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MONTREAL,
APRIL, 1912

HARRY BRAGG, EDITOR.

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NUMBER 4

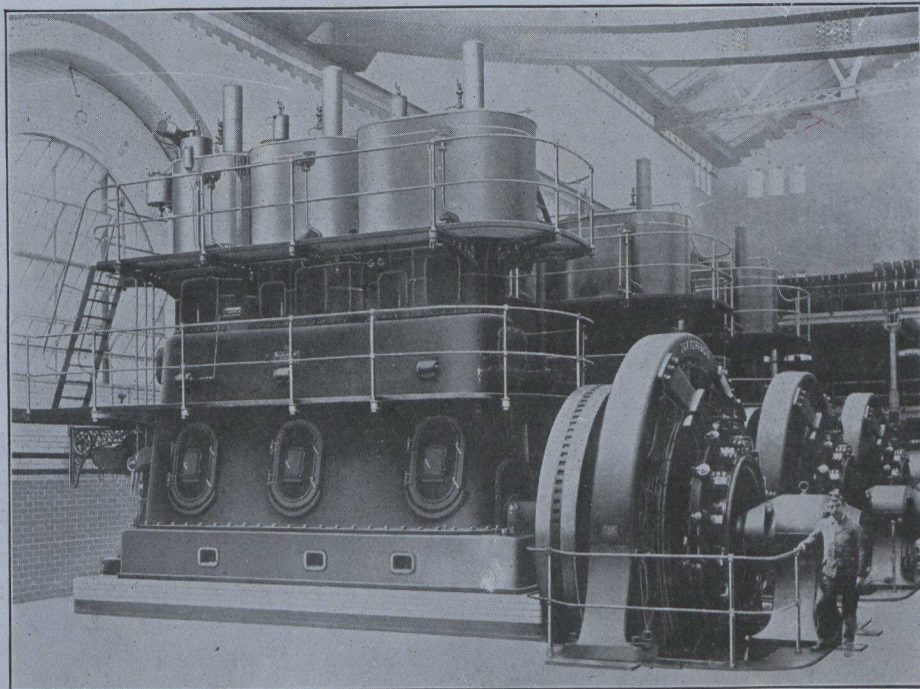
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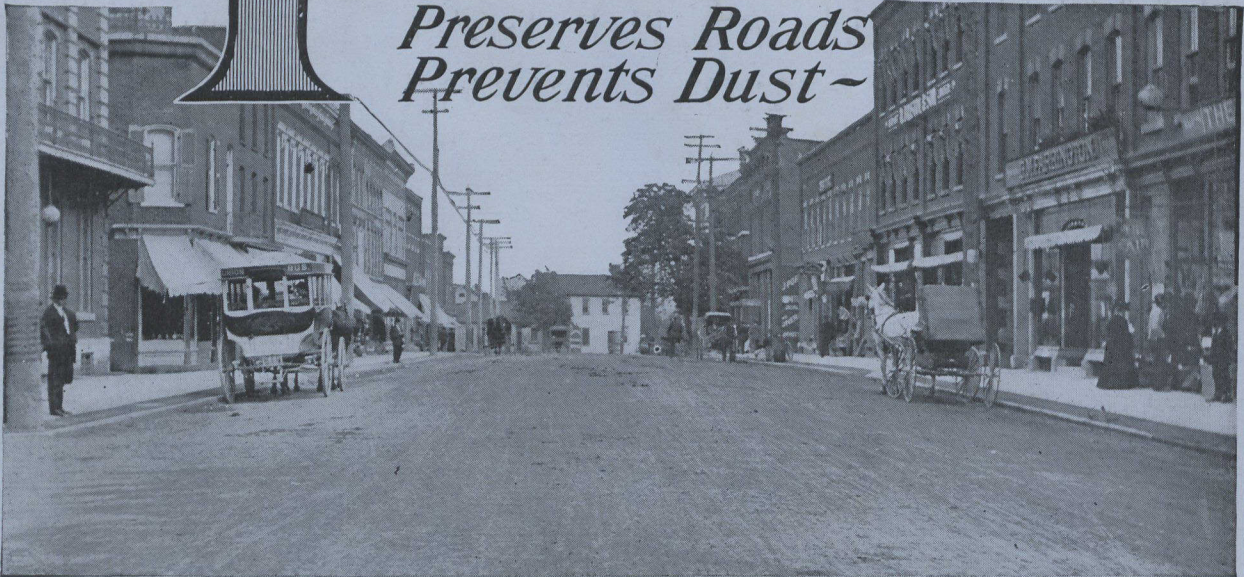
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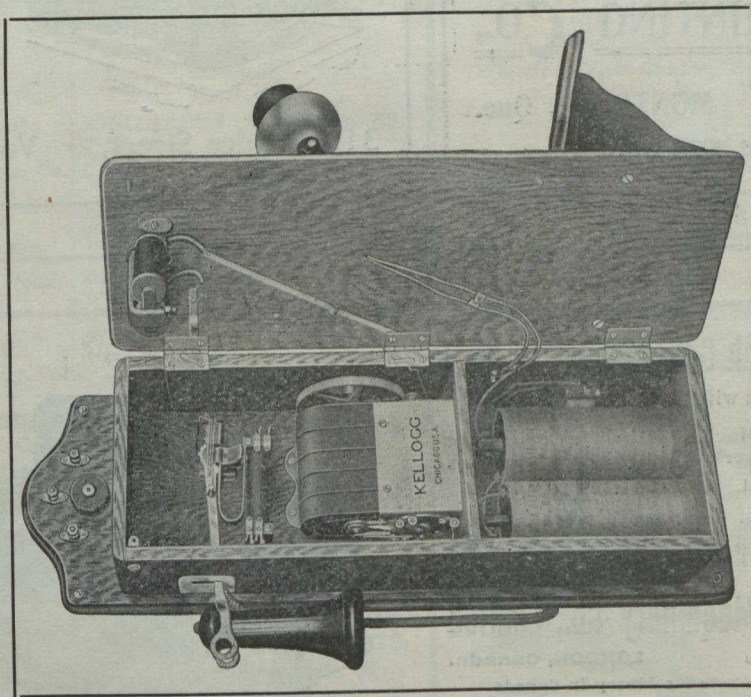
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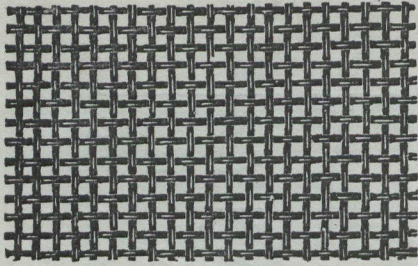
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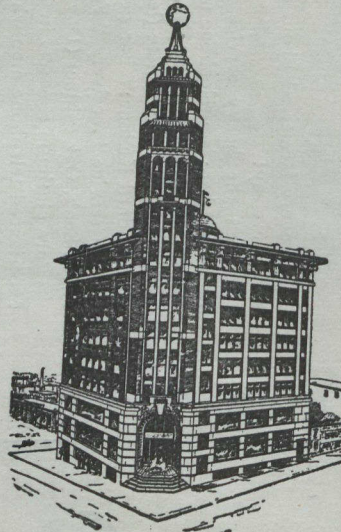
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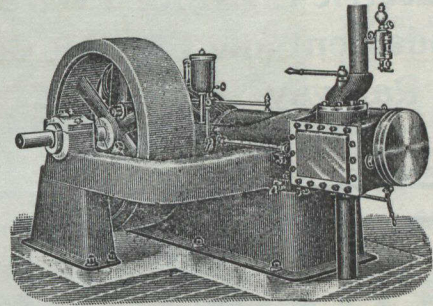
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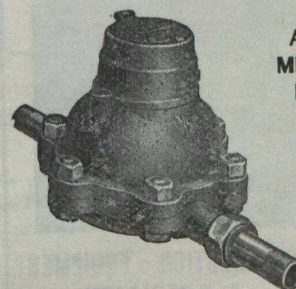
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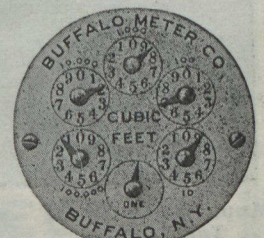
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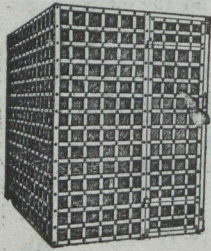
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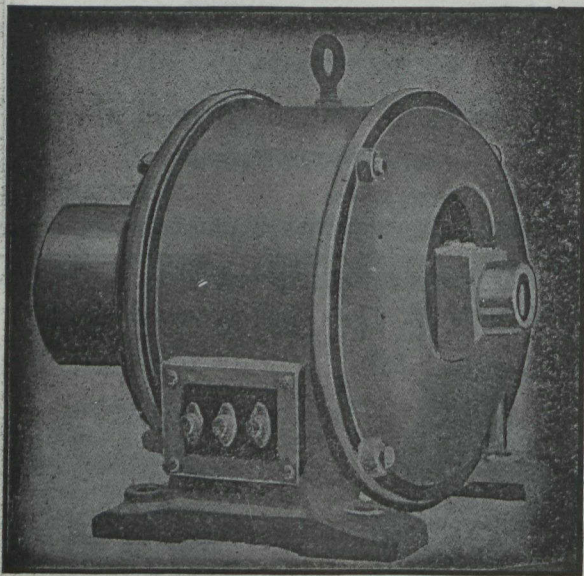
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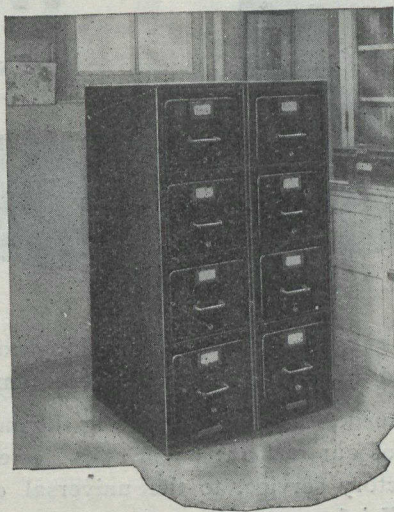
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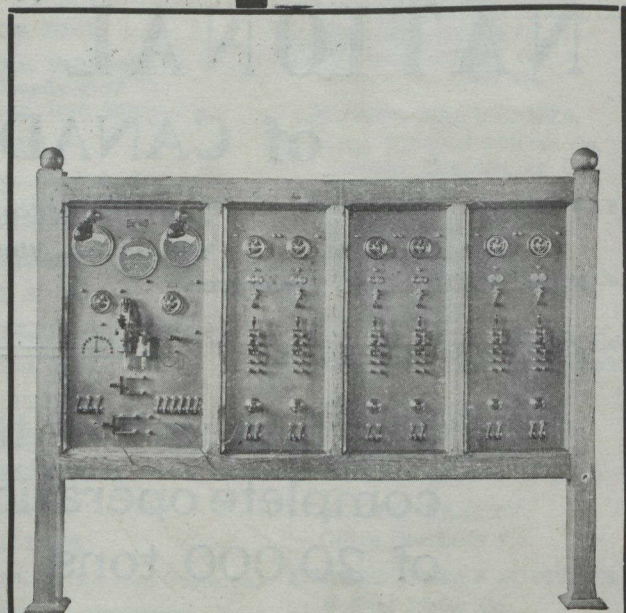
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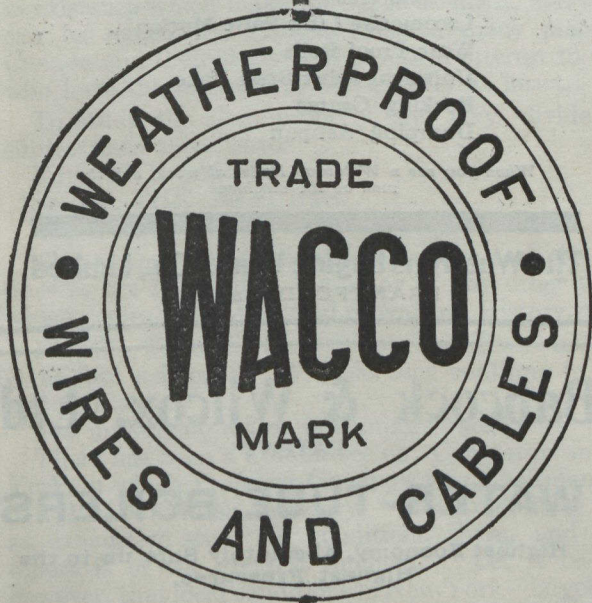
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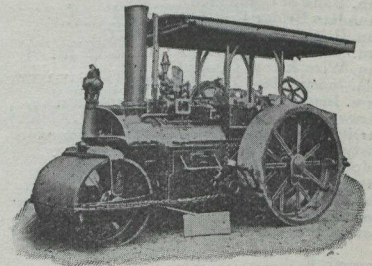
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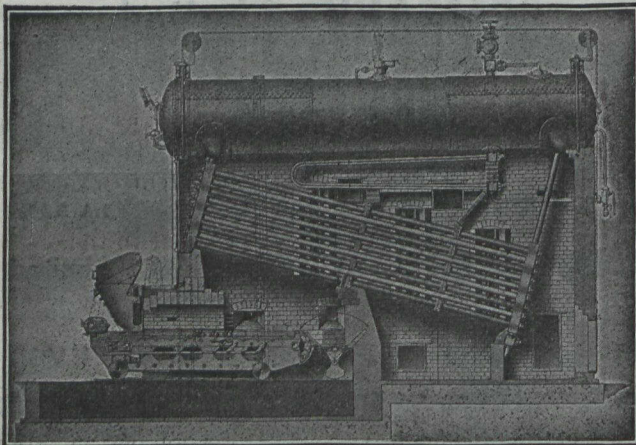


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THE CANADIAN MUNICIPAL JOURNAL

AND TELEPHONE AND BUILDING NEWS

HARRY BRAGG, EDITOR

The Natural History of the Slum

Condensed from an illustrated lecture in the Somerville Course of the Natural History Society of Montreal.

The subject is one of the curses of modern life, and its study is no less important than that of the rat, the house-fly or the mosquito. The white plague, contagious diseases and the appalling subject of degeneracy are all not only bound up in it, but are actually dependent on it. In fact these curses of humanity are comprised in the Slum question, apart from the social questions of morality and crime.

First of all—What is a slum?

A slum may be taken as a dwelling, or a nest of dwellings, which are unsanitary, unhealthy and overcrowded—in short, that are unfit for human habitation; any condition which overcrowds a single house, or a neighbourhood, so that both decency and health are practically impossible.

It may be well to disabuse the mind of anyone who may possibly believe that a new country like Canada does not possess slums, and that the study of them is of no more practical value as bearing on Canadian life than a lecture about the sleeping sickness or tarantulas.

The statement is correct that any city of over 20,000 population which disclaims having slums within its boundaries, has not investigated itself. Slums, unfortunately, are not confined to the old world, nor indeed to cities of any special size while even the smallest village may have to embryo slum.

Proud of Canada as we may be, and loyal to her fame, it is foolish to shut our eyes to defects which are really in existence which make for her abasement, and which can be remedied. Slums exist in many places in Canada and their study is of practical interest to those who have the interests of our country at heart.

To study the slum properly, we may divide the subject into three heads:

First, THE CAUSE,
Second, THE RESULTS,
Third, THE CURE.

This method of handling the question is on the same lines as are followed in the study of any other plague which comes under the head of Natural History.

FIRST, THE CAUSE. How is it that slums have come into existence? Why do they continue to grow and flourish?

The underlying reason is Human Greed!

There has been a Committee on Congestion in New York, of which Professor Goodnow was Chairman, and Mr. Benj. C. Marsh, secretary. This Committee made an exhaustive study of conditions there, and their report is of the greatest moment. Let it be said, however, that local conditions in New York—largely due to geographical reasons—conduce to unparalleled concentration, and—almost necessarily—to congestion and slums—to hideous skyscrapers and teeming tenements, tragic blemishes on the city, which should be scrupulously avoided by any place which wishes to be called practical and self-respecting.

The Committee gives the following as the basic reason for the creation of the slum. "Congestion is primarily the result of protected privilege and exploitation, and must be dealt with as an economic problem."

Both this report and other studies blame the system of taxation of improvements, instead of letting the land bear the burden, as the basic cause of the slum. It is pointed out that because model tenements are made to pay higher taxes than tumble-down ones, there is a premium upon ruinous buildings, whose owner pays less than his enterprising neighbour who puts up decent dwellings. In fact some people affirm that Henry George's Land Tax is a perfect cure for the slums.

Without admitting this fully, it is certain that the failure of the system of taxation to encourage "homes" and to protect slums by charging them at a low rate is one very grave reason for their existence.

It is a self evident fact—though it appears an anomaly—that (in cities at all events) the very poor live on dear land, while the better classes reside on land which is much cheaper. And where the land value is high, the landlord puts up the rents to the highest notch, so as to get the best returns upon the land value; irrespective of the filth, crime and disease, in which the slum dweller is compelled to live.

The want of rapid and cheap transportation is another cause of the slums. There are many classes of workmen who are obliged to live near their places of work or to depend upon good means of getting in to it. Without facilities for transportation they are compelled to herd in the city, and to face the chances—no, the certainty—that their children will grow up stunted and unhealthy, unambitious if not actually vicious—in fact, Slum Children.

Lack of proper building laws and often the thorough neglect of enforcing those which do exist, is another cause, and one that would be removed if Public Opinion were only aroused to the importance of this question.

Some blame foreign immigration, but this is answered by the plea that the foreign immigrant can only afford the cheapest kind of dwelling, and has to crowd in upon his own nationality. Dr. Ewan Pratt in one of the "Studies" published by Columbia University, points out that the foreigner naturally seeks the society of his own race in a city where few others even speak his language, and this has a tendency to congestion. But while it may be true that the standard of living of the foreign immigrant is very low, that is all the more reason for insisting upon his accepting standards which will not make for crime and disease.

SECOND: THE RESULTS OF SLUMS. These may be divided into two classes. Those which are evident, and those which are less patent to the general view.

Many results which are very evident to the observer, are easily overlooked or not noticed by the public.

The residents on the broad avenues, whose houses are surrounded with lovely gardens can ignore the slums which exist in other parts of the city.

But results arise from these hidden sources of crime and disease that affect the dwellers in villas and mansions, and which leave their impression on the nation as a whole.

(Continued on page 140)

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, APRIL, 1912

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CONFERENCE ON CITY PLANNING.

The fourth National Conference on City Planning will be held in Boston, Mass., at the end of next month (May), the actual date not having been arranged. Particulars can be had from the Secretary, Mr. Flavel Shurtleff, 18 Congress St., Boston, Mass.

The balance of the Official Report of the Convention of N. S. Municipalities will appear next month.

The Cement Merger

At the annual meeting of the Canadian Cement Co., (the Cement Merger) references were made to the attacks on the Merger, and the methods used in its organization. This was only natural, for the sinner who is found out is expected to say ugly things about those who expose his wickedness.

The "troubler of Israel" found great fault with the prophet.

Therefore, the remarks of the Chairman, Senator Edwards, were quite in order. He expressed his chagrin at the exposure of the Merger's methods, but failed to explain that those methods were just. He stated that the common stock (all of which formed the "watered stock," kept by Sir Max Aitken's little transfer company) was held by a large number of shareholders. This statement of Senator Edwards confirms our prophecy, that this common stock was issued by the Bond & Share Company that it "might unload its shares on an unsuspecting public," then "it would be difficult for the Government to wipe out the watered stock."

The Chairman's statement shows that the Bond & Share Company (almost wholly Sir Max Aitken) has already sold a large proportion of the **thirteen and a half million dollars** of watered stock which the "transfer" company secured without any cash equivalent.

Senator Edwards' speech would have been much more interesting if he had explained how a company loaded with Thirteen and a half million dollars of watered stock can be the blessing in disguise to the users of cement, which the Merger claims to be, and wishes the public to be gulled into believing.

If the figures we have quoted from Sir Sandford Fleming's pamphlet are incorrect, why does the Bond and Share Company publicly prove them to be so?

The Winnipeg, Man., Board of Trade is bravely following up the question in the public interests. They show that a 350 lb. barrel of cement at Duluth is quoted at \$1.01 while the Merger's price at Fort William is \$1.35. Why should a Company whose shares are more than thirteen of water to less than seventeen of money be protected by 60 to 65 per cent custom's tariff?

Why should every user of cement in Canada have to pay to Sir Max Aitken and his Bond and Share Company thirty to forty cents per barrel?

B. C. Commission Taxation

The report of the Royal Commission on Taxation in British Columbia contains a great deal of valuable information and the recommendations are worthy of careful study. Their survey was a wide one as it covered the cities of Victoria and Vancouver fully and 18 other places, examining 84 witnesses.

The Commission recommends that the Poll Tax, which yielded \$313,338, be abolished, because (1) it is only suitable to a primitive condition of society and British Columbia is now sufficiently advanced to give it up; (2) it checks the free flow of labour into the Province; and (3) its loss to revenue can be made up advantageously in other ways.

As to the Personal Property Tax, \$179,053 at 1/2 per cent, the Commission "have no alternative but to recommend strongly its abolition, and the substitution of an income tax."

The income tax yielded \$192,925 and in the rate, the Commission recommends some changes; that the exemption should be raised from \$1,000 to \$1,500, with certain extensions (1) that for each child under 18, an

exemption of \$200 shall be further made and (2) that anyone engaged in the production of food products shall have an additional exemption of \$1,500.

That the tax on incomes between \$11,500 and \$50,000 be $2\frac{1}{2}$ per cent.

That on \$50,000 and upwards, the rate be $2\frac{1}{2}$ per cent on \$50,000 and 5 per cent on everything more.

With regards to Real Estate Taxes, the Commission recommend:

(1) That the valuation of real property should be as near as possible to actual value.

(2) **THAT THERE SHOULD BE NO TAXATION ON IMPROVEMENTS.**

(3) That in all real estate transactions, the actual price should be given under an affidavit.

(4) That the registration fee of 1-5 of 1 per cent should apply to all transactions.

"Wild Lands" Tax is recommended to be divided into different classes so as to allow of equitable taxation: There are (1) Timber Lands; (2) Dry areas; (3) Non-irrigable areas and (4) "Delta" lands.

The Timber Land Tax of 2 per cent; the Coal Land Tax of 1 per cent on worked mines and 2 per cent on unworked mines; the 25 cents per acre on unworked mineral claims, are all endorsed by the Commission.

Increases are suggested on the Succession Duties.

It is recommended that the Bank Taxes, which are now \$1,000 for each head office and \$125 for each branch office, be increased by 1-15 of 1 per cent on the gross average amount of business done.

A Blanket Charter

For a good, all-round-generous, blanket charter see the one of the Montreal Tunnel and Terminal Company, whose provisions are so numerous that they occupy a column and a half, in the daily papers.

After reading it through one can only wonder,—not at what the promoters propose to do,—but whether there is anything left which they have not included in their charter. They have powers:

To purchase or construct:—Railways, tramways and steamship terminals; stockyards, pipe lines; buildings of every description; hotels, parks, grain elevators, steamships' piers, docks and dry docks; incidental structures, smelters, works for the manufacture of machinery, steamships, structural metal, oils, cement, paints and wood; mines, oil wells, factories, pulp-wood, and development of power;

To act as forwarders and merchants.

To acquire similar businesses

To deal on property;

To construct or buy and own waterworks, gas works, roads, parks, restaurants, canals, &c., &c.

To engage in, acquire and carry on **any other business** manufacturing or otherwise, that may seem useful directly or indirectly, to themselves.

Really it would have been much simpler if the applicants had asked for powers to do as they pleased, when they pleased and where they pleased.

To have a Franchise

Montreal West, Que., has a clause in its amended Act which is entirely out-of-date and reactionary.

It gives an exclusive franchise to the Montreal Tramways Co. (The Montreal Street Railway Merger) for fifty years.

There are two mistakes in this bargain.

First of all, no exclusive franchise is necessary. No street railway that acts properly towards the public need fear a second franchise being given, but the fact that the public has the power to grant a franchise to

another Company has a very pleasant influence on the first company and tends towards good service.

Then no franchise should be given for any such term as fifty years. The whole trend today is towards short franchises, or none at all. The plea that capital cannot be secured without the security of long franchises is upset by the practise in Massachusetts where the franchise only exists during the pleasure of those who grant it—which means while the holders of the franchise behave properly.

The error is all the more grievous because Montreal West, in the course of time, is sure to become part of Greater Montreal and the terms of annexation will be hampered by a franchise that will not be co-terminous with those granted to the same Company by other component parts of Montreal.

Fire Waste

In line with our article on "The Cost of Fires" last month comes the statement, of Mr. William Purvis, at the Convention of the Montreal Fire Underwriter's Association in Toronto that in Canada every year **fire destroys one-half of the value of all the new buildings.**

There is a steady grumble at the rates charged for fire insurance in Canada, and the Insurance Companies are accused of making tremendous profits. We hold no brief for the Insurance Companies, but when it is known that the annual fire loss in Canada is \$2.39 per capita, while in Europe it is only 48 cents, in France and Italy only 12 cents, it is impossible to expect the rates to be as low as they are where the losses are so much smaller.

The fire waste in the United States is thus graphically described by Mr. F. W. Fitzpatrick, Secretary of the National Builders and Inspectors Association.

"Our losses by fire are an average of three theaters, three public halls, twelve churches, ten schools, two hospitals, two asylums, two colleges, six apartment houses, twenty-six hotels, three department stores, two jails, 140 flat houses and 1,600 dwellings every week of the year."

Pity the Chauffeur—Forget the Victim

Judge Riddell, Toronto, has sentenced a chauffeur, Roy Brintnell, to seven months in jail for knocking down and killing a woman in Yonge St.

Of course, a petition was out, asking for leniency!

Yet this man had already been up for speeding, and he tried to evade the law in this case by tampering with the machinery and trying to prove that the brake was out of order.

Those who think that the sentence was too severe, and even undeserved, have a funny notion of the value of human life. Here a chauffeur goes down a crowded street at more than the legal speed. In turning out of the way of a wagon into a side street, he runs against a pedestrian, knocks her down and kills her. And then hysterical people think that seven months in jail is too much.

If this mildness to criminals continues, the only way to stop murder by those among the chauffeurs who are so grossly careless of human life, will be for the mob to take one or two out of their motors as soon as they have committed a murder and hang them on a lamp post.

Certainly it will not be surprising if, after a similar occurrence, the husband of the murdered woman shoots the brute who is really responsible for murder and not for manslaughter.

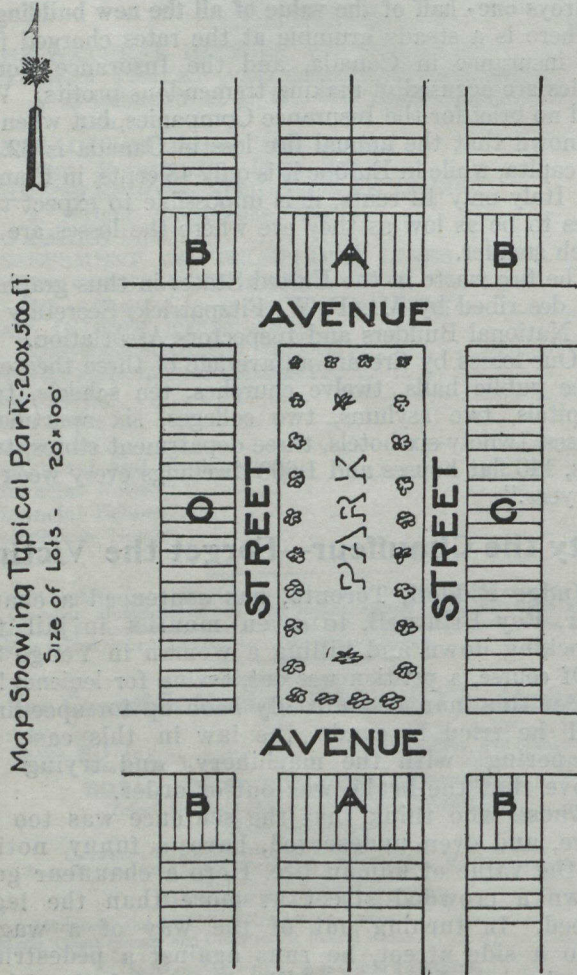
Do Parks Pay ?

The question as to whether Parks are of genuine and direct financial value was ingeniously proved by Mr. William E. Harmon, the real estate operator of New York, and were published, along with the cut in this article, in "the Survey," by whose courtesy we reproduce the plan, and condense Mr. Harmon's letter.

It will be seen that the Park takes out of the available property fifty lots. The problem is whether the presence of a park will increase the value of the remaining property so as to make up for the lots thus given up.

To arrive at a practical answer, seven leading real estate dealers were asked what advance would take place in A, B and C, if the Park were given. The answer varied all the way from 25 per cent to 50 per cent and the following statement shows the results:

Assuming that the cost of each lot and improvement was \$450,00 and the selling price was to be \$1,000, the owner would give



50 lots at \$450 each.....	\$22,500
The minimum increase on 50 lots in C would be \$250 each.....	12,500
The minimum increase on 40 lots in A and B would be \$250 each.....	10,000
Total increase in value in A, B, C.....	22,500

So that the whole cost of the Park would be replaced by the increase in the immediately surrounding property, even at the minimum rate which the experts stated.

Beyond this, the lots near the Park would be increased in value, or at least would be sold with less trouble, and therefore less cost.

According to this practical solution of this question by experts, it is evident the Parks can be established without any cost to the owners of the property.

If the real estate dealers could only be made to understand this, it would not only supply parks as the suburbs extend, but would obviate the exorbitant cost of expropriation in the future.

Premier Whitney Advancing

That there is a distinct movement for Tax Reform in the Province of Ontario was evident in the large and important delegation that waited upon the Premier, Sir James Whitney, to ask for a change. About 300 were present representing many cities, and many organizations. Toronto, Ottawa, London, Windsor, Oshawa, Port Arthur and Brampton were among the municipalities, while the Labour Organizations were numerous.

Mayor Hopewell, Ottawa, and Controllers Church and Hocken, Toronto, pointed out that their Councils had unanimously passed a resolution asking that every municipality could change its system if the majority of the rate payers approved it. The argument of municipal autonomy was pressed by these speakers, while Mr. Stewart Lyon, Mr. James Simpson and Mr. Julian Sale, showed the injustice of the present system.

Sir James pointed out that there was not unanimity as to details among the deputation, but admitted that "a man should not be allowed to hold unimproved land for a long time for speculative purposes." And that "a way must be found to prevent it." Adding "It is easy enough to do it."

Further, Sir James promised the appointment of a Select Committee to examine the question.

This is a distinct onward step for Sir James, and speaks well for him as a statesman. He is, we think, too sanguine in his belief that a way can be found to prevent the speculators' grip — unless he has privately embraced the Land Tax doctrine. It is a pity to hear him deprecate the adoption of any ideas from the Western Provinces. Every statesman should be open to follow the example of another place, and not be afraid to say so. It would be well for Ontario to follow the example of the Western Provinces in more ways than that of taxation. Municipal matters are further advanced in Saskatchewan than in any part of Canada, and Ontario will certainly copy her system before many years, as she is copying the telephone policy of the West

Comparative Assessments in Ontario

City Clerk Barker, London, Ont., has compiled a statement, showing the per capita assessment and debenture debt of the 10 largest cities in the Province of Ontario. It is as follows:—

Population	Municipal School Debent're Taxes. Taxes. Debt.		
	1911		
Toronto.....	341,991	\$11.77	\$4.59 \$111.02
Ottawa.....	86,106	11.06	5.34 96.57
Hamilton.....	73,542	8.89	3.59 79.60
London.....	46,727	10.35	4.70 80.48
Brantford.....	21,964	10.05	3.73 90.17
Fort William.....	19,858	12.44	5.75 182-98
Kingston.....	18,914	7.24	2.49 65.22
Windsor.....	17,534	10.16	4.63 45.93
Peterboro'.....	16,923	7.55	4.91 83.04
St. Thomas.....	15,240	7.77	3.52 61.78

It will be seen that Fort William leads in every list, spending more than twice as much on schools as does Kingston.

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107 St. James St., Montreal.

OFFICIAL CIRCULAR

TO THE MUNICIPALITIES

His Worship the Mayor,
and Council.

Dear Sirs:—

The dates of the TWELFTH ANNUAL CONVENTION of the Union of Canadian Municipalities have now been fixed for AUGUST 27th, 28th and 29th, at the City Hall, WINDSOR, Ont., by invitation of HIS WORSHIP THE MAYOR AND CITY COUNCIL.

The City of Windsor has also arranged for a cordial invitation from HIS HONOR THE MAYOR, AND CITY COUNCIL OF DETROIT, Mich., which is equally cordial, and those attending will thus have the advantage both of meeting in one of our sister Canadian cities, and also of studying one of the largest and most interesting of American cities. These combined opportunities have already aroused great expectations from the membership of the Union and a highly satisfactory Convention is expected.

The Union of Canadian Municipalities has the honor of inviting your municipality to participate, and to send as many delegates as you desire, and would emphasize the fact that such meetings are of great use to every municipality taking part. They afford the best practical means of learning at first hand of tried, up-to-date improvements; while at the same time, they afford the only effective link of solid, and wide spread combination by municipalities for protection against men and influences adverse to the interests of the people.

The Union of Canadian Municipalities has now a long period of faithful and powerful service to the people, and of many large and important results; and is constantly at work along the same lines, and introducing new ideas wherever sound ones may be found. It is in constant communication with municipal associations all over the world, especially in the United States, and Great Britain.

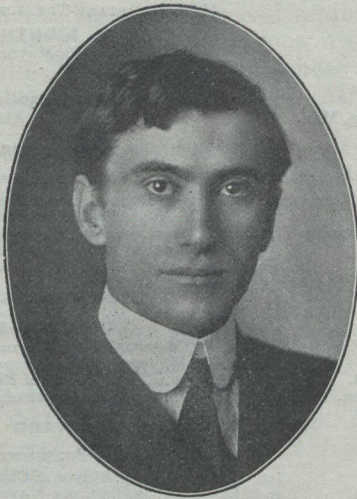
Some of the subjects that will receive special attention at the Convention will be:—

The price of Cement; Distribution of the cost of Subways and other Railway Crossings; Water powers in general and Georgian Bay Canal Water Powers; Uniform Municipal Statistics; Electric Franchises; Health and Mortality; Sewer Systems; Filtration of Drinking Water; Commission Government, &c., &c.

W. D. LIGHTHALL,
Hon. Sec.-Treas.

Railway Tracks and Grade Crossings

A. J. Latornell, B. A. Sc.,
City Engineer, Edmonton Alta.



Railways are an absolute necessity to the growth and development of a modern city. It is unnecessary to elaborate their importance to a city, as no single factor contributes more towards the growth and expansion of a city. It is also true that they bring forward some of the most difficult problems with which a city has to deal.

Recognizing that railways are a necessity and also that they must, and do, bring important problems, it is advisable that the attention of the City authorities be early directed towards their satisfactory solution, at least so that provision be made toward a satisfactory solution. Towards this, it is advisable that the City and Railway authorities co-operate, recognizing that to a large extent their interests are mutual, the railways being a necessity to the city, and the increased growth and prosperity of the city adding to the business and consequent growth of the railway.

Two of the very important problems to be solved in this connection are:

(a) Interference with a proper system of City Planning.

(b) Danger to life, and interference with traffic due to level crossings.

One of the most difficult problems which confronts these civic officials on whose shoulders rests most heavily the task of laying the foundation on which the City's future development is built, is to correctly forecast what that future development will be, and how to best plan for it. City planning is partly planning for the future development of the city, and partly planning so as to direct future development along certain preconceived lines. At the present time when this subject is receiving so much well merited attention it might be in order to point out the important place that railways have in a city plan. It is regrettable to see railways enter a city, (in its infancy,) each on its own right of way, located without any regard to its effect on the future development of the city; and then to see the city heroically attempting to shape its growth around the railway; and endeavoring, as far as possible, to efface the scar, and to make its plan harmonize with conditions created by the railways. A great deal could be accomplished from the standpoint of the city, and nothing lost from the standpoint of the railway, if the railway entrances were intelligently planned with due regard to the future growth

of the city. In this connection the writer fully recognizes, and would direct attention to, the difficulties that stand in the way of this. In the first place, the railways enter at practically the birth of the future city, of whose growth beyond the stage of swaddling clothes, there is considerable doubt. Then there is always such anxiety to obtain a railway at all cost, that often too much is sacrificed to the railway. Even after the importance and future growth of the city are assured, it requires experience, wisdom and keen insight into the future, to correctly plan for that future; and often these qualities are lacking in those who shape the growth of the infant city. However, notwithstanding all these obstacles, much could be accomplished by intelligent planning.

As traffic increases on the railways and also in the city streets, a period is reached when grade crossings become intolerable both because of their danger to human life and because of the annoying and vexatious delays to traffic. Ultimately this risk and interference to traffic (both on streets and railways) become more expensive than the cost to eliminate; as to maintain these crossings at grade, protection must be furnished by gates and the watchman, besides other expenses incidental to keeping the crossings clean and maintaining in fit condition for traffic. Yet in spite of all this expense, traffic is interfered with, and distressing accidents are of frequent occurrence. The elimination of grade crossings not only removes this danger attending them, but also facilitates both railway and street traffic, as trains can run faster, and street traffic is uninterrupted. The elimination of grade crossings in the last twenty years has made considerable progress, chiefly due to the rapid transportation facilities that are now required and which are obtainable.

A grade separation can be obtained in two ways:

(1) By carrying the street over the steam railway tracks—the structure in this case being called a viaduct or overhead bridge.

(2) By passing the street under the railway tracks—the structure in this case being called a subway.

To effect a grade separation by the first method, requires in Canada approximately 25 feet; i. e. the vertical distance from top of rail on the steam tracks to surface of roadway on overhead bridge. This distance is made up of 22 feet 6 inches required by law as the minimum clearance from top of rail to underside of structure, and 2 feet 6 inches as depth of structure and roadway paving.

To effect a grade separation by the second method, requires from 17 to 18 feet, this being distance from surface of roadway to top of street railway tracks and is made up of 14 feet, the generally accepted clearance required for vehicular and electric railway traffic, and 3 feet for depth of structure.

Although these are the only ways in which a grade separation may be effected, yet they are subject to considerable variation depending on the elevation or depression made in the railway tracks or streets with reference to the general ground elevation. For example in this first method, the railway tracks may not take any of the grade separation, making it necessary to raise the street the entire twenty-five feet. On the other hand, the railway tracks may be depressed the entire twenty-five feet; the street simply passing over them without being elevated at all. Again in case of the second method, the railway may cross at ground elevation requiring the street to be depressed sufficiently to take all the grade separation; or the rail-

way may be partly elevated, thus dividing the grade separation with the street; or lastly the track may be elevated the entire distance, the street passing under it without any change in grade.

Since grade separation by means of an overhead bridge requires twenty-five feet, whereas a grade separation by means of a subway requires only seventeen feet, it will readily be seen that the latter is usually the most practicable. In addition to this a great many prefer the subway to the viaduct from the æsthetic standpoint; as they contend that the viaduct becomes dirty from the smoke of the locomotives passing beneath. It is highly probable that in the future this will be done away with by the use of electric locomotives. Many authorities also contend that the minimum clearance of twenty-two feet six inches as required by law in Canada for overhead railway structures is too great. This requirement is based on the necessity of having it sufficient to clear the head of the tallest brakeman standing on top of the highest box car. The law in Canada states that the minimum clearance shall be twenty-two feet six inches except by special permission of the Railway Commission. The latter has, I believe, declined to assume the responsibility of reducing it, contending that if it is too great, the law should be changed. This has been reduced in many parts of the United States, and no doubt when air brakes and the signal systems on freight trains are perfect enough to allow of their handling without the necessity of a brakeman on top, that the clearance distance can be lowered. This reduction will materially assist in the elimination of grade crossings.

The tendency of those cities where grade crossing elimination has been undertaken on an extensive scale, is to either elevate or depress the steam railway tracks sufficiently so that they recover their streets for the original purpose for which they were intended. In such cases the preferable method seems to be by track elevation, owing to the lesser distance required by this method. However, it is only when the city has reached a considerable growth and business warrants it, that such radical measures are resorted to. The first tendency seems to be to deal with the problem by eliminating particularly bad crossings by overhead bridges or subways; these being in most cases superceded when the more radical measures are adopted. In the writer's opinion, it would be particularly desirable that the whole problem of grade crossing elimination should early receive very full consideration, so that a plan of the future treatment might be formulated. Its value as a guide in treating individual cases would be considerable.

The effect of the change in the railway grades and in the street grades that are made in the process of grade crossing elimination are so well summarized by Mr. H. J. Pfeifer in a paper read before the St. Louis Railway Club, that I cannot do better than repeat it.

Effects of Change in Railway Grades

(1) Probable increase in maximum gradient and its effects on the efficiency of the road.

(2) Effect on Railway improvements, such as depots, water and fuel station, interlocking plants, switching yards, etc.

(3) Effect on industrial tracks, buildings and other property adjoining the right-of-way. The last two items are sometimes of serious import, as a material change in grade may involve the almost complete destruction of improvements costing large sums of money.

(4) Provisions for draining the right-of-way cannot be overlooked and must be given due weight in any plan of grade separation, sometimes at a considerable outlay of money.

(5) Damages on account of change in grade must be paid to any one who is injured thereby.

(6) The plan proposed for crossing under consideration may seriously affect a proper solution for adjoining crossings which makes it necessary at times to consider a series of crossings as a unit.

(7) Grade separation on the existing right-of-way may involve so much expense and such unsatisfactory results, that a new line, for which right-of-way must be acquired, is the only solution of the difficulty.

(8) Due regard must be had for the future development of the railway.

(9) Care must be exercised so that the railway will have the proper side and vertical clearance along its tracks.

Effects of Change in Street Grades

(1) If the grade of the street is changed, a reasonable gradient must be secured; if it is too steep, great expense and inconvenience result to those using the street. Opinions differ as to what constitutes a reasonable grade, but I believe I am safe in saying that any slope with less than 4 feet rise in an hundred feet comes within that definition.

(2) Abutting damages on account of change of grade on the street are a prolific source of expense in the abolishing of grade crossings.

(3) Right-of-way must be required for approaches along the street for highway structure and great skill can be shown in their proper location and design. These last two items frequently amount to as much as the construction cost, and in some cases make an otherwise acceptable plan prohibitive in cost.

(4) Frequently a proper solution requires a new location for the street. This is the case when, for example, it is found desirable to consolidate two streets and make one crossing serve for both. When it is done with discrimination and good judgment, the results are satisfactory to all.

(5) A change in the grade of the street forming the crossing may affect other streets in the vicinity.

(6) Most streets have sewers, water pipes, gas pipes and other ducts under them. Relocation or change of grade of these cannot be lightly passed over, as work of this kind runs into money rapidly.

(7) The same attention to the details of drainage, future development and clearance given to the railway right-of-way must be accorded the street, because without a proper regard for these satisfactory results cannot be obtained.

Do Garden Cities Pay ?

The first Garden City has not shown anything but a loss from its inception until this year, when the tide has turned, and a profit has been made.

So much for the financial side.

The infant's death rate of Letchworth, the First Garden City, is 54.54 per 1,000 births, while for all England it is 106.

The general death rate at Letchworth is 6.3 as compares with 13.4 for all England and Wales.

These two statements of the mortality are tremendously significant when it is considered that the death rates for England for both infants and the whole population, are not taken from the slums, but from the healthy and unhealthy districts alike.

Chief Constables' Association of Canada

President, Chief Chamberlain, Vancouver, B. C.;
Sec-Treas., Deputy Chief Stark, Toronto.

Seventh Annual Convention

Official Report

Extradition from the U. S.

Superintendent Rogers, Ontario Provincial Police

The law of extradition between Canada and the United States is covered by a number of treaties entered into by Great Britain and the United States, and it will be well to rehearse the crimes covered by them.

The Treaty of 1842 covers murder; assault with intent to commit murder; piracy; arson; robbery; forgery; and uttering.

Supplementary Treaty, 1890, covers manslaughter (when voluntary), counterfeiting or altering money, or uttering counterfeit or altered money; embezzlement; larceny; receiving; fraud by a bailee, banker, agent, factor, trustee, director or member of a company; perjury; rape; abduction; child stealing; kidnapping; subornation of perjury; burglary; house breaking; shop breaking; piracy by the law of nations; revolt on the high seas; slavery or slave trading, etc.

Supplementary Treaty, 1901, covers obtaining money, valuable security or other property by false pretences; wilful and unlawful obstruction, or destruction, of a railroad, which endangers life; and procuring abortion.

Supplementary Treaty 1907, covers bribery (which is defined to be offering or receiving bribes made criminal by the laws of both nations); and offences against the Bankruptcy law made criminal by the laws of both countries.

Supplementary Treaty, 1908, covers the conveyance of prisoners from one point to another in either country, and passing through a portion of the other country *en route*.

It will thus be seen that the first step to be taken in a matter where extradition is asked for, is to decide whether the offence complained of comes within the scope of the treaties.

In the Province of Ontario it is necessary, after it has been decided that, in the opinion of the Law Officers, the offence complained is covered by one of the treaties, application should be made by the Crown Attorney to the Attorney General that a request should be made on the Government of the United States for the surrender of the offender; and it should be borne in mind that the Government of Ontario will only consent to proceedings being taken in connection with matters which, though the seriousness of their nature, may be said to affect the public at large, such as murder, rape, arson, etc., and in such matters the whole of the expense of the proceedings is borne by the Government. But should it appear that the offence is one which more particularly affects the interest of an individual, then the complaining individual or corporation must furnish a bond indemnifying the Government for the expense.

With the application of the Crown Attorney for the institution of proceedings, the Attorney General's Department must be furnished with:—(1) Warrant of Arrest; (2) A statement of the evidence procurable showing a *prima facie* case against the fugitive; and (3) A description of the accused, together, if possible, with a photograph, for identification.

On receipt of this information the Deputy Attorney

General will advise the Attorney General as to the advisability of action, and if the Attorney General orders proceedings to be taken, the evidence must be taken in narrative form before a Magistrate, particular attention being paid to the swearing of each witness. Should the evidence be taken by the Magistrate personally each witness must sign his or her deposition, but if the evidence is taken by a stenographer he must be first sworn, and it is not then necessary that the depositions should be signed by the witnesses, but it is imperative that the stenographer should certify that his transcription of the evidence, as taken by him in shorthand, is correct.

The taking of evidence in question and answer form is a mistake, because when subsequently the accused is before the United States Court, exceptions may be taken to certain questions as being irrelevant, irregular or leading, and it is possible that should the objection be sustained, the questions affecting an important point may be struck out with the result that the whole proceedings may fall to the ground. When, however, the evidence is taken in narrative form it does not appear what form of examination has been adopted to bring out the evidence, and therefore, no road is opened for technical objections raised with the object of defeating the ends of Justice.

Three copies of the evidence must be supplied: one to be used as an original, and the other two for the service of the United States Courts. These copies must be certified in proper form by the Magistrate. One copy should then be taken to the Provincial Secretary for his certificate showing that the Magistrate before whom the depositions were taken is a properly authorized person, and a form of authentication must be attached for the United States Consul's certificate. A consul's certificate must be prepared with care, and show the name of the complainant, the names of the witnesses examined, and the exhibits used in the case.

The officer instructed to act in the matter will then receive the official authorization of the Attorney General to institute and prosecute extradition proceedings against the accused, and on receiving this instruction in writing he proceeds to the point in the United States where the accused is held or expected to be found. On arrival the Officer goes before a United States Extradition Commissioner, care being first taken to ascertain that the Commissioner is empowered to act, for it must be remembered that many Commissioners in the United States are not designated to act in International matters, but only Inter-State matters.

In the complaint to the Commissioner it must be shown that the complainant (the officer detailed is the complainant at this stage of the proceedings) has been authorized by the Government making the demand to prosecute the proceedings. Upon the complaint being taken, the Commissioner will then issue his warrant to a United States Marshall to arrest the accused, and bring him before his Court.

There are only two legal ways in which the arrest of a fugitive from Justice can be secured in the United States; first on the request of the Governor General of Canada, who requests the British Consul to act; or, as already shown, on the request of the person authorized by the Attorney General of the Province, and there is great danger that the ends of Justice will be defeated if a Police Department is asked to arrest a fugitive offender without proper authority first having been obtained, because in such a case the Court, on *habeas corpus* proceedings, will discharge the prisoner, and the fugitive has an opportunity to fly to other parts.

On the other hand once a person is arrested on a Com-

missioner's warrant he must lie in prison until the proceedings are concluded, as there is no law in the United States provided for bail in such cases.

I would like to draw attention to the fact that the "Canadian Extradition Law", in this connection, is better than that of the United States. If a Police Department of the United States communicates with a Police Department of the Province of Ontario, requesting the arrest of a fugitive, and sends the warrant, an Ontario Officer can go before an Extradition Judge or Commissioner, and obtain a provisional warrant for the arrest of the fugitive, and on the arrest being made the prisoner can be remanded for a reasonable time pending the arrival of the foreign officer with the required papers.

In the United States, after arrest, the prisoner is brought before the Commissioner. The Officer detailed by the applying Government takes the stand, proves his office, produces and puts in the authorization of the Attorney General, and proves the identity of the prisoner.

Identity can be proved by personal knowledge, admission or by photograph. Should a photograph be used it is desirable that witnesses knowing the fugitive, when giving the evidence before the Magistrate in Ontario, should state: "The photograph now shown to me by (the Officer Detailed) is a photograph, and likeness of..... the accused in these proceedings. I personally know the said..... the accused, and there is no mistake in my identification of the photograph shown to me as being his likeness." The Officer can then prove the photograph when it is produced before the United States Commissioner. He then produces the evidence, either by producing the witnesses, or, which is the usual course, by putting in the evidence by means of the certified copy. The last mentioned course is preferable, because the witnesses are then not subjected to cross examination.

Should it be found necessary to employ Counsel it is well to engage such as have had experience in extradition matters. This presents no difficulty in large centres, but in smaller places counsel having knowledge of International extradition are not readily obtainable. The trouble in many cases is that inexperienced Counsel confuse International Extradition with Inter-State Extradition, and I have found it well to get into touch with the United States District Attorney who is acquainted with Counsel and their attainments.

In the examination before the Commissioner the fugitive has the right to call witnesses on his own behalf, but not to use depositions as the complainant has.

Should the Commissioner decide that the fugitive is to be held for extradition the next step is the forwarding by him to the Secretary of State at Washington, of his certificate, together with a copy of the proceedings before him, and the Secretary of State will then issue his warrant of surrender, which is forwarded by the British Ambassador to the applying Government, by whom the Officer with the warrant of *recipias* issued by the Governor General is sent to receive the prisoner.

While extradition between Great Britain and the United States has been in operation for a great many years, in 1909 it was found that the Government of Canada had made no provision to compel the attendance of witnesses before a Justice of the Peace for the purpose of obtaining their depositions. I took steps to call attention to the matter with the result that it was taken up by the Minister of Justice, and on the 30th April, 1909, a Bill was passed amending the Extradition Act, and covering this point.

I have outlined the procedure at considerable length,

for it may appear to be unwieldy in many ways, but each step has a particular object.

On representations being made to Washington it was ordered that no proceedings should be effective unless the request for their institution was made by some authorized Government Official. Under the United States law no United States Commissioner or Marshall can accept his fees from the complainant. Bills for services have to be sent to the Department of State at Washington for audit, and they then turned over to the British Ambassador, to be forwarded by him to the Government making the request for Extradition, for payment.

Once proceedings are instituted they must be completed, and if an order of Extradition is made the fugitive must be brought back for trial. No compromise is permitted, and the Attorney will not permit proceedings to be instituted where he entertains a suspicion of the existence of an ulterior motive.

Another point of interest is that when a fugitive has been properly surrendered, the Officer whose name is contained in the warrant of *recipias* becomes a United States Marshal, and has authority as such in all the territory of the United States through which he may travel with his prisoner.

In connection with the matter of escorting prisoners an important change was made in the law in 1908. Up to July 1908 if a fugitive had to be brought back from Mexico, Cuba, or any other country, it was necessary in some cases that he should first be taken to England. Under the Treaty of 1908, however, if a fugitive is held in Mexico or other countries the Officer having charge of the prisoner can bring him through the United States by having his warrant backed by a United States Judge or Magistrate, or by the consent of the Secretary of State of the United States if (1) the offence for which the prisoner is being held is one for which extradition can be properly asked under a Treaty in force between the United States and Great Britain; (2) Assault with intent to commit grievous bodily harm; or (3) Assault upon an Officer of the Law in the execution of his duty.

I have dealt with this matter mainly from the Ontario point of procedure, but in Manitoba no police department can ask for the arrest of a fugitive without first having obtained the consent of the Attorney General of that Province, and in Quebec, I understand, the whole of the expense of any extradition proceedings must be borne by the complaining parties.

From time to time complaint is made by uninformed newspaper correspondents about the difficulty of securing the arrest of a fugitive from Justice. I am sure that the great majority of Police Officers of experience will agree with me when I say that many of the difficulties arise through the injudicious publication of facts with regard to criminal matters.

Again complaint is made with regard to the red tape involved in the procedure, and these complaints are generally made by persons who have given no thought to the principles involved. "Freedom of the subject", and "The right of asylum" are two constitutional principles both with the British Empire and the United States, and while extradition is devised to assist in the punishment of the criminal, yet all possible safeguards should be provided to prevent interference with the liberty of an innocent person.

At the conclusion of his paper, Inspector Rogers showed a complete set of the extradition papers required by the United States.

Chief Carpenter. We have Extradition cases from time

to time, and it is very necessary that we should know the proper proceedings to take. Superintendent Rogers has gone into this matter very fully. We had a case where the Deputy Consul General for the United States signed a certificate for the Consul General, without stating that the Consul General was absent from the City and that was taken exception to and that exception was upheld; it was stated that when the Deputy signed in the Consul General's absence he must state that the Consul General was absent from the City at the time he signed. The amendment to the Extradition Treaty in 1903 was a very wise move. Formerly if a man were arrested in Mexico we had to take him to Liverpool and back to Canada but now we can bring him through the United States. One thing that I think is a great hardship is that, if a person is robbed and a fugitive escapes out of the Country before proceedings can be instituted against him the complainant must put up expenses to warrant bringing the fugitive back before anything can be done whereas I think for the sake of Society at large the Government should stand the expense. In Baltimore the system was adopted that if a fugitive escaped they would bring him back no matter what the cost was and I believe if this were adopted throughout Canada, in a very short time we would have a very few absconders, for if they were sure that they would be followed and brought back no matter what the cost was there would be a little more hesitation on their part about leaving the Country.

Secretary-Treasurer. This paper will prove a very valuable contribution to the Archives of this association. It is a question about which we hear very little, as many of us have little or nothing to do with it, but it is very interesting and valuable as we never know when we may be called upon in such a matter, and we are very fortunate in having Superintendent Rogers to give us this information, about 25 years of his life having been spent in cases of this kind. The particular feature of it is perhaps the proper procedure to take when we arrest a prisoner on this side that is wanted on the other side, to many of you it is a difficult point what to do after making the arrest; the first impulse is to rush to a Crown Attorney or Magistrate whereas it is a matter that neither the Magistrate nor the Crown Attorney has anything to do with though they often assume they have, the only official is a Canadian Judge who by his virtue of his Office an Extradition Commissioner. Friends of the fugitive come and demand bail but as I understand it there is no bail provided for and no police magistrate or Crown Attorney has any say in the matter. In Toronto the operation is simple and since we adopted the present system I do not think we have had a single man fight Extradition, they generally go back without any opposition.

Superintendent Rogers. For the benefit of Chief Carpenter I might say that it is not necessary that the Deputy General should state, when signing for the Consul General of the United States, that that Official is absent from the City and if that objection was taken and upheld it is not in accordance with the Act. A difficulty that I have met with in the United States is that they have Inter-State Extraditions and you will meet Lawyers who confuse the Inter-State with the International and you will find some District Attorneys and even Judges on the other side make the same mistake and think they have authority to act in the International Extraditions whereas they can only act for Inter-State Extraditions.

Chief Slein. One thing that strikes me is that if a man commits a crime that is an extraditable offence, and you know he is on a railway train escaping at the rate of forty or fifty miles an hour you must communicate with the Crown Attorney at Toronto to get his authority before asking the fugitive's arrest at any point and in the meantime he crosses the line and is lost sight of. I think the good judgment of the Chief Constables should be sufficient, I think he should be able to tap the wires and ask for that man's arrest without waiting for the consent of the Attorney General, I know I did this in one case and if the Government wishes to find fault they can do so for had I waited to get the permission of the Attorney General I would not have caught my man. This happened in Brantford and I finally captured him in the City of Chicago. I learned that he had bought a ticket for there and wired them to be on the look out for them and when he got there he found an officer waiting to receive him with open arms. I then communicated with the Crown Attorney. I think that Chief Constables should be given some latitude in the matter.

Inspector of Detectives Duncan, Toronto. In Toronto when fugitives are wanted in other Countries the matter is referred to me and I have handled a good many of them, and without the instructions of any Counsel whatever. If a requisition reaches our office, whether in the shape of a letter or a telegram, I immediately take steps to apprehend the fugitive. I prepare a warrant and then go to the Extradition Judge, representing to him I have here in my hand a telegram or letter as the case might be requesting the arrest of so and so, and the Judge merely issues his warrant and that warrant can be executed in any part of Canada and when the fugitive is apprehended he is brought before the Judge, and the Judge explains to him the condition of affairs, and tells him that if he decides not to go back he must remain in custody until a *prima facie* case is made out, and out of 75 or 80 in Toronto there was only one who fought Extradition, and as far as Toronto is concerned we have no trouble whatever with these cases. As to the formality to be complied with I agree with Chief Slein in regard to getting the machinery going at once. I know I sometimes take a chance but we have very little trouble in that regard. Telegrams or letters from our office to Chiefs of Police across the line are generally acted on, and we generally manage to get our men, sometimes by deportations. If the offence is not an extraditable one we try and have him turned over to the Immigration Department in whatever city he is located, and have the police explain to the Immigration authorities that he is a fugitive from Canada and is an undesirable citizen of the United States and I may say that in no case have we made application to the Immigration Department that we have not received the man. But I think if we waited to get in touch with the Attorney General we would often lose our man. For instance if a man gets away say Saturday afternoon or Sunday or on a holiday, nothing could be done until the next day, but I generally take the chance and in no case that I know of has a Chief of Police refused to act on a telegram signed by the Chief Constable of Toronto. A man wanted went to England and a formal application was made, we prepared our papers and they went on to the Attorney General's Department, but before they communicated with England the man was gone. He is now, I believe in Buffalo but so far nothing further has been done to bring

him back, and I think there is something lacking in such a condition of affairs.

Superintendent Rogers. The paper that I have just read is one prepared showing the conditions as they at present exist, I know myself there are many defects so far as we are concerned in the arrangements between the two Countries, and for many years we have been trying to get the United States to give us reciprocity in the matter of extradition proceedings similar to what we give them in this country but we cannot get them to do it. They amended the Treaty in 1908 permitting us to convey prisoners through the United States, but they do this, simply so they could bring their prisoners down from Alaska through Canada, otherwise we would not have had that to-day.

At the meeting of the International Association of Chiefs of Police held recently in Rochester, N. Y., I took the matter up with President Sylvester, as to the means we offered them in getting back their criminals, and drew his attention to what they gave us and he promised to take the matter up with the authorities at Washington and I hope we will get the same from them as they get from us in the near future.

Chief Newton. Before this is entirely disposed of I would like to call attention to the fact that there is no provision in this Extradition Treaty covering wife desertion or wife beating, and of all the things in the Criminal Code to-day, I think they are two offences for which some provision should be made, and I do not think the law would go too far to make it an extraditable offence and one punishable by a goodly number of lashes.

Chief Chamberlin, Vancouver, B. C. I am very glad indeed to hear that matter brought up, I have always been of the opinion that these offences should be made extraditable ones. In Vancouver there is scarcely a week but some wretch leaves a poor wife and family to the mercies of the world and I agree with Chief Slemin that if a punishment fitting the offence (and I do not think anything short of the lash would fit that offence) were placed on the Criminal Code we would have very few wife deserters.

Chief Inspector Archibald. I quite agree with this, but there would have to be some provision made whereby the Government or Governments of the different Provinces would bear the expense of extraditing a wife deserter or wife beater.

Superintendent Rogers. I think most of us quite understand what is needed, but we do not make the laws and cannot do what the law does not allow, but I can say without any hesitation that in so far as the Ontario Government goes, that if a committee from this Association were appointed to wait on the Attorney General of Ontario to express their views on matters we have discussed I know he will do all in his power to help us along and meet our views. You have got the right man there who will listen to you, and who will be glad to listen to you, and again who will give you his views on the matter and thank you for going to him.

Colonel Sherwood, Ottawa. In regard to having the Extradition Treaty altered I may say that this is a very difficult thing to do, for it must be remembered that the Treaty was made between Great Britain and the United States, and it is not at all likely that there will be any change made in this Treaty for the next ten or fifteen years. They went into it very thoroughly the last time, and again it is not at all likely that they would have an offence that is not in their Inter-State Extradition Treaties placed in the International Extradition Treaty. I think when this paper is being printed it would be

well to have a number of extra copies printed, if that could be arranged and that each member have a couple of copies sent him and let the Secretary keep a supply on hand so that new members could get a copy, and in that way every member of this Association for some years to come will have a copy of it in his office.

Inspector of Detectives Duncan. In addition to the paper itself being printed I think it would be well to have the same number of copies of the different forms that Superintendent Rogers refers to printed and a complete set sent with each copy of the paper that is sent out.

Chief Ross, Ottawa, Ont. Why not have it printed in pamphlet form and if the expense amounts to anything I am sure we would all be willing to pay a small amount for each set required.

The meeting adjourned.

Temiskaming Telephone Co.

The 7th annual report shows a considerable growth in the business; the income was:

	1911	1910
Gross.....	\$ 32,041	\$ 31,042
Net.....	16,416	15,934

Quarterly dividends of 8 per cent per annum have been paid.

The Company has 26 toll and 24 pay stations, and 874 subscribers' stations, an increase of 33; 4 private branch exchanges have been added and the systems at Cobalt, Haileybury and Ville Marie have been rebuilt.

The subscribed stock is \$40,112 and the surplus of assets over liabilities is \$33,608.

At the annual meeting the number of Directors was increased from 5 to 7, and the following officers were elected:—President, Mr. Thos. McCanns; Vice-President, Mr. Geo. Taylor and Secretary-Treasurer pro-tem, Mr. P. R. Craven.

The intention of the Company is deserving of success—"to furnish within the territory covered, adequate and efficient telephone service at reasonable rates, properly maintain its plants, pay a reasonable dividend to the shareholders and properly care for its employees."

Such a statement deserves the highest form of flattery-imitation, and is a splendid motto for every public utility.

Another paragraph on the cover of the report explains, partly, the success of the Company:—"the strength of this Company lies in the fact that practically all its shareholders and bondholders reside and carry on business in the territory in which the Company operates."

The Company has one complaint and it seems justified in complaining.

The Temiskaming and Northern Ontario Railway Commission refuses to exchange business with its long distance connected system and the Company's lines. The Ontario Railway and Municipal Board, when asked to issue an order, held that they had no jurisdiction. The attitude of both these Commissions seems peculiar.

Why should the T. & N. O. Ry. Commission refuse to facilitate business in the district which they are opening up? Why should a Government telephone system not connect with a private Company?

Again why should the O. R. & M. Board balk at ordering connection in this instance when they have issued similar orders elsewhere?

Apparently the Temiskaming Telephone Company—representing the public who subscribe and pay tolls to them—has a well-founded complaint.

THE NATURAL HISTORY OF THE SLUM (Cont'd from page 129)

First—because the monetary side is supposed to be the most important to a nation which has been contemptuously called one of Shopkeepers—let us look as far as possible at the cost in Dollars and cents.

In a splendid article on "The annual cost of our Slums" in "Progress," Mr. W. G. Wilkins goes into the matter very thoroughly. He shows that if the death rate in Great Britain had been that of the 100 healthiest cities, there would have been 97 thousand less deaths than were recorded, for there were eleven unnecessary deaths in each hour, day and night. If the average value of a man to the nation be taken at \$4,000, there is a direct loss of \$388,000,000. But the loss does not stop there. The children who are born and brought up in the slums are not the most energetic or valuable kind of citizens. The product which escapes death is not the stuff of which any country can be proud. And every slum child who grows up, means a citizen who does not share in his country's work. It is a tragic, but very true saying, that the one thing worse than a dead Slum child, is a living one. The average life of the professional and well-to-do in England is 55 years, while of artisans in Lambeth is only 29, so that 26 years of the workman's life is cut off, and this, cut in half to 13 years represents, at wages of only \$2.50 per week, no less than \$50,000,000 annually.

But apart from the men who are cut off, there are those to whom sickness comes as part of the slum curse, and this is calculated to cause an annual loss of at least another \$10,000,000.

The cost of all this unnecessary sickness falls very largely upon the public, and the Committee on Congestion in New York estimates the cost of preventible diseases annually at between \$37 and \$40 million dollars there being 27,000 deaths each year in New York from preventible diseases and 24,000 cases of Consumption.

That slums are manufacturing poor types of men is seen from the large number rejected as being unfit. In Manchester, England, at the time of the South African war no less than 8,000 out of 11,000 were rejected, and this was attributed to the slums.

There remains a large field which is hard to discuss, because it is less direct, and that is the extra cost of our prisons, police, lunatic asylums, and other sources of expense which are largely due to slums.

One expert states that three quarters of our police forces would be idle if the slums could be removed. And if this is so, the need for enlarged jail accommodation would also cease. Our hospitals would need no extensions, and our Reformatories would be out of business.

The fact is, we are creating supplies for our police, jails, hospitals and penitentiaries in our slums.

If children are born into slum conditions, and brought up in unhealthy dwellings where decency and morality are impossible, we are training criminals and bringing up invalids.

Another terrible fact is that although the slum dwellers in Great Britain number only one fourth of the population, yet they produce one half of the children. So that the incoming generation is more slum-like than the past, and this is likely to apply to other places whose records are not so available.

THIRD THE EXTERMINATION OF THE SLUM. If it be true that the slum is a curse, the only wise thing of course is to see how it can be destroyed. Millions of money are being spent to do away with things which are inimical to humanity. The House-fly, the Rat, the Mosquito, the White Plague, The White Slave Traffic, the Juvenile Criminal, all these and many

others, deservedly have large sums of money spent upon them.

If the slum be the hotbed of vice, crime, disease and other ills which spread abroad over the land, by all means let everything be adopted that will abolish it forever from our midst.

Naturally there are two aspects of this question (1) How to get rid of Existing Slums and (2) How to prevent new ones.

These two overlap in many ways, but are partly different in their practical working.

At first sight, it appears easy to do away with slums. The impulsive man says: "Set the law in motion—and if the present laws do not suffice, pass new ones."

If we had a far-seeing tyrant like Napoleon, he could give orders, like those to Haussman, and broad avenues and boulevards would arise, as they did in Paris. But the reign of such a tyrant is past, and we can move only as fast as the law's delays will permit. Even when the laws are passed, giving power to close up and pull down unhealthy slums, practical sense intervenes, and shows the folly of turning out scores of families until they have some place to go. If this were not realized, the only result would be to create new slums where the homeless people moved.

Only recently in Toronto, an investigation by Dr. Hastings, M. H. O. revealed the fact that there were over three hundred houses utterly unfit for human habitation. The law gave power to close them up. But the result would have been disastrous, so only the very worst were closed, and orders issued to improve the others.

In England, great blocks of slums have been pulled down, and model tenements erected on the sites. But this is tremendously expensive, as the landowners ask exorbitant prices for their old rookeries.

Other cities, both in England and in Europe, have acquired land outside the boundaries, and have erected suburban dwellings for the working men. In this case, transportation, both rapid and cheap, has had to be provided also.

An apparent difficulty, that slum tenants are not able or willing to pay a fair rent, is met with the fact that slum rents are almost always very high.

One way to cure the slums is to compel the owners to put their property into proper order. It is a disgrace to any city to compel citizens to submit to conditions which imperil health and life itself. In some places, there is a municipal fund for legal expense for the very poor. For it must be admitted that the slum dwellers submit to conditions which are illegal, and which would not be tolerated to even a small degree by those who have the means or the knowledge of legal actions.

A means that would be the death blow of many slums appears to me, as a newspaper man, to be the judicious advertising of the names of the owners of the slums. I would like to have sufficient money to spend in getting photographs of slum conditions so as to get out an illustrated "Guide Book to our Slums," with full particulars gathered by trustworthy people, and giving the name of the owner. It might be as it was in New York some years ago, that even Church property was among the worst. This, I believe, has never been suggested, but the idea will not be copyrighted, and I hope that some one will rise to carry it out. Mr. Ames did something in that direction when he published his admirable study of the "City below the Hill," but did not advertise the owner of the poor property.

After careful study of the Land Tax as a means of curing the slum evil I agree with the many who have found at least one means to the desired end in this.

In his book "Taxation of Land Values in American Cities" Mr. Marsh gives many arguments showing that the result of the pressure of taxes on land rather than on buildings would exert an influence towards curing the slum evil.

Mr. William E. Harmon, a large real estate operator, says "Probably the best way to solve the problem of congestion would be to double the tax on vacant land, thus reducing the tax on improvements. If you increase the tax on land, you force construction to offset the carrying charges."

Then the "heavy taxation of land values would be an automatic incentive to the demolition of unsanitary tenement." It seems strange that in one district on the East Side of New York (the most congested area in the world, where the buildings are 5 and 6 stories high), there are (or were) 57 lots of land vacant and 72 with one story buildings. A heavy land tax would soon bring this land into use, instead of allowing some speculator to hold it from the public while the increased population all around it puts up the value.

Mr. Marsh points out the fallacy of housing reformers not giving sufficient prominence to the question of land taxation. He points out that foreign experts all agree on the necessity of heavier taxes on land; and that English Royal Commissions have recommended that the site bear heavier taxation than the buildings, and that unoccupied property should be charged with a special tax. The Federation of Churches and Christian Organizations of New York advocating the halving of taxes on buildings say "The Bill is in the interests of proper housing."

One need not go far in any city in Eastern Canada to see how many hovels stand upon land which is suitable for good buildings; and this at once points out what would happen if the land only were taxed, and the buildings were free of taxes.

The principle being adopted in the West that a home, whether a palace or a cottage, should only bear taxes for the land on which it stands, will go far towards curing the Slums.

One great cure for the Slum evil and one which would go far to prevent its development, is cheap and rapid transportation. This enables the working man to live outside the congested parts of the city, and there are thousands of such who jump at the chance of a tiny home and bit of garden if they could only get it out cheaply. Unfortunately in Montreal we have allowed the Tramways Merger, with its watered stock, so that the possibility of cheap fares is brushed aside in favour of dividends on watered shares. But the transportation problem is still here, and its importance is increasing all the time.

City planning is by many accepted as a perfect cure for the Slum evil. This is a great mistake. City Planning, *per se* is not a remedy at all. For City Planning too generally includes only the construction of great avenues, boulevards, Civic Centres, and such magnificent and imposing ideas. It is quite possible to have a magnificent City Plan, and abominable Slums along with it. Such is the case in Washington.

Attendance at the City Planning Conference in Philadelphia last spring was intensely interesting, especially with the greatly added value of a huge exhibition of plans and models from many cities all over the world. But the most interesting part to my mind was the insistence by the British delegates, of the need of some scheme of Housing in any City Plan, and the exhibits of models of Slum localities and their possibilities, and of the inspiring pictures of Garden Cities.

Garden Cities offer a way to alleviate existing conditions and to prevent Slums for the future,

Briefly explained a Garden City is one laid out so as to give plenty of light and air between the houses, and to absolutely prevent any chance of the construction of a Slum.

Their construction, combined with transportation of the right kind, has a double effect. It takes from the congested areas the more enterprising dwellers, and makes the landlord realize that unless he improves his property, he will lose more tenants, thus aiding in the cure of the existing Slum. While at the same time its plan and regulations prevent any property declining into a Slum.

The idea of Garden Cities was introduced into Canada by Mr. Henry Vivian, who came out at the invitation of Lord Grey, and spent a good deal of time addressing public meetings on the subject of City Planning and Housing, and to Mr. Vivian I am indebted for much information on this subject, as well as to Ald Thompson, and the Officers of the First Garden City at Letchworth. It is satisfactory that the Hon. Dr. Guerin, while Mayor of Montreal, has introduced the Garden City Movement practically into Montreal, and it is to be hoped that it may take root and multiply.

Praise is also due to Mr. Herbert Ames, not only for his study in the book, "The City Below the Hill," which first called attention to the housing problem here, but also to the practical experiment in housing which he undertook some years ago by building model dwellings on William Street the corner of the Haymarket. This was pioneer work and has to led the way for others to follow.

There are many who turn with disgust from the shacks which fringe our city in certain directions, where land is cheap. The "packing boxes," as they are laughingly called, are not handsome. But does it not really mean that these men who go out of the slums, to make homes for themselves and their families, often putting up the shack with their own hands after they have earned a day's pay as hired men—are deserving of the highest praise? They are the pioneers of the race, as truly as those ancestors of theirs who went out into the virgin forest and hewed down the logs for their homes. There may be many mistakes, much lack of sewerage and water supply. But is it not the fault of others that they have to incur all the hardships of a pioneer in order to bring up their children in God's sunshine and light, instead of in a man-made Slum.

And the Children; what does a Garden City mean to them? These citizens in the making?—What shall our future Canadian citizens be?

Today we all believe less in heredity and more in environment. How do the Slum and the tiny Home on a lot of its own compare in influence for the children?

A writer who visited the Garden City of Hellereau near Dresden said to one of the residents that the children seemed much happier and more carefree than the average German children. "Yes" said the man, "they were all a nuisance in Dresden, and they felt it. They are a blessing here, and they know that too."

Compare this with the tale of the Slum child who lived in a dwelling which had no walls. A teacher gave a tiny Italian girl a picture and told her to hang it on the wall, at home, "Gotta no wall" replied the child, and insisted that they had no wall. Enquiry showed that the child's parents rented one room, but to make both ends meet, had rented the four corners to four tenants, so that the child was literally right when she said that they had "gotta no wall."

MUNICIPAL IMPROVEMENT

The Building-up and Beautifying of Canadian Towns

UNION STATION, WINNIPEG, Man.

This imposing structure which was officially opened recently is known as Union Station and is one of the finest as well as the most modern depots on the continent.

The building has a frontage on Main Street of 352 feet and a depth of 140 feet and covers a ground area of approximately 50,000 square feet. It comprises basement and four storeys, surmounted by a dome 90 feet in diameter and 100 feet above street level. The new depot forms part of an extensive project involving a system of trackage and railway buildings which will provide one of the best equipped terminals in the World.

The main floor of the building has a large circular lobby in the centre under the dome, with waiting rooms, restaurant and lunch room on one side, the ticket offices and baggage rooms being placed on the opposite side. It communicates through the rear by a subway and stairways to wide platforms between the eight through tracks which have a capacity for 200 cars at a level of 10 feet above the main floor. The main lobby is entirely unobstructed by columns or seats of any kind and is exceptionally well lighted on all four sides by large arch windows. In the basement there is a waiting room with an area of 10,000 square feet, besides excellent accommodation for immigrants. The second, third, and fourth floors will be devoted to office purposes. Ultimately, it is planned to add four more storeys to provide a total of 200,000 square feet of office room.

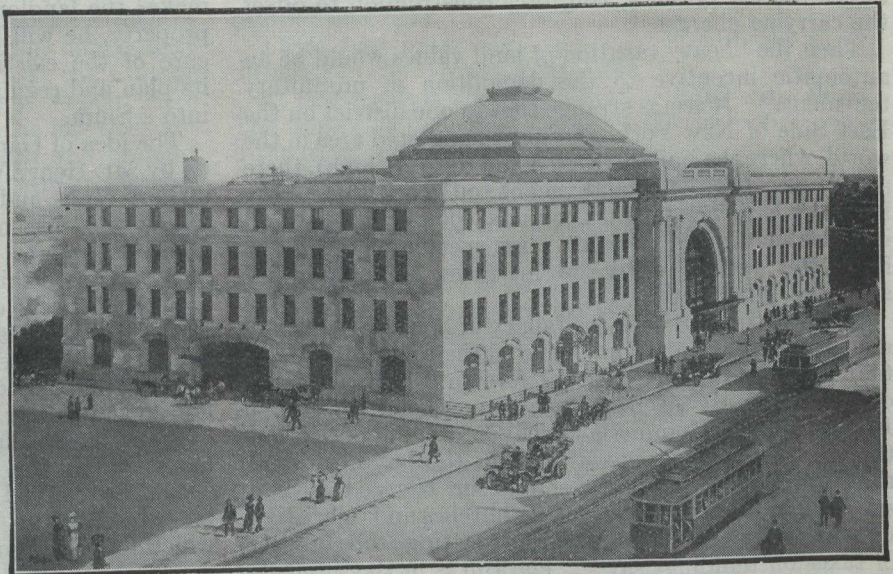
The first train in or out of this station was Grand Trunk Pacific passenger train which leaves Winnipeg at 7.00 a. m. for Minaki, Graham and Fort William. This train was made up of Grand Trunk Pacific standard equipment, which is conceded to be as fine in appearance and as substantial in construction as can be found in America.

Substantial progress is being made in all directions in the construction and opening for traffic of the lines of the Grand Trunk Pacific. Recent reports given out announced the completion of the line to Fitzhugh, a point in the Jasper National Park, 1027 miles west of Winnipeg and service will be immediately extended thereto, and it expected that 50 or 60 miles addition beyond Fitzhugh will be graded for steel this fall—This would bring steel to Tete Jaune Cache.

Work on Prince Albert Branch is being rapidly pushed forward and steel has been laid as far as Waka, 68 miles from the main line and grading on this line has been completed withing 24 miles of Prince Albert.

On the Branch from Regina to the International Boundary 25 miles of steel will be completed this fall and 60% of the grading on the Regina—Moose Jaw Branch has been finished.

Construction work on the Brandon Branch which runs south from the main line at Harte, a distance of



Union Station, Winnipeg, Man.

24 miles is being commenced this week and when complete will give the Grand Trunk Pacific the shortest line between Winnipeg and Brandon.

Grading has practically been completed on the first 50 miles of the Biggar-Calgary Branch, and work was started last week on 50 miles of the line from Battleford West through the Cut Knife District towards Wainwright, Alberta.

On the Tofield-Calgary Branch steel has been laid to the Red Deer River.

The above gives a good idea of how the work on the branches is being advanced, in addition to which the main lines are being pushed forward actively.

A neat little booklet has come to hand from Langham, Sask., got up and sent out by the Board of Trade. The facts about Langham are crisply condensed into three pages; they state where Langham is—507 miles west of Winnipeg on the C. N. Ry. main line; what Langham has: 2 banks, 4 elevators, 4 stores, a good live newspaper, a flour mill, schools, churches, etc.; what the surrounding country can produce; what the climate is; and other interesting information. Then 11 pages are occupied with cuts of buildings, principally farm houses and outbuildings, showing general prosperity and success; and among these is the Town Hall, with the Fire Department. The final page calls attention to "Fat and Fertile Acres at Bargain Prices;" to "Good Markets, Light, Taxes and Healthy Climate" and for further particulars refers the reader to the secretary of the Board of Trade.

This booklet deserves commendation. It is simply got up; the statements made are few and brief; there are no exaggerated claims to be discounted by doubters; and it is short enough to be likely to be read carefully by anyone who reads it.



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.



Assessments on Telephone Lines in Ontario.

As some questions have arisen as to the assessment of the lines of Telephone Companies in the Province of Ontario, the following quotations from the Assessment Act will explain the position:—

Section 14, (2) states: Every telephone company shall be assessed in every Township for one ground circuit (being a single wire for carrying a message) or metallic circuit (being two wires for carrying a message), as the case may be, placed or strung on the poles or other structures operated or used by the company in the township and in use on the 31st December next preceding the assessment at the rate of \$135 per mile and in case any line of poles or other structures carries more than one ground circuit or metallic circuit at the rate of \$7.50 per mile for each additional ground circuit or metallic circuit, as the case may be, placed or strung on the 31st day of December next preceding the assessment.

Provided that in the case of any local telephone system not operating generally throughout the Province, and not authorized by Statute to carry on business throughout the Province, the lines of said company within any township shall be assessed at their actual value, but not exceeding the whole rate per mile in this section prescribed.

(3) In the computation of the length of said telephone wires and additional wires for assessment in a township as aforesaid, the wires placed or strung within the area of any police village and the wires of all branch lines, which do not exceed 25 miles in length, shall not be included.

The assessment in Cities, Townships, Villages and Police Villages, is covered by subsection (1) of the same Section, which orders that the assessment shall be levied upon 60 per cent. of the gross receipts for the year, but in cities of over 100,000, the assessment shall be upon 75 per cent.

The Bell Contract

A meeting of delegates of the Independent Telephone Companies was held in Toronto by the association, to discuss the proposed contract with the Bell Company at which approximately 9,000 telephone users were represented. The contract was fully discussed, and it was decided that when the matter is heard before the Railway Commission on the next hearing, a contract shall be submitted by Mr. G. H. D. Gamble, K. C., which shall not be one-sided, like the one already proposed, but which shall be fair and

equitable to both parties who sign it. The Independent Companies do not want anything from the Bell which they are not willing themselves to grant. The hearing will be in the City Hall, Toronto.

"It's a surprising thing to us that more farmers don't organize telephone companies of their own. I believe they're doing it now more generally than they used to, but there are lots more that would and could organize if they knew how it was to get started, and how great the benefits were.

"If there's one thing that I would advise more than another, it would be for some farmer in every locality to write to one of the big supply houses to find out what they have to tell him. There's no reason either, why one man should put it off expecting another to do it; write yourself. Rural telephones are a thing a farmer can't know too much about—especially when there are concerns who are ready to tell him everything and not charge him a cent for the information.

"All I ever invested for the knowledge was a two cent stamp, and I read over the books they sent me in the evenings."

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CANADIAN INDEPENDENT TELEPHONE ASSOCIATION OFFICERS FOR 1911-12:

President: DR. W. DOAN, Harrietsville, Ont.
Sec.-Treas: F. DAGGER, 21 Richmond St. W., Toronto

Sixth Annual Convention

(OFFICIAL REPORT)

(Continued.)

Mr. Moore, Mount Albert:—Our Company have had Bell connection for a couple of years. Our agreement is like this—On all messages that come from the Bell Company, we get a ten cent messenger service, but we do not get anything on the business originating on our lines and going over theirs. Now, personally, I think it nothing more than fair that from all business originating on the rural lines, and being switched over on the Bell lines, there should be, at least, twenty per cent of that come back to the Rural Company. I hope a Committee will consider this. We have about four hundred phones at the present time, with two centrals—one at Mount Albert and one at Queensville. Between Queensville and the town of Newmarket they have a five-cent service, and some of the telephones are fully seventeen miles from Newmarket, but by being switched through Newmarket we get a five-cent service. We think if we had twenty per cent. of the business originating on our own system and transmitted to the Bell, that it would be only fair and just.

A Delegate:—Mr. Chairman, it seems to me that the Bell people are trying to mix up Long Distance and Local Service, and they are trying to hold us up on account of the local competition to keep us out of the Long Distance connection. We cannot emphasize too plainly the difference between Long Distance and Local service. We are not competitors against the Bell Company for Long Distance service, and, under those conditions we have perfect right to demand the same percentage as they pay anyone else. The arrangements for percentage on local service must not be made so they will be in favor of either party, but they must be made separate from the long distance. I have heard one or two gentlemen express themselves as having an agreement with the Bell Company which is a decidedly better agreement than those of us have who have sought the assistance of the Dominion Railway Board. Now, there may be some others who have such agreements and said nothing about them. I think if the Committee could have access to these agreements it would be a good thing. If some can get these agreements, why cannot they give them to all of us. I suggest that the several companies, who have these agreements, forward copies of them to the Secretary of this Association, for the use of the Committee.

Colonel Mayberry:—I want to say, that as far as the Ingersoll Company is concerned, they have had no trouble with the Bell. We instructed the operators to give no records whatever, and they have never asked us anything in connection with our business. We are in quite a different position to that which the last speaker occupies.

The President:—I think, Gentlemen, that it is quite evident from what we have heard, that the Dominion Board Ruling is a "one-sided affair;" that the Independent Companies that have connection under and taken advantage of this Ruling, are compelled, under the Ruling, to place their central office and exchange line at the service of the Bell Company, giving that free;

and in fact you are not even allowed enough out of it to pay you for the messenger service, and you are not allowed a commission on messages from your line to the Bell line for collection fees due which you bring over the Bell Company. You will readily realize that those fees cannot be collected for any small amount, and it costs something to collect that money in. Something should be brought before the Board to show them that this matter could be adjusted on a more equitable basis than it is at the present time.

Mr. Banks, Jordan:—Take from Grimsby to Jordan. It is in the Bell Company's territory, but if we want to send a message that way they say it is local and they cannot give us connection.

Mr. Ormiston:—I would like to ask the gentleman from Blenheim if his Company is restricted as to territory?

Dr. Gibb:—We are restricted in this way—we are not to compete or take subscribers in the ground where the other is already established.

The President:—I wish it understood that, while we are Independent Companies, the main object of this Association is not to fight the Bell Telephone Company. We are here to look after ourselves, and our own interest, and the interests of the public at large. If the Bell Telephone Company have concluded that this is the best agreement they can put out, it is our duty to combine against it and bring pressure to bear on the Dominion Railway Board. We are here to protect our money that we have invested in our Company. We are not here to fight the Bell Company. Mr. Squire has a Resolution bearing on this.

Mr. Squire submitted the report of the Committee: "That the agreement, as submitted by the Bell Telephone Company to the Dominion Railway Board, does not meet with the approval of this Committee.

"That the Secretary of this Association be instructed to notify the Secretary of the Dominion Railway Board that the agreement is not satisfactory to this Association, and ask that the hearing be postponed until sometime next year, and that the case be heard in Toronto.

"That a Committee be appointed to-day to prepare a counter-agreement, same to be presented to the Dominion Railway Board at the hearing of the case—same to be the result of comparing the best parts of all existing Bell situations and other agreements.

"That the members of this Association are asked to assist such appointed Committee in every way, supplying information asked for." Carried

The President asked for the Report of the Legislative Committee.

Mr. Squire:—There are two clauses which the Legislative Committee thought of sufficient importance to memorialize the Government in connection therewith:—

"That we memorialize the Ontario Government to undertake the purchase of, or the construction of, Long Distance Telephone Lines, believing that universal connection is in the interests of the public and that Government ownership of Long Distance Lines will be the only satisfactory solution of the Telephone situation.

"That the Government be petitioned, asking that the law controlling the telephone situation as far as the Dominion Board is concerned, be so amended that Orders may be made by the Commission to effect the connection of Independent

Telephone Companies for Local as well as Long Distance service." Carried.

The President asked the Resolutions Committee to present their Resolutions.

The Secretary:—The Resolution Committee have four Resolutions to report:

(1) "Whereas it is in the interests of the Independent Telephone Companies and lines that they all get into closer touch with each other, and so perfect the organization of the Canadian Independent Telephone Association by coming into closer relationship with all Companies,

"Therefore be it resolved,—That the Executive of this Association take steps to appoint Local District Committees, who shall meet and discuss local conditions in their territory and otherwise promote the interests of the Association with a view to establishing a perfect unity of action in all things pertaining to the welfare of the Independent business as a whole." Carried.

(2) "That this Convention, being representative of a large portion of the telephone users of the Province of Ontario, respectfully urges upon the Legislature the desirability of providing a Long Distance service which will furnish adequate telephone facilities to all the people without discrimination."

(3) "That the Constitution, in so far as it relates to Membership fees of the Association, be amended and that this Convention adopt a revised scale of fees which will increase the membership of the Association and, so far as possible, meet the views of owners of all telephone systems who are eligible to become members."

After full discussion it was moved by Mr. Gee, and seconded by Mr. Ormiston, that the fees be as follows:

Companies of 50 phones, and under, \$2.50; 250 phones, and under, \$5.00; 500 phones and under, \$10.00; and 1000 phones and under, \$15.00.

It was moved and seconded "That the fees of all the members of the Executive be paid by the first of January, 1912, or the places be filled by paid-up members." Carried.

(4) "That this Convention tender its sincere appreciation and thanks to the Mayor and Council of the City of Toronto, for its hospitality on the occasion of the Sixth Annual Meeting of this Canadian Independent Telephone Association, in permitting the delegates to meet in the City Hall." Carried.

Mr. Suddaby, Burnt River, moved, as since the last meeting of the Association our late President, Dr. Demers has died, a resolution expressing the regret of the Association be passed.

Mr. Squire seconded the motion. Carried.

Dr. Webb moved that the matter of the Bell agreement be left in the hands of the Executive Committee, they acting in the capacity of Legislative Committee. Mr. Ormiston seconded the motion. Carried.

The President introduced the Editor of the "Canadian Municipal Journal," which has published the Reports of the Conventions.

Mr. Bragg said he needed no introduction to the older members of the Association who were good enough to make the "Canadian Municipal Journal" the official organ. He asked the members to send news from time to time. The telephone question is very much mixed up with Municipal matters, and that is why it is of such importance to the public. It is for your own interest to send in your Reports as the President always does. Send in your news items from time to time, the increase in phones, mileage, etc.

A paper by Mr. Wright on

Independent Telephony in Quebec

was read by Mr. Dagger:

As it falls to me to give a short sketch of the situation of the Independents in Quebec, I would like to say, first: That in the City of Sherbrooke, one hundred miles east of Montreal, and which is a very thriving City of about eighteen thousand population, with four railroads running through, and which is growing rapidly, seems to be the hub or centre in the Eastern townships, the People's Telephone Company's Head Office is situated.

This Company has been in business for the last twenty three years, and has grown to its present size, which is about twelve or thirteen hundred telephones, scattered in all directions through the City and into the Eastern Townships, and is now operating Nine "Central Offices" with from twenty-five to three hundred telephones each.

Our Toll Lines amount in all to about seven hundred miles. We are connected up with five small Independent Telephone Companies, and we are working hard to connect up with as many of these small Independent Telephone Companies as possible, so as to maintain our own position, and hold what business we now have.

Sometimes it is rather hard work, as we have no connections with "The Bell Telephone Company," and they are very active wherever they find we are forging ahead.

Our Rural or Party line rates are Fifteen Dollars, same rate as The Bell Telephone Company. In the city of Sherbrooke we are considerably smaller than the "Bell Telephone Company" in number. City rates are Fifteen Dollars for residence and Twenty-five Dollars for business. Bell rates are Five Dollars higher than ours.

Our telephones are all put in on yearly contracts, with six months rental payable in advance. Collections are good, and we have had a very prosperous summer. We have put in upwards of One Hundred and Fifty Telephones, and built about Two Hundred Miles of new line this year.

This century the Farmer is just beginning to realize the value of the Telephone.

We are looking forward for a prosperous future for the Independents of the Province of Quebec, and the one thing needful is co-operation and a strong association to try and weld the different companies together, and for a definite policy to be pending in the future, and there is nothing to hinder the Independents from doing this, they will only co-operate.

The time is now, and the opportunity is at hand, for us to get down to a definite line of business. This is shown in the number of victories which this Company won last winter before the Railway Commission in Montreal and Ottawa. We were successful in breaking up an exclusive contract which the Bell Telephone Company was endeavoring to make with an Independent Telephone Company, which if it had not been for the Railway Commission, would have been the means of putting us practically out of business.

I regret very much not being able to attend this Convention, and submit on behalf of the People's Telephone Company, the above.

The next Annual Meeting was left in the hand, of the Executive.

The Convention adjourned.

The Bruce Township Municipality, Ont., which has already built a rural system covering 85 miles with several hundred subscribers, has decided to install central exchanges, and an advertisement for supplies appear on page 153.

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CIVIC NOTES

WESTERN PROVINCES.

BURNABY, B. C. The municipality will participate in the sewer scheme for a Greater Vancouver. — The council passed a resolution that no applications would be considered by the Board of Works unless received in writing at least seven days before the meeting.

CALGARY, ALTA. A \$250,000 playhouse is to be erected here by the Orpheum circuit; a site has been bought already. — Work on the splendid C. P. R. hotel will begin this month; 500 men are to be employed. — The two money by-laws recently submitted were both carried. — The City Commissioners have recommended the City Council to erect a building at an early date to be used as a city jail and police court; the site suggested is back of the city hall, but not close to it.—Six new cars will be ordered so as to have sufficient to operate the extension in the C.P.R. car shop district.—It is probable that the Sunlight Soap Company will build a factory here. — The City is asking the Government to give it part of the barracks' land to widen 9th Avenue; then the bridge across Elbow River at 9th Avenue will be considerably widened to accommodate the large volume of traffic. — The City Engineer is urging the city commissioners to establish a civic paving plant which the city council voted in favor of last year.

EDMONDS, B. C. The main road is now being put into good shape for the coming summer. — There is talk of incorporating the town and the district immediately surrounding it into a city. — It has been decided by the Board of Works to open a number of temporary roads to give settlers access to their property.

EDMONTON, ALTA. A new police station is to be erected near the new Isolation Hospital. — A municipal hospital in the southern portion of Greater Edmonton, which until recently was the city of Serathcona, has received an offer of \$25,000 from Lord Strathcona.

KILDONAN, MAN. The C. P. R. has purchased 1,800 acres in the eastern portion of the city as a site for their new yards.

KINDERSLEY, SASK. Permission has been secured for an extension of the town one-half mile in every direction, and three square miles have been added including some valuable subdivisions, and increasing the assessment by about half a million. — The council has decided on an extensive waterworks scheme for the town, to cost \$50,000; a plentiful supply of excellent water has been obtained about a mile from town and it is intended to pipe this in and put in an extensive distribution system covering the entire town; as the annual water-bill for the town now runs over \$10,000, it will unquestionably be a re-

venue producer from the start. — A municipal skating and curling rink will be erected early in the coming summer, at a cost of about \$6,000. — Proceedings are being taken for the installation of a municipal electric light and power plant. Between \$10,000 and \$15,000 will be spent on the project this year.

MEDICINE HAT, ALTA. The School Board advocates two new school sites, though there are two new schools now under construction. — The Industrial Committee has secured two new industries, the Western Porcelain Manufacturing Company and the Alberta Glass Company, and asked that a by-law be submitted to confirm the agreement granting concessions to the factories; the city agrees to grant the Porcelaine Company, three acres of land, with an option on two more acres, to supply water and electric power at their plant at the prevailing manufacturers' rate and to give them free gas for five years; the agreement with the glass factory is for five acres of land and free gas for five years. — The City Engineer is preparing plans for a subway under the C. P. R. tracks at Toronto Street. — A municipal street railway is proposed.

MOOSE JAW, SASK. The C. N. Ry. has made an arrangement with the city council for the entrance of that railroad into the city and for a station site.

NANAIMO, B. C. The street car line work has been delayed owing to the street railway company being unwilling to accept the proposed terms of the city. — The council has decided to petition the Provincial Government to have all prisoners returned to the place from the local jail; at present after of conviction upon their being released they have served their terms in Nanaimo jail they returned loose in the city. — A by-law is being prepared to borrow money for the purchase of motor trucks for the fire department.

NELSON, B. C. American capitalists propose to establish a pulp and paper mill here; subsidiary factories for the manufacture of envelopes, paper boxes and other similar produce would also be established; a free site and cheap power are asked.

NEW WESTMINSTER, B. C. By-laws will be submitted for a municipal gas plant, a cemetery, two parks and a new hospital building. — The Board of Trade of the different municipalities near here have passed a resolution that the north arm of the Fraser River should be dredged as far as this city, as part of a great natural harbour scheme. — The Council has decided to clear Columbia street of all the old-fashioned wooden buildings; the owners will be allowed to make alterations, only on condition that they remove the buildings at the expiration of half the time estimated as the life of the structures by the fire chief and the building inspector.

CIVIC NOTES



BERLIN, ONT. The Council has decided to abandon its \$80,000 producer gas plant and depend on Hydro-Electric power. — The Town Council and the Waterloo county Council have been arranging to separate; when separation is completed, Berlin will apply for a city charter.

BRANTFORD, ONT. The Board of Trade has decided to act with the Manufacturers' Committee for securing new industries. — The contract for the Y. M. C. A. has been let; the building will cost \$95,000 and is to be completed by November next. — The Council is facing scores of lawsuits arising from the ruthless destruction of pet dogs during the rabies scare.

DURHAM, ONT. The Durham Furniture Company's new \$75,000 addition is nearly completed and will give employment to 100 more workmen.

FORT FRANCES, ONT. The fight continues against the Ontario and Minnesota Power Company, which has applied to the Provincial Legislature for authority to expropriate a portion of the site of the town for the purpose of erecting additions to their plant; this company already controls half the Rainy River water power from the American side; the Minister of Lands, Forests and Mines has been asked to protect the rights of the municipality, for its future will be jeopardized if it loses its share in this great water power; the Minister has promised that their interest would be protected.

GUELPH, ONT. Stewart Sheaf Loader Company has bought 85 acres in the industrial section. — The Hare Engineering Company has purchased land for a factory.

HAMILTON, ONT. The City Engineer is in favour of water meters, when the capacity of the improved waterwork system has been reached. — The proposed route of the C. N. R. through the city will depress many of the streets. — The police are to attend all meetings of the City Council in future, owing to the disorderly conduct of a number who attended a recent meeting. — A deputation was sent to Ottawa to urge the Dominion Government to make a grant for the development of the Harbour.

LONDON, ONT. The City Hall Committee has practically decided on a site near Victoria Park. — The Forest City Furniture Company is opening a factory here. — There is the probability of an American automobile company locating here. — The London Electrical Company will tender for the city street lighting contract in opposition to the Hydro-Electric. — It is expected that motors for the city engineer and for the fire chief, together with a motor

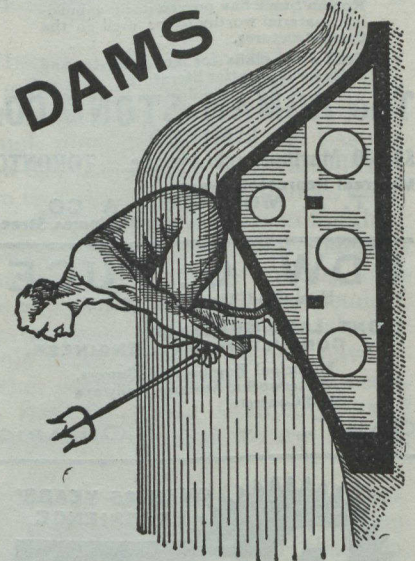
combination waggon for the fire department, will soon be purchased.

MONTREAL, QUE. It is likely that the proposed statue to King Edward VII. will be placed on Phillips Square. — The controllers are considering the advisability of having granite steps for the Champ de Mars. — The President of the Reid-Newfoundland Company has declared that he will visit this city on next Christmas Day in the ice-breaker "Bruce," the vessel which has caused a great deal of favourable comment. — It was proposed at the Chambre de Commerce that the Montreal Tramways Bill, now before the Legislature, should be postponed to give the city time to consider it and to incorporate amendments necessary. — A delegation asked the Provincial Government for a \$5,000 grant towards the erection of a statue to Dollard and his sixteen companions of Long Sault fame. — There is the possibility of portable polling booths for next civic elections, owing to the difficulty in securing rooms and offices. — During the past year, 202,538 tons of garbage were disposed of by the Incineration Department, 143,637 tons were put on the dumps and 58,891 tons were incinerated.

OTTAWA, ONT. The Dominion Exhibition will be held here this year, and will probably last two weeks instead of one. — The Hydro-Electric Commission has acquired the Chats Rapids near here.

PORT ARTHUR, ONT. The plant of the Port Arthur Waggon Works, the largest in Canada, is nearly completed; the plant will generate its own electricity; about 150 men will be employed. — The Port Arthur Elevators will be increased to 24,000,000 bushels. — The by-laws to grant exemption from taxation to the McRae-Wood factory, to the Stanworth-Martin store plant, and to the Pigeon River Lumber Company were not carried, though they got a majority, as a 50 per cent. of the total possible vote was necessary; they may be submitted again; several by-laws for municipal improvements were carried. — The Industrial Committee resigned because of the defeat of the recent industrial by-laws.

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which last item includes \$100,000 for new meters, but as there was strong opposition to this clause, it was struck out for the present. — The tax rate is to be 21 mills, which will bring in a revenue of \$1,713,645. — The Board of Control has increased the salaries of the Mayor, the Controllers, the City Treasurer, the City Solicitor, the City Engineer, besides minor increases.

KAMLOOPS, B. C., has sold \$90,000 5 per cent, 25-year debentures to the Dominion Securities Corporation.

KERRISDALE, B. C. The additions to the municipal hall will cost about \$12,000. — The water regulations provide that all water rates, except meter rates shall be payable half-yearly in advance, with a discount of 20 per cent. if paid before certain dates; all persons taking water must keep their own service pipe and fixtures in good repair, and well protected from frost at their own expense.

LETHBRIDGE, ALTA. The assessment is \$18,634,711, an increase of \$1,224,522 during the year; the present borrowing power of the city is \$2,226,000, and it has borrowed only \$1,500,000 so far; the assessment figures show an increase of 140 per cent. over those for three years ago.

MACKLIN, SASK., has sold \$10,000 6 per cent. 20-installment school debentures to Messrs. C. H. Burgess and Company.

MINNEDOSA, MAN., has sold \$10,580 5 per cent., 20-installment debentures to Messrs. C. H. Burgess and Company.

MONTREAL, QUE. It costs \$150,000 a year to remove and burn the city's garbage, according to the report of the Superintendent of the Incineration Department.

NORTH VANCOUVER, B. C. The civic debentures have been sold, and the city will now have \$374,000 to spend on improvements.

PORT ARTHUR, ONT., has sold \$300,000 4½ per cent. 20-year debentures; \$75,000 4½ per cent. 30-years to the Dominion Securities Corporation.

PRINC-RUPERT, SASK. The publicity commissioner receives a salary of \$5,000 a year; he will have \$15,000 to spend for the city.

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CALGARY, ALTA. The by-law for \$12,000 for publicity purposes for the year was carried by a large majority. — The by-law to grant exemption from taxation to the Canada Malting Company was only just carried. — The total assets amount to \$15,486,721.81, exceeding the liabilities by \$3,240,631.19; the comptroller has recommended that a paymaster regularly appointed and bonded should be engaged to pay all city employees; total expenditure for 1911 amounted to \$5,795,779.34.

CANORA, SASK. Two by-laws, one for \$22,000 for a town hall, the other for \$10,000 for fire protection, were passed by large majorities.

CASTOR, ALTO., has sold \$6,000 5 per cent. 20-installment debentures to the Dominion Securities Corporation.

CLARESHOLM, ALTA., has sold \$8,500 5 per cent. 20-installment debentures to the Dominion Securities Corporation.

EDMONTON, ALTA. The rate-payers will be asked to vote on money by-laws calling for the raising of money to the amount of \$1,897,096.79.

Civic office site.	\$ 76,406.67
Erection of civic building.	225,813.34
Land for Park purposes, lots 99 to 103 inclusive and 124 to 128 inclusive, Block 14, H.B.R., Peace Ave	26,280.00
Purchase of Hudson's Bay property, known as golf links.	31,066.67
Police building on Elizabeth street	75,443.43
Sewer extensions	818,086.67
Carrying on water works department	264,746.67
Isolation Hospital	100,253.34

The Mayor's salary has been raised from \$3,000 to \$5,000. — The by-law for \$586,666.67 to be used for general purposes were turned down.

GREENFIELD PARK, QUE., has passed a loan of \$23,500 for sidewalks, bridges and street building.

HAMILTON, ONT. The Board of Control has recommended that the Legislature be asked to authorize the city to issue debentures to cover the following expenditures: new bridges, \$266,350; new fire halls, \$128,539; and waterworks improvements, \$731,519,

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MONTREAL

REVELSTOKE, B. C. The City Council have voted \$500 towards the Board of Trade publicity fund for the coming year; the estimates for the coming year show the finances to be in a most satisfactory condition, and there is the prospect of a reduction in the rates, and also of cheaper light and water from the municipal owned utilities.

ST. BONIFACE, MAN., has sold \$657,678 5 per cent. 20 and 30-year debentures to the Dominion Securities Corporation.

THOROLD, ONT., has passed a by-law giving a fixed assessment to the big paper and pulp mill which is to be established near the town.

WALKERVILLE, ONT., has sold \$20,000 debentures to the Dominion Securities Corporation; these were issued last year but were not offered for sale owing to the inability to secure a satisfactory quotation; the price paid was \$20,777.

WINNIPEG, MAN. The City Council has decided to submit a proposition to the ratepayers for "single tax" as a basis of civic taxation in the future, to control to some extent the high-handed speculation in vacant property. — The Council has decided to raise \$4,500,000 for the various works to be accomplished this year.

PERSONAL.

Mr. Gunn of Winnipeg, has been appointed publicity commissioner of Prince Rupert, B. C., with a salary of \$5,000 a year.

City Commissioner Candy of Edmonton, has resigned his position.

Mr. G. A. Mantle has been appointed Financial Commissioner at Winnipeg.

Mr. James Clark has been appointed Chief of Police of Dundas, Ont., with a salary of \$900.

Chief of Police Thomas Mackie, of Calgary, Alta., has resigned from the force.

Detective Roche has resigned from the Calgary, Alta., force to take up his position as Chief of Police of Penitentiary, B. C.

Professor Herdt, of Montreal, has been retained as consulting electrical engineer of the Winnipeg light and power department at a salary of \$2,000 a year.

Mr. Eugene Caron has been elected Mayor of Tadoussac, Que., for his twenty-fourth term.

Mr. A. Fred Cuddy has been formally sworn in as Chief of Police of Calgary, Alta.; Chief Cuddy was the recipient of several presentations from his Toronto friends.

Mr. Grant Henderson, the newly appointed commissioner of industries in London, Ont., has assumed his duties.

CANADA SECURITIES CORPORATION LIMITED

MUNICIPAL and INDUSTRIAL
BONDS and DEBENTURES

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MONTREAL

TOFIELD, ALTA. Adequate fire protection for the commercial district, including an electric fire alarm system is now being installed; provision has been made for the erection of a water tank of 30,000 gallons to be connected to the central portion of the town by mains.

VANCOUVER, B. C. A "Vancouver Beautiful" Association has been formed, with the object of improving and beautifying gardens, boulevards, and streets; the president advocated the securing of Court House square and two city blocks south of it for a breathing space; he deprecated the handing over of Stanley Park to trams. — The C. P. R. has plans for a tunnel about 4000 feet long to connect the Waterfront and False Creek yards, doing away with all the present level crossings.—The Playgrounds Association has appointed a committee to plan for the equipment and supervision of the Harris Street grounds. — There is a plan of the eastern grain growers to select a site where Government-owned terminal elevators would be provided, and prevent the grain from being diverted to the American side, owing to the congestion of traffic this side.

WINNIPEG, MAN. The majority of the City Council is in favour of personal registration for the compiling of the voters' list, instead of the present system of compiling the lists from the books of the assessment department. — The city council has adopted, almost unanimously, the report of the fire, water, light and power committee that an additional 20,000,000 gallons of water per day be supplied from Crystal Springs and Poplar Springs district; transmission line and transformers alone would cost \$90,000. — The Industrial Exhibition, the largest permanent exhibition on the continent, was opened by the Mayor pressing a button to turn on the electric light; a course of technical lectures for the benefit of workingmen is part of the whole scheme. — There is a scheme on foot to induce the City Council to undertake a civic ice enterprise to force reasonable prices, as there is but one company here and the prices are exorbitant.

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SALES OF BONDS FROM 19TH FEB. TO 16TH MARCH

PLACE	Population	Assessed Value	Debenture Debt.	Sinking Fund	SALES				PURCHASER
					Amount	Time	Interest	Object	
Dauphin, Man.	\$ 200,000	30 inst.	5	W. W. & S.	Wood, Gundy & Co.
Camrose, Alta	85,000	7 & 40	5, 6, 7	W. W. & S.W.	do
Owen Sound, Ont.	30,000	10	4½	.....	do
do	25,000	20	4½	.....	do
Barric, Ont.	35,870	5, 10, 30	5	.....	do
Kamloops, B. C.	90,000	25	5	.....	Dom. Securities Corp.
Clareholm, Alta.	8,500	20 inst.	5	W.W.	do
St. Boniface, Man.	657,700	20 & 30	5	.....	do
Port Arthur, Ont.	300,000	20	4½	.....	do
do	75,000	30	4½	.....	do
Castor, Alta	6,000	20	5	.....	do
Walkerville, Ont.	20,000	.....	.....	.....	do
N. Vancouver, B. C.	590,000	20 & 50	4½	.....	G. A. Stimson & Co.
Toronto, Thp., Ont.	7,000	30 inst.	5	Hy. elec.	do
Haileybury, Ont.	12,000	10	.....	.....	Brent, Noxon & Co.
Merritt, B. C.	20,000	20	4½	Fire Hall, etc.	do
Steeleton, Ont.	82,000	30	5	Sewers	Æ. Jarvis & Co.
do	32,000	20	5	Sidewalks	do
Innisfall, Alta.	15,000	20	5	Elec. light	do
Minnedosa, Man.	10,500	20 inst.	5	.....	C. H. Burgess & Co.
Tofeld, Alta.	4,000	20	6	.....	do
Penticton, B. C.	27,000	5, 10, 20	5	.....	National Finance Co.
York Thp., Ont.	6,700	15 inst.	5	.....	do
Alsak, Sask.	5,000	15	8	.....	do
Melville, Sask.	13,500	30 & 40	5 & 5½	.....	do
Niagara Falls, Ont.	3,000	15, 20, 30	5	.....	do
Granum, Alta.	4,000	20	5	.....	Nay & James
Battle River, Sask.	5,000	20	4½	.....	do
Magrath, Alta.	11,000	20	5	.....	do
Blairmore, Alta.	25,000	20	5½	.....	do
Leslie, Sask.	1,500	15	7	.....	do
Montcalm, Que.	60,000	30	5	.....	Royal Securities.
Tilsonburg, Ont.	25,000	30	5	.....	V. A. Sinclair.
Brampton, Ont.	40,000	28	4½	Hy. elec.	Goldman & Co.
Nelson Thp.	4,000	15	5	.....	do
London, Ont.	\$8,627,504	.....	203,500	10 & 50	4½, 4½	Sch., W.W., etc.	M. C. and D. S. Bank.
Price S. D., Sask.	4,000	20	5½	.....	Nay & James.
Macklin S. D., Sask.	10,000	20 inst.	6	.....	C. H. Burgess & Co.
Tealon, S. D., Man.	5,000	20	6	.....	Nay & James.
Herbert, S. D., Sask.	12,000	20	5½	.....	do

SUMMERLAND, B.C.

The Annual Report, just received, shows: total assessment, \$2,550,930; tax rate one per cent. irrigation rate, \$2.50 per acre; debenture liability \$290,000, less redeemed debentures; sinking fund, \$10,775; surplus of assets over new liabilities \$45,263; the fixed assets include \$106,961 for the irrigation system, besides \$104,195 for domestic, and irrigation and domestic water systems. The statements have been audited by Messrs. Crehan, Monat, & Co., Chartered Accountants.

QUEBEC, QUE. A delegation was sent to Ottawa asking for an extra grant for the further development of the Harbour, including additional dredging, wharves and freight sheds; the deputation urged that the graving dock be built on the city side instead of at Levis.

SARNIA, ONT. The Mueller Brass Company, which will build a branch factory here, will probably build houses for their employees, if they can purchase enough land near the factory. — The Imperial Oil Company will spend about a million dollars here on the plant. — The greatest indignation prevailed when it was discovered that the water supply was cut off because the intake pipe was clogged with ice, paper, weeds, and refuse of different kinds.

SOREL, QUE. The City Bill has passed the Legislature Committee.

ST. CATHARINES, ONT. The Royal Bank will purchase a site for the location of their new building.

STRATHROC, ONT. A modern fire fighting system and equipment is to be installed.

TORONTO, ONT. Assessment Commissioner Forman strongly opposed the applications for annexation from five suburban sections. — Medical Health Officer, Dr. Hastings has re-issued the ordinance against the use of the common drinking cup, which will go into operation in May; the medical health officer also hopes to have an ordinance against the roller towel in operation about the same date.

VERDUN, QUE. A movement has been started to establish a hospital, which is badly needed, as all patients have to be sent to the Montreal hospitals at present.

WESTMOUNT, QUE. A small strip of land near Westmount Ave. has been formally deeded over to Montreal; this piece of land would be of no use to Westmount when the avenue was straightened.

ALVINSTON, ONT. The by-law for \$8,000 for a new Town Hall was defeated.

AMHERST, N. S., has sold \$79,000 4½ per cent. debentures, due in 30 years, to Messrs. Dominion Securities Corporation.

BARRIE, ONT. A by-law for \$35,000 for sewers, carried; for \$50,000 for extending the Collegiate Institute was lost.

BERLIN, ONT. By-laws for \$100,000 for waterworks extensions; for \$10,735 for straightening Walnut St.; for \$7,000 for street railway extensions; for \$1,700 for a trunk sewer, were carried;

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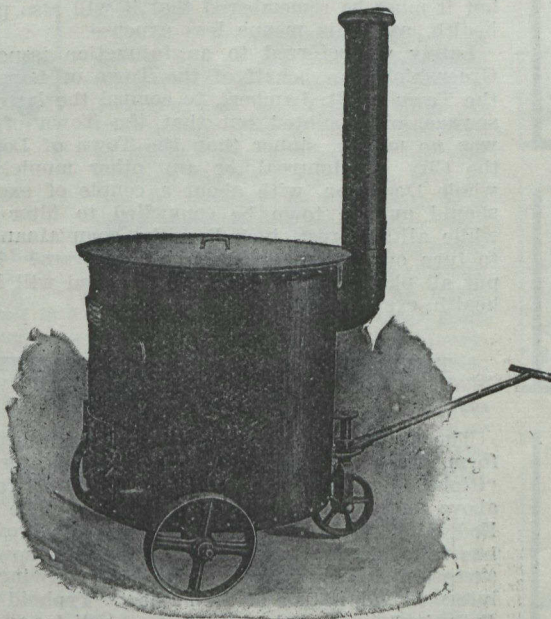
Underwood, Ont.

March 27th, 1912.

one for \$10,000 for fire appliances was lots. — The profits from the public utilities last year was over \$10,000 of which \$9,000 will be applied to reducing the taxes, annually, to a mill less.

BRACEBRIDGE, ONT. The by-law giving a fixed assessment to the Bird Woollen Mills was carried; one to loan \$60,000 to the Dominion Linen Mills was defeated.

BRAMPTON, ONT. A by-law for the purchase of the electric light plant carried. — A by-law for \$85,000 for hospital extension was carried.



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SEWERAGE FILTRATION.

The question of Sewerage Filtration, which, as Mr. Willis Chipman stated, in a paper before the Public Health Association, has attracted a "decided lack of interest, and consequent neglect with reference to most sewage plants", is likely to be forced upon public attention by legislation, within a very short time.

It will be remembered that Senator Beique introduced a Bill into the Senate concerning "the pollution of navigable rivers", which after its second reading was referred to the Commission of Conservation. The Commission, after careful study, drafted a new Bill, which was postponed owing to the dissolution of Parliament.

This new Bill has been introduced into the Senate by Senator Belcourt, and is likely to become law after passing the Committee of Public Health.

The principal provisions of the Bill are as follows:—

"Every person is guilty of an offence against this Act, and liable on summary conviction to the penalties herein-after provided, who puts, or causes to be put, or to fall, flow, or to be carried into any navigable water, or into any other water any part of which is navigable or flows into any navigable waters:

"(a) Any solid or liquid sewage matter; or

"(b) Any other solid matter which, not being sewage, is poisonous, noxious, putrid, decomposing, refuse or waste; or

"(c) Any liquid matter, which, not being sewage, is poisonous, noxious, putrid, decomposing, refuse or waste; unless such matter, whether solid or liquid, is disposed of in accordance with regulations or orders made or permits granted under the authority of this Act."

There can be no doubt but that this Bill, if it becomes law, will completely change the position of almost every municipality in Canada, for it will compel each one to be its neighbour's keeper, to the extent of not polluting the water supply of those below itself on any stream.

There is no doubt that it will lead to great expense, but it must be remembered that it will also produce better health, and this means less expense.

Lately we referred to an injunction issued by Justice Greenshields on behalf of the Town of Longueuil against the Town of St. Lambert, to compel the latter to filter its sewage, and pointed out that the Town of St. Lambert was no more a sinner than the Town of Longueuil itself, the City of Montreal, or any other municipality in the whole Dominion, with about a couple of exceptions. Why should anyone town be compelled to filter its sewerage while all the rest, including the complainant, be allowed to turn out crude sewage into the rivers? This Bill will put all places on an equal footing, and will lead to better health everywhere.

* * * * *

THE PREVENTION OF THE POLLUTION OF SURFACE WATERS.

The Commission of Conservation has issued in pamphlet form, three articles which were written for the Toronto "Globe" by Mr. T. Aird Murray, C. E., of Toronto, on the above subject. The first article is on "The Necessity for Federal Control", and points out how far Provincial control has failed to deal with the question, and how it cannot be successful, owing largely to the interprovincial, and even international, nature of the subject. "Typhoid Fever Stream Pollution" is treated in the second article, and Mr. Murray shows by practical examples what is well known; that "typhoid fever is acknowledged to be a water-borne disease". He quotes Dr. Hodgetts's figures, showing that Canada and the United States, which depend almost entirely upon waterways for their water supply, have the highest percentages for typhoid fever, Canada having nearly six times the percentage of Scotland, and more than three times that of England and Wales. The third paper takes up the question "Sewerage Purification and Sterilization", and shows how this can be accomplished, and what the best methods are.

what they are doing

JOSEPH'S WELL.

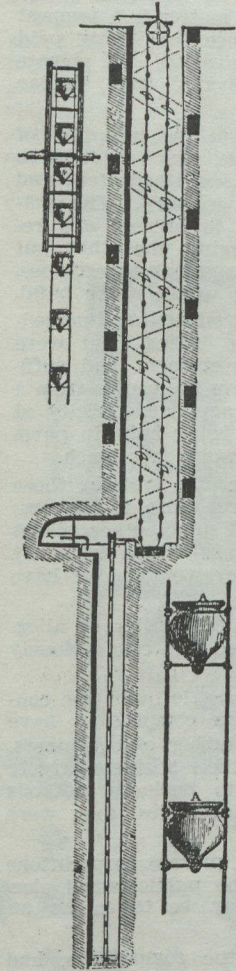
A most interesting and instructive paper was given before the Indiana Engineering Society, by Mr. Charles Brossman, on Wells and Well Pumping Machinery, which appears in Municipal Engineering, an extract from which we publish as of the greatest interest.

"There is no definite record as to when man first had to secure water from wells, nor the reasons which made him endeavor to secure water from below the surface. No doubt at first water was used directly from the streams, which at that time certainly were pure; but the human family increased. By multiplication and dissension it spread to all corners of the land, after which wells are spoken of again and again in the Bible.

No doubt the first wells were crude excavations, mere holes in the ground of very shallow depth and built wholly in soft materials; but, with the discovery of metal, wells were dug into the solid rock; not only shallow wells, but wells of prodigious depth for such times, and of no mean size, accurately fashioned and designed with a view toward permanency.

The well called Jacob's well, located on the road to Jerusalem, was used for 3,500 years by his descendants. The exact date of its construction is unknown. It is not known whether Jacob built this well himself. Sunk in the solid rock, this ancient hole drops to a depth of 105 feet and is 9 feet in diameter.

In the accompanying figure is shown one of the most remarkable engineering works of the ancients, Joseph's well at Cairo. This extraordinary well is nearly 300 feet in depth. For a depth of 165 feet through the solid rock it is 18 x 24 feet in section. At this depth is a relay chamber to receive water from the lower level of the well. The lower shaft extends 130 feet below through



JOSEPH'S WELL.

the rock into a bed of water-bearing gravel. The lower shaft of the well is 9 x 15 feet in section, the water from the bottom being raised to the 165 foot level by machinery, consisting of an endless chain of pots and toothed wheels; the motive power being horses or oxen. Making their countless rounds in this subterranean chamber, these beasts of burden raised the water from the very bottom to their own level; from there the water was again elevated the remaining 160 feet to the surface of the earth by similar beasts of burden.

Access from the surface of the ground to the lower chamber was obtained by a winding passage way following around the large shaft. This passage way is between 6 and 7 feet wide, and a little over 7 feet in height. Dropping with a very easy grade it winds around the well within a wall with little over 6-inch thickness between it and the well shaft itself. Built in the solid rock with such extraordinary care and accuracy, this well is truly remarkable; and it would be especially interesting to know more of the methods and tools used to build this great engineering work. The building of this well is commonly credited to Joseph, a patriarch of Egypt. Some scientists attribute this well to the same people who built the pyramids. Others, believing that Cairo is situated upon the location of the ancient city of Babylon, hold it to be part of the remains of this historic city."

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THE ONTARIO HYDRO-ELECTRIC COMMISSION.

The proposed amendment to the Hydro-Electric Commission Act of Ontario have naturally raised the hostility of the private electrical companies who persist in regarding the Commission as their enemy, to be fought on every occasion. As the principal change sought was to give the Commission power to dispose of property which they had already the right to acquire, the whole matter is a tempest in a tea-pot, but affords a good chance for highly paid eloquence to be directed against "invasion of private rights," "confiscation of private property" and similar appeals to popular feeling.

It is rather amusing to look back to the inception of the Commission and recall two objects which it was to accomplish. The first was to regulate existing rates; and the second, to construct plants, if necessary. The private corporations were so determined to prevent any regulation of the prices they were charging, that they put all the opposition they could muster against this clause, feeling confident that the Government would never build.

The private companies were jubilant when they succeeded in killing the regulation of their rates, but were aghast when they found that the Government had sufficient statesmanship and courage to relieve the people from a grinding monopoly by undertaking to supply electricity at rates which would allow of factories being built in parts of the Province which the Companies would not touch.

For the benefits of the Commission are seen in those districts away from the source of power close to Niagara, and to-day London, Galt, Guelph and many other places have a chance for factory development which is solely due to the Commission, and which they would never have obtained from the Companies.

A question however, remains. Has this policy of alleged "confiscation", and invasion of vested interests seriously injured private investments?

The answer, from practical experience, is quite the contrary. The low prices resulting from competition have led to an enormous increase in the number of consumers, and the private companies have had their business largely increased by having been forced into business methods of attracting customers which, as monopolies, they were too blind to see.

In every place, the business of the private corporations has increased since the advent of the public-owned electricity. The increase in London may be taken as an example.

The Company in London, before the competition, had some 2,000 customers; it now has about 2,500, while the municipality has also 2,500.

But the Company in London has an unequal fight, for it produces its power by coal, and competition with hydro-power is very difficult.

It is very interesting to remember that the cost of construction was below the estimates of the electrical experts, the then firm of Messrs. Ross and Holgate, and also to know that the oversight was so complete that the only failure in the system was due to destruction of some poles by blasting on the Canadian Pacific Railway tracks.

The Hydro-Electric Commission has done good work for the Province, good in every way — in its objects; in its construction; in its operation.

* * * * *

BERLIN WATERWORKS' EXTENSIONS.

The council of Berlin, Ont. has received a report from Mr. H. G. Hodgkins, an expert from Syracuse, N. Y. on the proposed extensions to the present waterworks system, which approves the plans which necessitate the expenditure of \$100,000. If the water supply is properly conserved there will be sufficient to meet the demand for the next ten years, according to the outlook for increase in population.

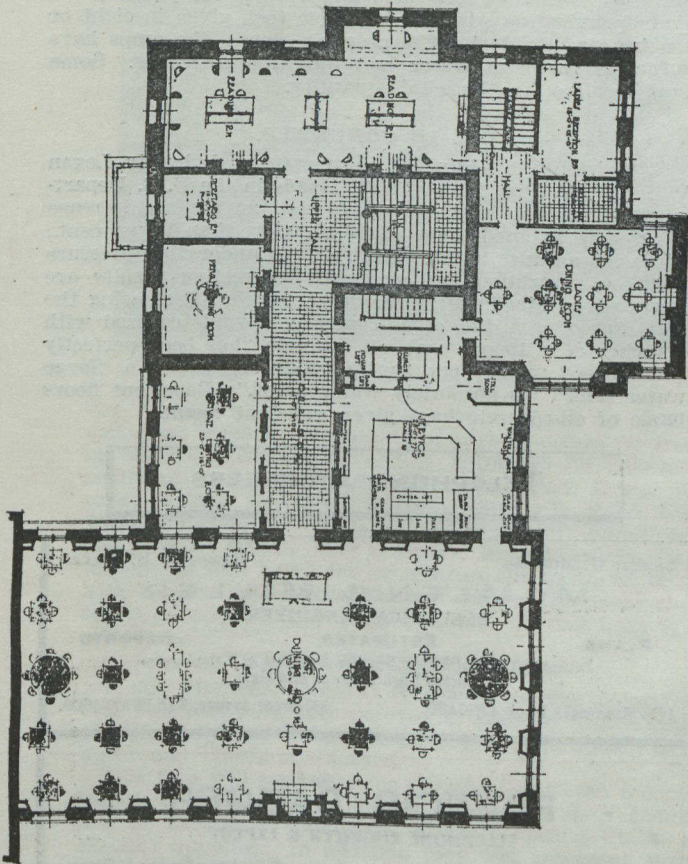
what they are doing

ENGINEERS' CLUB, MONTREAL, EXTENDING ITS QUARTERS.

Alterations will provide for 400 Members.

The old site occupied by the Engineers' Club, one of the land marks of Montreal, known as the Dow homestead before it underwent some changes to meet the requirements of the Professional element, is to be again altered and greatly enlarged.

The headquarters of the Montreal Engineers is a splendid site, away from the noisy section of the city, and with a pleasant outlook on Beaver Hall Square in the front and a garden in the rear. The vacant property of the right hand side is that which will be chiefly used for the main extensions, as the dining hall. It is the intention to adopt the same architecture in the new section as the old, as far as possible; the frame being of steel, faced with concrete and cut stone trimmings.



First Floor Plan

Some idea of the increase in size will be gained from the knowledge that the enlargements will make the building three times the size of the present edifice. On the ground floor will be the lounge, writing room, and billiard room sufficiently large to accommodate twelve English tables, and other rooms for the convenience of members. The second floor will be given up to reading room, secretary's room, private dining rooms, large club dining room (79 ft. x 39 ft. 6 in., 22 ft. high), smoking room, ladies' dining room and reception room. On the attic floor there will be a smoking room and bed rooms. Messrs. Saxe and Archibald, Architects, Montreal have practically completed all plans for work to begin at once.

* * * * *

GLASS PAVING BLOCKS.

According to a report of the United States Consul at Lyons, France, experiments with glass paving blocks have proved their unsuitability for roads.

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Engineers—And what they are doing

BORROWING A CITY ENGINEER.

The selection of Delhi as the new capital of India naturally necessitates the selection of a plan suitable for the capital of the great Indian Empire, and the India Office has asked the City Council of Liverpool to lend the City Engineer, Mr. J. A. Brodie, for five months for that purpose.

The Council has consented and Lord Derby, the Lord Mayor of Liverpool, congratulated Mr. Brodie upon his appointment, and the Government upon its selection.

Mr. Brodie's excellent work in the development of Liverpool has been widely known and the appointment is a practical appreciation of it.

* * * * *

It appears that sewerage for fertilization is usually applied in great excess. An investigation by Muntz and Massie in Paris has shown that a permanent meadow yielding 4½ tons of hay per acre requires 120,000 cubic feet of sewerage for phosphoric acid and 150,000 for potash; and that by irrigating with 150,000 cubic feet, given in eight or ten instalments during the growing season, the crops have sufficient for both water and nutritive materials. Some land receives ten times this quantity.

* * * * *

OIL IN CONCRETE.

Experiments in adding oil to concrete made by Mr. Logan Waller Page, Director of Public Roads in the U. S. Department of Agriculture have proved that no serious decrease in strength is noted if the oil be not more than 10 per cent., while the mixture is impermeable, even under high pressure and the absorption is decreased. Interesting results are narrated by Mr. Page in the "Cement World" showing the water proof qualities of oil-concrete; a vault covered with 3 inches of a 10 per cent. oil concrete "has been perfectly water-proof under very trying conditions"; and a "large water tank", "is absolutely water proof." Basement floors made of oil-concrete have given excellent results.

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 1906-7. Expert to Government of Manitoba.
 1907-8. Expert to Government of Saskatchewan.
 21 Richmond Street W. TORONTO

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

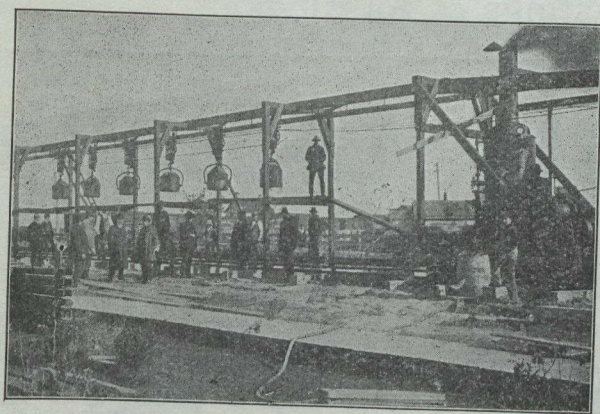
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 American building and trade journals. Terms moderate.

Equipment and Engineering

Interesting Notes on the latest Municipal and Telephone Appliances.

CATALOGUE OF MUNICIPAL SUPPLIES.

A new catalogue of Municipal Supplies has just been issued by Messrs. Mussels, Limited, which shows how very fully they cover this line of business. The aim has been to put in concise form the main features, and to supplement the details by special catalogues. The Austin Road Machinery comes first, with illustrations of the Reversible Road Machine doing many different operations, while other lines of the Austin type come later on. Drags and Scrap-



Carson French Machine at Winnipeg, Man.

ers, Dump Carts and Ploughs, are followed by sweepers and dump wagons. Machinery of various makes for trenching leads on to engines and boilers. Of pumps, the Pulsometer, centrifugal and diaphragm types are listed, Drain pipes, tools, portable lights are all fully listed. In Road Rollers there are many varieties, both of the Austin and Banford and Perkins' makes. For Concrete, Mussels handle several mixers, as well as all the accessories and tools, while they have a variety of Rock Crushers. Every Engineer should secure a copy of this Catalogue, No. 41, and keep it for reference.

NEW AGENCY BUSINESS.

A new Montreal company to deal in general agency business has just been incorporated at Ottawa with a capital of Fifty Thousand Dollars under the name of Stuart, Drinkwater and Hingston, Limited.

This firm will represent for Canada The Brush Electrical Engineering Company, Limited, dealing in their complete line of Electrical Machinery, Electric Rolling Stock, and Electric Supplies. In addition they will represent Messrs. A. W. Penrose & Company, of London, the well known manufacturers of the Penrose Electric Elevators.

The Company will take over the Canada Ford Company, Limited, of which Company Mr. Stuart is President, Mr. Drinkwater, Vice-President, and Mr. Hingston, Secretary-Treasurer, — these three gentlemen constituting the sole shareholders of the Companies.

Mr. Stuart, the President of the Company, commenced his business career with the Bell Telephone Company of Canada, where he occupied the position of assistant Purchasing Agent until The Bell Telephone Company disposed of their plant to the Manitoba Government, when Mr. Stuart went West to conclude the arrangements. Almost immediately after his return to the East Mr. Stuart entered into partnership with Mr. Ford and Mr. Drinkwater under the name of the Canada Ford Company, Mr. Hingston later joining the Firm. In September last Mr. Stuart, Mr. Drinkwater, and Mr. Hingston acquired the entire interests of Mr. Ford, who retired from the business. The Company has met with very considerable success in the last few months, and it is understood that the purpose of the new incorporation is really to grant the Canada Ford Company wider powers and identify the business more closely with the present active heads.


Mr. Drinkwater started his business life with Allis-Chalmers-Bullock Limited, leaving them to join The Canadian Fairbanks Company, which Company he left to enter into partnership with Mr. Stuart.

Mr. Hingston's entire business career has been with the Canada Ford Company. He is a son of the late Hon. Sir William Hingston, M. P., of Montreal.

ATTRACTIVE POST CARDS.

In line with the Kellogg Switchboard and Supply Co.'s live methods of assisting customers, not only with practical engineering information but advertising assistance, the Company is distributing free to customers two very attractive postal cards that can be used by the operating companies in their campaigns for subscribers, and special service.

These cards, printed in two colors illustrate and describe, in a way appealing to the subscriber, the advantage and economy of extension sets in homes or offices: and automatic push button Intercommunicating systems for residences, offices, factories and warehouses.




Departmental Telephones
For Public Buildings, Factories,
Offices and Stores

A COMPLETE PRIVATE TELEPHONE SYSTEM, capable of handling the heaviest service, where the number of calls per day is not sufficient to need an operator and switchboard. Sure in action, simple in operation. Our intercommunicating system is compact, the apparatus being made with the same quality material and care as our standard wall telephones. Either wall sets or our regular desk telephones, with key box, can be used. Each station can signal or talk to every other system with Key type signaling and switching. Can be furnished in 11 and 23 station size. Write or phone us for particulars.

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Kellogg Intercommunicating Systems will be in operation. Kellogg Telephones are in service in every State in the Union, in South America, Canada and abroad.



Extension Telephones
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AN EXTENSION TELEPHONE in the library, upstairs, in the bedroom, or in distant parts of the house will prove an economy to you, not only in household management but in emergency business calls, as a fire and burglary protection, and as an every-day time saver. Extension sets can be provided in different styles of telephones and we will be glad to submit rates and complete information on request. Fill out and mail us this card today. Doing so will not place you under the slightest obligation.

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Kellogg Telephones and Switchboards are in service in every State in the Union, in South America, Canada and abroad.

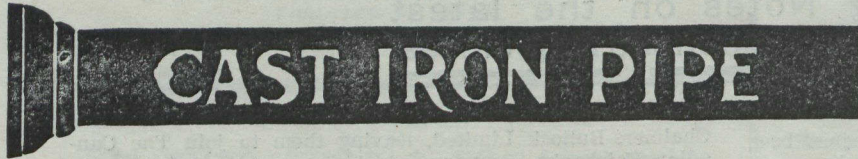
On the stamp side of the card is the usual blank space for address in which the operating company can place their own address, making it a return card, which is enclosed in the regular correspondence to subscribers or with a personal letter to special lists of people most apt to be interested in either service.

The space for the message on this side of the card is printed as follows: "Gentlemen: Kindly advise me as to the cost of an extension telephone per this card". Then follows space for subscriber's name and address.

The Intercommunicating System return card is similar except that the message reads as follows: "Gentlemen: Kindly advise me as to cost of a private telephone system per this card".

The Kellogg Company will furnish samples of these "More Business Cards" promptly on request, and will supply them to customers in quantities as desired without cost; and to other operating companies cards will be supplied at a nominal price.

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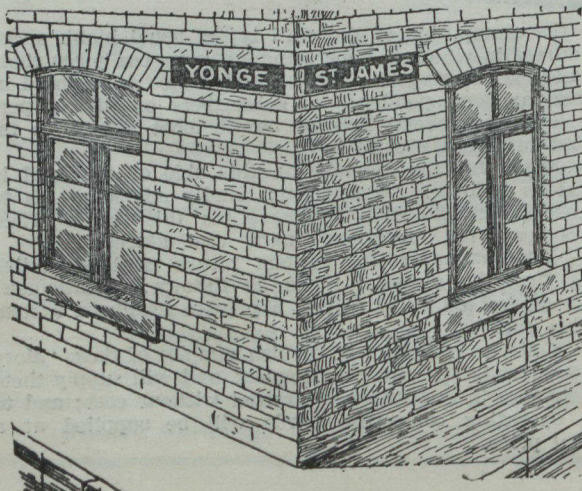
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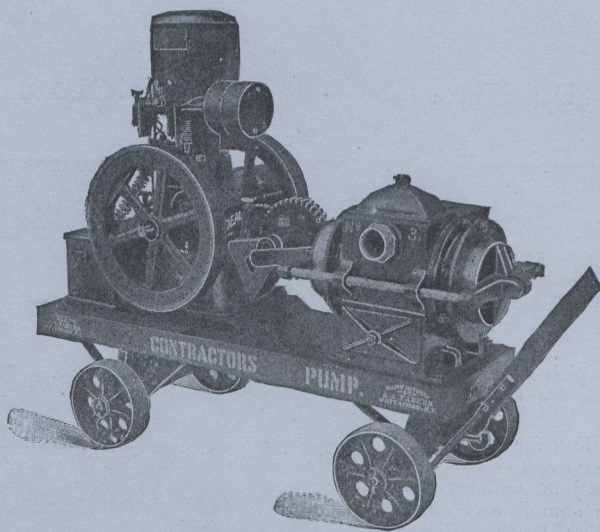
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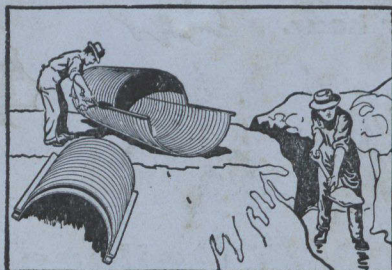
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