raise \$20,000 for local improvements, was passed.

VICTORIA, B.C. The result of the voting on the recent by-laws is as follows:—passed—to raise \$700,000 for sewerage work; \$29,000 for school purposes; \$50,000 for waterworks system; \$50,000 for police headquarters; defeated by-laws—to raise \$85,000 for park, \$125,000 for salt water baths; all required the three-fifths majority; all except the last received a majority in favour.

WATERLOO, ONT. The by-law to raise \$20,000 for the erection of a planing mill, was defeated.

WELLAND, ONT. Three by-laws have been passed for:—Empire Cotton Company, concession; \$5,500 for waterworks; and \$4,250 for general improvements.

WEST VANCOUVER, B.C. The by-law to raise \$50,000 for current expenses was passed by the Council.—A by-law to raise \$100,000 for a marine drive, was passed.

BUSINESS FOUNDED 1795

American Bank Note Company

ENGRAVERS and PRINTERS

Municipal Debentures and Cheques

A SPECIALTY

Head Office, 224 WELLINGTON STREET, OTTAWA.

Branches: HALIFAX, MONTREAL, TORONTO, WINNIPEG.

R. A. ROSS & CO.

CONSULTING ENGINEERS

MECHANICAL STEAM ELECTRIC HYDRAULIC
EXAMINATIONS REPORTS VALUATIONS

80 ST. FRANCOIS XAVIER STREET, - - MONTREAL

211 BOAR OF TRADE BUILDING

Laurie & Lamb

CONSULTING & CONTRACTING ENGINEERS

STEAM & GAS POWER INSTALLATIONS
FILTERING & WATER SOFTENING PLANTS
REFUSE DESTROYERS & BOILER INSTALLATIONS
REPORTS, TESTS & APPRAISALS

MONTREAL

A. L. McCulloch, M. Can. Soc. C. E.

CONSULTING ENGINEER

Hydro-Electric Power Installation.
Water-Works. Sewerage and Sewage Disposal.
Examinations. Plans. Estimates and Reports.

NELSON, B. C.

BAYFIELD & ARCHIBALD

Consulting & Constructing Engineers

Plans, Reports, Estimates for Machinery.

Plants for Electric Light, Water Works, Road Making, Etc.

MOLSONS' BANK BUILDING,

VANCOUVER, B. C.

Tel. Uptown 6771

Room 41 Merchants Bank

J. B. SAINT CYR

Quebec and Dominion Land Surveyor

GENERAL LAND SURVEYING

Subdivision, Staking of Lots, Public Highways, Mining Claims, Timber Limits, Etc.
364 University Street, Corner St. Catherine, Montreal

E. A. CLEVELAND

DONALD CAMERON

CLEVELAND & CAMERON

CIVIL, HYDRAULIC AND MUNICIPAL ENGINEERS AND SURVEYORS

1001 TO 1010
ROGERS BUILDING

VANCOUVER, B. C.

GORE & MCGREGOR
LAND SURVEYORS
AND ENGINEERSWATERWORKS AND SEWERAGE
EXAMINATIONS AND REPORTS
MUNICIPAL WORK A SPECIALTY**CHARLES H. TOPP**

M. CAN. SOC. C. E. M. PAC. N. SOC. E.

CONSULTING ENGINEER

P. O. Box 152
Phone L 504Chancery Chambers, Langley Street,
VICTORIA, B. C.TELEPHONE:
BELL UPTOWN 3808**SURVEYER & FRIGON**

CONSULTING ENGINEERS

EXAMINATIONS SURVEYS ESTIMATES AND DESIGNS
TECHNICAL AND FINANCIAL REPORTS

56 BEAVER HALL HILL

MONTREAL.

Engineers—And

Mr. Thomas C. Keefer, C.E., C.M.G., LL.D.

(McGill.)

The engineering profession in Canada was honoured recently, in a most gratifying manner by the fact that Mr. Keefer was created an Honorary Member of the Institute of Civil Engineers (Great Britain), of which he had been a member for many years.

Mr. Keefer has, for very many years, been recognized as one of our foremost professional men and has received many honours from various sources in recognition of the prominent position he holds in engineering circles. He is Past-President of the Canadian Society of Civil Engineers and also Past-President of the American Society of Civil Engineers, as well as having held offices in other societies of more or less importance.

Mr. Keefer is the grandson of an Alsatian Huguenot, who came to America in early life, settling in the British Colony of New Jersey, and who afterwards served in the British Army during the American Revolutionary War. His father, a U. E. Loyalist, came to Canada and at Thorold, Ont., Mr. Keefer was born in 1821.

During the ninety years of his active life Mr. Keefer has been connected with a great variety of undertakings a few of which it will be of interest to note, for as time has passed the present generation do not fully realize the great work he accomplished in laying the foundations for us today. His first position was that of Engineer in the Erie and Welland canals in 1838, which was followed soon after by work in connection with the navigation of the St. Lawrence.

Early in the fifties he was making preliminary surveys for the Grand Trunk Railway between Montreal and Toronto, and in 1857 was engineer of the Montreal Harbor Commission, afterwards he constructed water-works in Montreal, Hamilton and Ottawa. For some time he was chief engineer of various railways in Upper and Lower Canada, and International Commissioner for Deep Waterways between the Great Lakes and the Atlantic seaboard. In many other capacities he served Canada with great benefit and credit to himself.

In 1850 he won the Lord Elgin Prize for the best essay on "The Influence of the Canals of Canada on Her Agriculture," and is the author of other works, including one advocating the construction of a Canadian Pacific Railway.

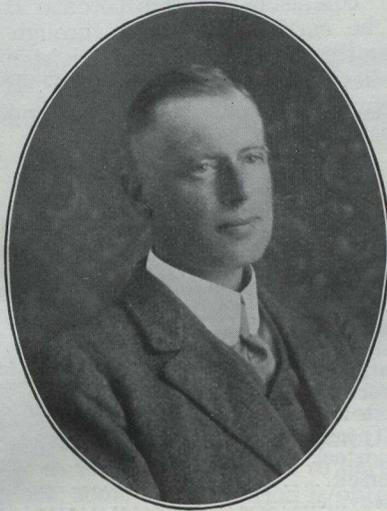
Mr. Keefer was president of the American Society of Civil Engineers in 1888, of which he was elected as honorary member in 1912.

In 1887 he was one of the founders of the Canadian Society of Civil Engineers and its first president, being re-elected in 1897.

The circle into which Mr. Keefer has been admitted represents a membership—comprising members, associate and student members—of 9,122, as well as twenty Honorary Members. The members and associates are probably the most representative of all the engineering societies in the world and the honorary members comprise such as: His Majesty the King, Honorary President; Emperor William of Germany, the Duke of Connaught, Prince Auguste d'Arenberg, Lord Alverstone, Earl Brassey, the Right Hon. Joseph Chamberlain, the Earl of Cromer, Earl Curzon of Kedleston, Sir James Dewar, Sir Archibald Geikie, Viscount Kitchener of Khartoum, Viscount Milner, Sir Andrew Noble, the Duke of Northumberland, Mr. Alfred Picard, Lord Rayleigh, Sir Frederick William Richards, and Lord Strathcona and Mount Royal.

what they are doing

Belleville's New City Engineer



Mr. P. Lancaster was born 34 years ago at Burnt Island, Scotland. He is a Civil Engineer, Waterworks Engineer and Concrete expert by profession, having had 17 years experience along these lines. He received his education at Dulwich College, winning prizes for chemistry and physics.

He finished his preliminary training in 1897.

In 1897-1898 he travelled in France, Germany, Belgium and Switzerland.

From 1898-1903 he served an apprenticeship with the firm of Messrs. Sir John Jackson, Limited, Contractors, on their works of building harbors, docks and wharves at Devonport; the total amount of money spent on that contract being over \$10,000,000.

In 1903 he accepted the post as Chief Engineer on the harbor works at Port Shepstone, Natal, South Africa, where he had charge of the building of a harbor capable of accommodating ships up to 2,500 tons displacement, the second largest harbor in Natal. His work in South Africa included the survey of the "Bluff" at Durban.

Returning to England he was engaged by his former employers, Messrs. Sir John Jackson, Limited, as assistant engineer and remained with them until the completion of their work at Devonport.

Mr. Lancaster then acted as secretary for some time to his father, Mr. 'Harry Collingwood,' the well-known writer of some 40 boys' books. At the same time he himself contributed several articles, stories and boy's books, to the literary world. His best known book is 'Captain Jack O'Hara, R. N.,' at ale of life in the British Navy. A presentation copy of this book was graciously accepted by his late Majesty, King Edward VII and also by the present King George V, who had the book included among the presents of the Prince of Wales.

Coming to Canada, Mr. Lancaster took the post of Concrete Inspector for the C. P. R. Grain Elevator at Victoria Harbor, Ont.

Then followed a Sub-division survey in Muskoka. This completed he engaged with the firm of Messrs. Clarke and Monds. on works at Point Anne, Orillia and Peterboro.

CHARLES H. KEEFER, C.E., Consulting Engineer
 THOS. C. KEEFER, JR., Late Lieut. Royal Engineers
KEEFER & KEEFER
 CIVIL ENGINEERS
 Reports and Construction Water Powers, Waterworks, Sewerage, Bridges and Railways
METROPOLITAN BUILDING, OTTAWA, ONT.

CHARLES BRANDEIS, C. E.
 A.M. CAN. SOC. C.E.
CONSULTING ENGINEER
 TO PROVINCIAL GOVERNMENT, MUNICIPALITIES, ETC.
 Estimates, Plans and Supervision of Hydraulic and Steam Electric Light, Power and Railroad Plants, Waterworks and Sewers. Arbitrations, Reports and Specifications.
4 PHILLIPS PLACE - - - - MONTREAL

SMITH, KERRY & CHACE
 ENGINEERS
 HYDRAULIC, STEAM, ELECTRIC, RAILWAY, MUNICIPAL, INDUSTRIAL
 W. U. Code used. Cable Address "Smithco."
TORONTO VANCOUVER BOISE (IDAHO) PORTLAND (OREGON)
 CECIL B. SMITH. J. G. G. KERRY. W. G. CHACE.

DE GASPÉ BEAUBIEN
 B. Sc. MCGILL, Ass. M.C.S.C.E., Ass. M.A.I.E.E.
CONSULTING ENGINEER
 ELECTRICAL, HYDRAULIC, MECHANICAL AND CIVIL
28 ROYAL INSURANCE BLDG., MONTREAL.

J. F. FREW
 A. M. INST. C. E.
CIVIL AND MECHANICAL ENGINEER
 PHONE 4698 19 FAIRFIELD BLDG.
445 GRANVILLE STREET, VANCOUVER, B. C.

MUNICIPAL FRANCHISES
 Accepted and carefully executed
A. LEOPRED, CIVIL ENGINEER.
 (Grad. Laval and McGill)
 President
AQUEDUCTS LIMITED
 Metropolitan Life Ins. Bldg., 39, rue St-Jean, QUEBEC, Telephone 545

E. O. FUCE, A. M. Can. Soc. C. E.
 Hon. Grad. Univ. Toronto S. P. S.
 W. A. SCOTT, B. A. Sc
 A.L.S., D.L.S., S.L.S.
FUCE & SCOTT
 CONSULTING ENGINEERS
 Sewers, Sewage Disposal, Waterworks, Roadways, Reinforced Concrete Bridges and Buildings.
115 Seventh Ave. W., - - - - Calgary, Alta.

C. G. MOON FRANCIS SILVERTON
MOON & SILVERTON
 MUNICIPAL ENGINEERS
518 HASTINGS ST. WEST VANCOUVER, B. C.

R. S. LEA, M. Can. Soc. C. E.; M. Inst. C. E.;
M. Am. Soc. C. E.; Hydraulic & Sanitary
Engineer

H. S. FERGUSON, M. Can. Soc. C. E.
M. Am. Soc. M. E., M. Am. Soc. C. E.
Engineer, Pulp, and Paper Mills,
Power Plants

R. S. LEA and H. S. FERGUSON
ENGINEERS

Specialties: Water Supply, Sewerage, Water Power Development and Transmission,
Steam Power Plants, Pulp and Paper Mills, Examinations and Reports

Birks Bldg. Long Distance Tel. Up. 751. MONTREAL

WALTER J. FRANCIS, C. E.,
M. Can. Soc. C. E.,
M. Am. Soc. C. E.

FREDERICK B. BROWN, M. SC.
A. M. Can. Soc. C. E.,
Mem. A. I. E. E.

WALTER J. FRANCIS & COMPANY
CONSULTING ENGINEERS

HEAD OFFICE—232 ST. JAMES ST., MONTREAL,
LONG DISTANCE TELEPHONE—MAIN 5843
CABLE ADDRESS—"WALFRAN, MONTREAL."—WESTERN UNION CODE

WILLIS CHIPMAN

GEO. H. POWER

CHIPMAN & POWER
CIVIL ENGINEERS

TORONTO WINNIPEG

**CANADIAN INSPECTION & TESTING
LABORATORIES, LIMITED**

INSPECTING AND CONSULTING ENGINEERS AND CHEMISTS

Inspection and Tests of Waterworks and Municipal Supplies.

TORONTO WINNIPEG VANCOUVER Head Office: MONTREAL

W. N. DIETRICH
ELECTRICAL AND MECHANICAL ENGINEER

REPORTS, ESTIMATES, PLANS, SUPERVISION, ETC.
CONSULTING CONTRACTING.

16 ST. SACRAMENT ST., MONTREAL.

Telephone 5256 P. O. Box 1695

JOHN S. ISDALE
**ELECTRICAL ENGINEER AND SCIENTIFIC
INSTRUMENT MAKER**

Engineers and Surveyors Instruments. Nautical Instruments.
Electrical Instruments. Electro-Medical Work. Fine Electrical
Work and special Apparatus for Scientific Work. :: :: ::

527 Dunsmuir Street, VANCOUVER, B. C.

CARTWRIGHT, MATHESON & CO.
CONSULTING ENGINEERS

PLANS, SURVEYS, REPORTS,
Superintendence of Construction for Railways, Wharves, Foundations,
Bridges, Buildings, Water Supply, Power Plants and Irrigation.

601 ROGERS BUILDING VANCOUVER, B. C.

ORMOND HIGMAN, Jr. B.Sc. WILLIAM A. DOCTOR, A.I.A.

HIGMAN & DOCTOR
ENGINEERS, SURVEYORS AND ARCHITECTS

Hydraulic, Electrical, Mechanical and Municipal Engineering. Steel and Reinforced
Concrete Construction. Arbitrations, Estimates and Reports.

31, 32, 33, 34 WILLIAMS BUILDING, VANCOUVER, B. C.

Engineers—And

As chief of the survey party making a survey of waterfront conditions for the Toronto Harbor Commissioners he carried this work through to completion. After this he became chief Divisional Inspector for the Belleville division of the C. P. R., the office he held before taking up his present appointment as City Engineer of the City of Belleville.

Cost of Power in Ontario

The cost of power furnished by the Hydro-Electric Power Commission of Ontario, according to the new schedule for this year is as follows:—

Municipalities—	Rates
Toronto.—	\$15.00
London.....	24.00
Guelph.....	22.00
Stratford.....	30.00
Seaforth.....	40.00
Mitchell.....	37.00
St. Thomas.....	29.00
Woodstock.....	23.00
Ingersoll.....	25.50
Beachville.....	31.00
Tillsonburg.....	32.00
Norwich.....	32.00
Berlin.....	22.50
Waterloo.....	23.50
New Hamburg.....	32.00
Baden.....	37.00
Preston.....	21.50
Galt.....	22.00
Hespeler.....	23.00
St. Mark's.....	29.50
Dundas.....	16.00
Hamilton.....	16.00
Waterdown.....	26.50
Port Credit.....	31.00
Weston.....	31.00
Brampton.....	25.00
Mimico.....	30.00

The prices are based on the quantity taken, and the distance from the power station at Niagara.

THE FIRE QUESTION.

"Most of the building laws now in force," reports the Chief Inspector of the Fire Prevention Bureau of St. Louis, "are adequate and obsolete" And he is echoed by every fire chief, fire commissioner and underwriting authority throughout the country. There is the same unanimity as to the remedy. In place of fire fighting, heroic and inefficient, we need the quiet and effective methods of prevention. "New York is paying \$8,000,000 for the maintenance of its fire department," said ex-Chief Croker recently, "and about \$15,000 a year to prevent fires!" In that lies the whole situation. Modern medicine takes all its broad and vital value from its power to prevent disease. What civilized country now waits for its citizens to develop smallpox or cholera or yellow fever? Fires ought properly to be regarded as so many cases of a malignant disease, a disease fearfully contagious.

We have the preventive medicine for fire. It can be administered by the youngest civil engineer out of the institute of technology. And the same logic which has compelled government, through its boards of health — municipal, State and Federal—to take up the practice of one sort of preventive medicine, must in the end bring it to take up the practice of the other.—McClure's.

High Tension Power Cables

The Canadian British Insulated Company, Head Office, Montreal, have secured the contract from the City of Winnipeg for High Tension Cables for this year.

what they are doing

Some of the Fundamental Problems of Town Planning

B. Antrim Haldeman, Assistant Engineer,
Bureau of Surveys, Philadelphia, Pa.

(Read at the Town-Planning Conference, Winnipeg, Man.)

(Concluded)

It seems somewhat curious that open public places were so long neglected by American cities while they were considered almost an essential feature in Europe and were provided even in private land schemes. William Penn introduced a London custom in his original plan of Philadelphia by laying out five public squares, but nearly a hundred and fifty years passed before another was established. Parks were ignored in the original planning of New York, and that city has paid as heavily as \$2,500,000 per acre to partially atone for early neglect; some compensation is obtained, however, in the fact that the value of Central Park and the property in its vicinity is forty times as great as it was in 1856 when the park was acquired.

The park system, if taken in time and planned with the main arterial street system in advance of building improvements, loses its complexity as a problem, and, as the community expands, not only falls naturally into its ordained place in the healthy economy of urban life, but becomes a source of legitimate profit to the public treasury.

The playground and the civic or neighborhood center are the near cousins of the park. The former is the preparatory institution in which the child conserves the physical health and vigor that fits it for the larger activities of life, and the latter provides the opportunity for the social contact of the people that creates a closer common interest in the civic and social welfare.

The civic or social center, as an adjunct to the public institutions of the city, can be made to play a large and important part in educating the people to a broader conception of the duties and responsibilities of citizenship; its prototype in America is the village "green" of New England towns, around which were gathered the church, the town hall, and the school, and in which the people met to discuss the affairs, both public and private, of the community. Its modern form might still retain the "green" and have grouped about it the church, the school, the library, the public hall, the gymnasium, the local civic organizations and the branch offices and establishments of the central government; here could be the intermingling of the people of the neighborhood in every kind of civic and social function that would tend to bind them closer together in their common causes.

City planning reaches the health of the people through the methods employed in laying out streets and subdividing property for building purposes. Where no public control is exercised over these, or where it is exercised indifferently, bad housing conditions may result; if not in the initial improvement they may be brought about subsequently by the crowding of the land to increase its earning capacity. Proper sanitation may be provided by the municipality, but the light and air, which are as necessary as sanitation, can only be pro-

J. M. ROBERTSON, LIMITED
CONSULTING ENGINEERS
Mechanical, Electrical, Hydraulic, Steam Gas.
Plans, Specifications, Estimates, Tests, Reports, and Supervision.
SUITE 101 BOARD OF TRADE BUILDING, MONTREAL, QUE.

ALEXANDER POTTER, C.E.
SPECIALIST IN
HYDRAULIC AND SANITARY ENGINEERING
WATER SUPPLY AND PURIFICATION. SEWERAGE AND SEWAGE DISPOSAL.
WATER AND ELECTRIC POWER.
Special Facilities for the Sanitary Investigation and Analysis of Water Supplies for Municipal and Manufacturing Plants.—Plans, Estimates and Specifications.
50 CHURCH STREET, NEW YORK CITY

C. R. YOUNG
B. A. SC., A. M., CAN. SOC. C. E.
CONSULTING STRUCTURAL ENGINEER
Steel and Reinforced Concrete Bridges and Buildings, Foundations,
Tanks, Towers and other Structures.
318 CONTINENTAL LIFE BUILDING
TELEPHONE, MAIN 3476 TORONTO

PHONE 5488
DUTCHER, MAXWELL & CO.
ENGINEERS AND SURVEYORS
319 Pender Street W., VANCOUVER, B. C.
BRANCH OFFICE: CALGARY, ALTA.

Telephone Main 2560
T. AIRD MURRAY
M. CAN. SOC. C. E.
Consulting Engineer to the Saskatchewan Government, and Municipal Consulting Engineer for Sewerage—Sewage Disposal—Water Supply and Purification.
303 LUMSDEN BLDG., TORONTO, CAN.

BOWRING & LOGAN
CONSULTING ENGINEERS
MUNICIPAL POWER PLANTS
332 DONALD ST WINNIPEG, MAN.

R. G. Austen E. M. Chapdelaine, P.L.S.
AUSTEN & CHAPDELAINE
ENGINEERS, CONTRACTORS & LAND SURVEYORS
Dams, Waterworks, Sewers, Roads, Surveys
Subdivisions, Timber Limits, Etc.
New Birks' Building, MONTREAL

MURPHY & UNDERWOOD
CONSULTING ENGINEERS
SASKATOON, SASK.
"SPECIALISTS IN ALL MUNICIPAL WORK"
A. A. MURPHY, B. SC. ELECTRICAL AND MECHANICAL ENGINEER
J. E. UNDERWOOD, D. L. S. A. M. CAN. SOC. C. E. SASK. LAND SURVEYOR AND CIVIL ENGINEER

what they are doing

Competition is as keen among cities as it is among individuals and skilful advertising is as necessary in establishing and maintaining a city in a position of eminence as it is in assuring success in business. The most effective advertising of a city is accomplished through the agency of the street and its furnishings, and the opportunity and encouragement it gives for expressing the civic pride and ambition of the individual and the community; a city whose streets are uniformly commonplace and monotonous will never inspire its citizens with a very high order of civic pride or patriotism, nor will it engage the earnest attention, admiration or respect of the visitor.

There are two classes of streets in foreign cities that are the delight of tourists; one is the narrow thoroughfare of the olden time, full of angles and offsets, curious gables, picturesque open spaces and quaint buildings; the other is the wide, dignified, tree-lined avenue of recent years, flanked by stately buildings and bearing the finished touch of the most skilled architects. The picturesque passageways of the middle ages will never be reproduced, nor should they be; they belonged to an urban condition that has passed with the progress of industrialism, and their legitimate successor will be the minor residential street planned with an enlightened conception of the needs of its dwellers for sunshine, light, air and a little of the charm of nature in its grass and trees. The wide avenue we have in very many forms, but too often it has been unwisely planned, without proper advice, control or supervision, and instead of giving expression to civic dignity, order and beauty, it has degenerated into a desolate waste of paving or a grotesque combination of various experiments in street decoration.

American cities lead the world in the beauty and charm of their suburbs, but as urban improvements are pushed outward much of this is destroyed by inflexible insistence upon some formal scheme of development, regardless of the character of the street or the nature of the adjacent territory. With all our boasted wealth and progress, our great municipalities have failed dismally in both the efficiency and attractiveness of our streets and roads; the best we have to show, with few exceptions, is in our suburbs, in our smaller towns, or where development has been due to broad-gauge private enterprise.

In the building of the town or city many different plans may be worked out and each a good one; the best can only be secured through sympathetic collaboration; some sacrifice of time, labor and money must be made; the municipal officers, the engineers, architects, artists and artisans, and the owners of property, must work together for the common good of all if the great problems of city building are to be satisfactorily solved and fine ambitions achieved.



FREDERICK G. TODD
LANDSCAPE ARCHITECT
 MUNICIPAL PARK SYSTEMS AND TOWN PLANNING
 Birks Building, MONTREAL.

RICKSON A. OUTHET
LANDSCAPE ARCHITECT
 Fel. Am. Soc. Landscape Architects
 PLANS FOR CITY DEVELOPMENT AND LAND SUBDIVISIONS.
 Beaver Hall Hill, MONTREAL.

DUNINGTON-GRUBB & HARRIES
LANDSCAPE ARCHITECTS
 Consultants on all matters relating to Park and Garden Design, Real Estate and Suburban Development, Civic Art and Town Planning.
 24 Adelaide St., East - - TORONTO.

LEONARD E. SCHLEMM
LANDSCAPE ENGINEER
 Consultant on Landscape Engineering in connection with all matters relating to Town Planning
 43 ST. FRANCOIS XAVIER ST. MONTREAL

GUY WILFRID HAYLER
Landscape Architect, Town Planner and Municipal Engineer
 Member, Institution of Municipal Engineers Member, Royal Sanitary Institute
 Exhibitor, Royal Academy International Town Planning Exhibition.
 Town Planning in all its branches, Real Estate, Civic and Suburban Development
 384 Notre Dame Avenue, WINNIPEG, MANITOBA

GEOFFREY K. BURNETT
 (Successor to HILL & BURNETT)
 CIVIL ENGINEER AND B.C. LAND SURVEYOR
 PLANS, SURVEYS, REPORTS.
 NEW WESTMINSTER,
 P. O. BOX 886 BRITISH COLUMBIA

LIGHTING ENGINEERS

P. MORTON-WRIGHT
ILLUMINATING ENGINEER
 16 University Street, : : : : MONTREAL.

NEWS
 is always welcome
 Will YOU send some ?

The Canada Iron Corporation, Limited

CAST IRON PIPE

SUCCESSORS TO:

Canadian Iron & Foundry Co., Limited
 Canada Iron Furnace Co., Limited
 Annapolis Iron Co., Limited
 John McDougall & Co., Drummondville

Head Office : Montreal, P. Q.

Iron Ore, Pig Iron, Car Wheels, Cast Iron Water and Gas Pipe, Specials,
 Valves, Hydrants, Etc. Castings of All Kinds.

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.

SEWER PIPES

CHIMNEY TOPS
 FLUE LININGS
 WALL COPINGS

Ask for Price Lists
 and Discounts



SALT-GLAZED and VITRIFIED
 True to size
 Impervious to water
 Will never disintegrate

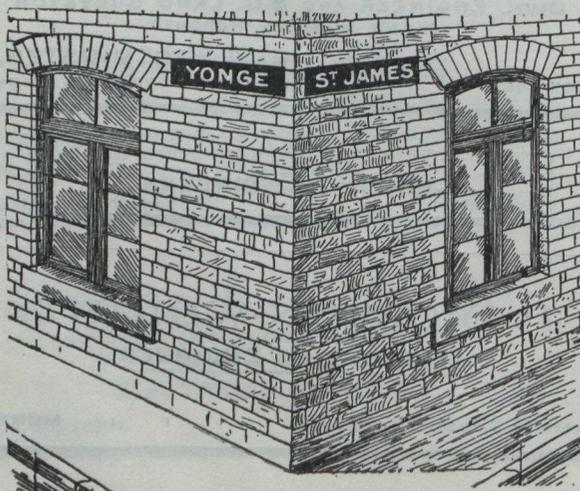
Sizes manufactured and always
 in stock, 4 in. to 24 in.

TELEPHONE (Toronto connection) PARK 1809
 Post Office: SWANSEA

Works and Office:
 SWANSEA, near Toronto

THE DOMINION SEWER PIPE CO., Limited

The INDEPENDENT
 COMPANY



The Principal Cities in Canada
 are using our

ENAMEL STEEL STREET NAMES AND HOUSE NUMBERS

THEY LAST A LIFETIME

MADE IN CANADA BY

The THOS. DAVIDSON MFG. Co., Limited

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

207 St. James St., Montreal, Que.
 Write for prices and samples

Can a Stranger find his way around your City or Town
 without difficulty?
 Are all Streets named and houses numbered up to date?