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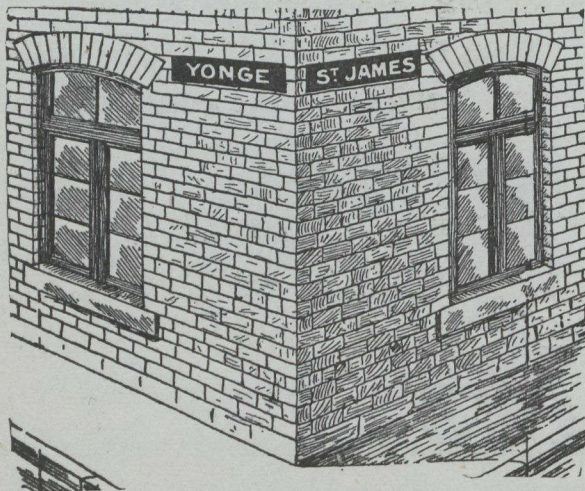
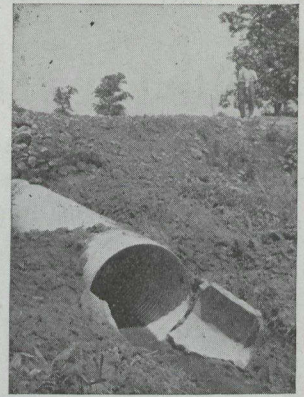
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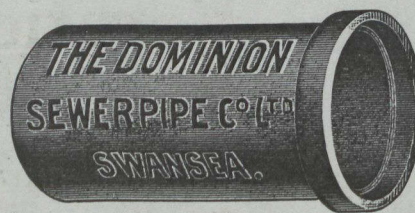
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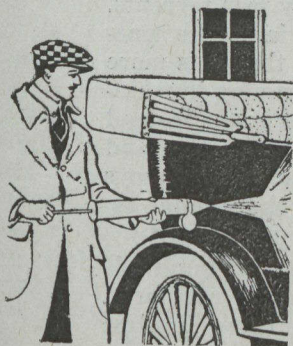
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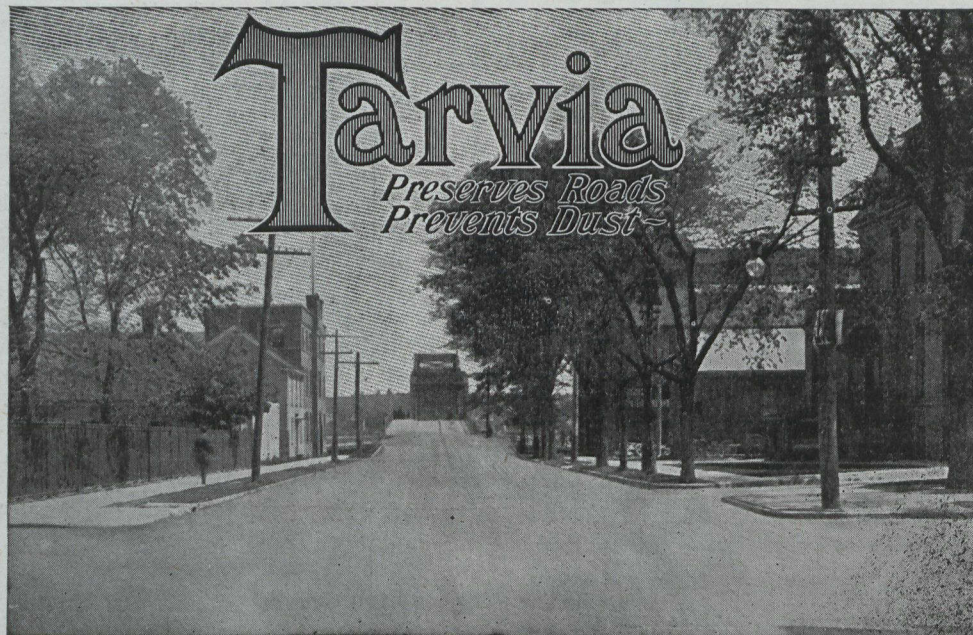
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Official Organ of the Union of Canadian Municipalities

"Municipal from cover to cover"

Circulates in every city, town and village

Vol. XII

JUNE, 1916

No 6

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Criticism of Municipal Councils

We note that recently one of the great dailies published a letter in which the writer, to show his contempt for the government of a certain city, offered one million dollars as a guarantee that he would secure a better administration. Of course such a bet could not be taken up, but we wish it had been possible, for though it is probable that better financial results could be shown, he would lose, for it was evidently beyond the critic's outlook that municipal government is not confined to the raising of money and its spending. There are a thousand and one details to consider that the average citizen knows nothing about. These details have been piled up as the municipality has grown, which in many instances in Canada have been at a tremendous rate, so that it is only reasonable to expect many shortcomings in our civic life. The critic might say, "let the councils adapt themselves to conditions as they arise." In ordinary business this can be done, but, under our present system, in the public service there are handicaps that make it impossible at times to get over the ever growing difficulties. We have known business men who have been elected to municipal councils on their promises to see that certain so-called reforms and new systems were introduced into the administration, but who have in a very short time fallen in line with their older colleagues. This apparent failure is not because of the lack of ability or earnestness on the part of the successful candidate, but he has found out that there is a vast difference between public and private business; and he has also found out that the old members of the council have all the time been honest.

The great trouble that our municipal councils

have to contend with to-day is this same detail work. In the Old Country all this is obviated by the actual administration being in the hands of the permanent officials who, as we have mentioned before in these columns, are responsible to the Local Government Board, as well as to the council. This gives ample time for the council to take up new policies for the benefit of the community, and we would suggest to those critics of our municipal councils to give more consideration to the conditions under which they work and less to the personnel, which on the whole is made up of intelligent citizens who are just as anxious to give good service to the electorate as the critics are to condemn the results. The difference is that the councilors know from experience what they are up against, and the critics don't, though they think they know all about municipal government. Constructive, not destructive, criticism is what is required in the municipal affairs of Canada.

ANNOUNCEMENT.

Mr. G. S. Wilson, owing to increasing work as assistant secretary of the Union of Canadian Municipalities has resigned from the position of President of the Canadian Municipal Journal, Limited, (the publishers of this Journal), though he retains his holdings in the company. Mr. Harry Bragg succeeds Mr. Wilson as president. The secretaryship is retained by the editor of this Journal, Mr. Frederick Wright.

Municipal Councils and Industries

As we are still in the throes of the mighty struggle against the monster of Prussian militarism, it would seem almost out of place to even discuss preparedness for peace, yet the war, on no uncertain terms, will cease and when that time comes the Dominion should be in a position to forge ahead and it is the duty of those of us who are not privileged to be on the firing line to "do our bit" in laying the foundations for the new conditions (both material and social) that must be met on cessation of hostilities, for it would be indeed a lasting disgrace to us if Canada was not in a position to give congenial employment to every man who comes home from the wars, whole and wounded.

The big industry of Canada today—the making of munitions—at the most cannot last much longer. This means that when peace does come many factories will be idle and thousands of men and women thrown out of employment. This, together with the returned soldiers may make a huge army of out-of-works. The burden of caring for this army will be thrown on the communities as we might make sure that those who have made the vast sums of money in the munition business will not take up the responsibility. The question comes then: What are the local authorities going to do about it? How can they meet the situation? It is very evident that if the problem is not met in some practical way, chaos and poverty will be the consequences, which in turn will have a very direct effect on public progress. We have spoken of vast sums of money being made from munitions. This is well illustrated in the great increase in bank deposits — one bank alone carrying over one hundred million dollars increase—and we frankly state that these vast sums of money should be kept in the country to develop its normal industries which have suffered considerably because of the war, directly and indirectly. By normal industries we mean the utilizing by means of manufacture of the vast mineral and forest resources of the Dominion, instead of exporting our raw materials as we have been doing in the past largely because of the lack of capital. This capital is now in the country and should be used to keep our factories running. We believe that by intelligent co-operation this can be done and no one can do it so well as the municipal authorities because of their practical knowledge of local conditions.

If we were asked to make suggestions, one would be that each municipal council cause an inventory to be made of the local factories, and the report sent in to the convention of the Union of Canadian Municipalities, which will be held in August. The convention in turn to elect a special committee whose business will be to get into touch with the Federal Department of Trade and Commerce with the object of securing the results of its recent investigations which were carried on with the idea of finding out the opportunities for Canadian manufactures in different parts of the world. By this means each municipality would get a line on its factories, their opportunities both at home and abroad, and how best each

factory could be used. It need hardly be said that Canada's success as a manufacturing country depends to a large extent on her finding profitable outside markets; and there are many.

To our mind the full working of the factories is essential to the prosperity of the neighborhood, and though the councils have already multitudinous duties the additional one of seeking the best opportunities for the individual prosperity of the citizens must be taken up at this time if they would seek the suffrages of the people to-morrow. It is true that Boards of Trade abound in the country, some of them good, but the majority are little better than publicity associations. At the same time there is no reason why they should not work with the local councils, but it is the elected representatives of the people who must take the initiative.

GOOD ROADS NUMBER.

The report of the Good Roads Congress which was published last month in the Journal has met with much success, though this was to be expected for the reason that all the papers and addresses represented the concentrated knowledge of the best men on the many different types of roads built in the United States and Canada. The address of Mr. B. Michaud, Deputy Minister of Roads for the Province of Quebec and President of the Congress, was in particular of great interest because it was practical and he was speaking from his successful experience in the development of Good Roads in the great French province on the banks of the St. Lawrence, and what is more to the point, Mr. Michaud's address as given, and as it reads, can easily be followed by the average man. The deputy minister favors no particular type of road, but what he does urge is the utilization of the materials at hand. For instance, gravel roads should be built where gravel is plentiful. This should be obvious to any intelligent man and yet we find the reverse in many cases. It is very evident that much of the success of Quebec's roads is due to the use of local material as far as possible. We hope next month to give the story of how the people of Quebec became so enthusiastic as to spend fifteen millions on the building of roads, which is a record.

One drawback to the complete success of the good roads number was the paper used. The reason for this was the shortage of book paper, but this was more than made up, as already stated, by the articles themselves. We also for the first time published a French edition of the whole number, which has been a huge success. This was made possible by the generosity of the Quebec Government and those advertisers whose minds were quick to see the advantage of catering to the French speaking citizens of Canada. They will get their reward. Our reward is the satisfaction of an achievement big enough to be proud of. We also wish to thank the Dominion Good Roads' Association for their loyal support in the work. We do believe that the roads number will have a beneficial effect on the good roads movement.

The Patriotic Fund

A very serious problem will soon have to be faced by the citizens of Canada—the financing of the Patriotic Fund. As the Canadian army now totals upwards of 350,000 men the demands on the fund is correspondingly greater, and, outside levies made by employers and taxes by municipalities, the subscribers are confined to the comparative few, meaning that too large a number of people have not contributed a cent towards the fund; “escaped it” as some of them would boast. This is not a healthy state of affairs and we believe the time has come for every one to be taxed. This is the only way for an equitable adjustment and the only sure means for a continual flow of money to meet the fast growing demands of the Patriotic Fund. All the provinces (with the exception of one), and very many of the municipalities have subscribed, and it is only right that they should, but they, when called upon to pay again, as certainly they must, might object, giving as a reason that every part of the Dominion should contribute proportionately. And such reasoning would be logical.

From the recipient's point of view, too, a tax is infinitely more preferable as removing the taint (in this instance) of charity, for cover as you will that is the only term for the Patriotic Fund. As one soldier put it to us he never realized before that in becoming a patriot he was pauperizing his family. This man's wage before joining the forces was

\$100 per month; on joining he sacrificed \$40 per month. This he was prepared to do, but it went against the grain to feel that his wife and children were receiving even a dollar to which they had no legal right. In suggesting that the income of the Patriotic Fund should be raised by a federal tax—which the federal parliament has a perfect right to impose and enforce—we do not mean that the distribution should be in any different hands than what it is, for not only does the present voluntary system cost practically nothing, but there is an army of volunteer workers in every centre doing magnificent work amongst the soldiers' families left behind. It is true there is a crank here and there but there will be some in Paradise, and for social service on a large scale the distribution of the Patriotic Fund is a model worth following, and it would be a good thing for Canada, if when the war is over the organization could be retained under its present management. Certainly the distribution could not be in better hands.

In short our suggestion for a federal tax if carried out would mean a sure income for the fund, and thus relieve the minds of the workers in knowing that the flow of money was steady; it would mean the removing of the taint of pauperization which Canada cannot afford to encourage, and it would make every person pay his just proportion in making the families of our soldiers at least content.

THE DAYLIGHT SAVING IDEA.

The Editor,

There is a movement amongst some Canadian municipalities particularly in the West, to save one hour of daylight by putting the clock forward an hour; the idea being that people will thus be able to finish their day's work earlier and have an extra hour's daylight for recreation and pleasure. Frankly I fail to see the benefit of putting the clock forward at all; it would seem that arrangements could easily be made by which work could be commenced earlier and get the additional daylight that way. But when it comes to altering the time a very serious problem arises for it must be remembered that the present time arrangement was adopted in Canada to put an end to the troubles caused by localities taking their time from the sun, which varied considerably. For instance, it is said, that cities so near each other as Ottawa, Montreal and Toronto varied half an hour which certainly must have caused confusion to travellers, and Sir Sandford Fleming, of Canada, and Professor Cleveland Abbey, of the U.S.A., were asked to study conditions with the idea of bringing about some remedy. These gentlemen recommended the establishment of five time belts, each covering fifteen degrees of longitude. The report was accepted by the railways and the authorities, and is in force to-day. Now, if this convenient arrangement is disrupted by the daylight savers a great deal of inconvenience will be caused which in turn is bound to affect the progress of the community. Let us have as much daylight as possible for our recreations, but don't alter the clocks at least until all Canada is prepared to act.—Yours truly,

SYDNEY CANDY.

OUR GOOD ROADS NUMBER.

Editor, Canadian Municipal Journal.

Dear Sir,—I wish to congratulate you on the special Good Roads number, just published. While the paper used in the English edition is not up to the usual standard—which, I understand, is because of the shortage—it is more than made up by the excellence of the articles and the general make-up of the pages.

I am glad to know that you are publishing a French edition of the Good Roads number, which, to my mind, is very important, as showing the splendid work done by the Quebec authorities in the building of roads—practically making it the banner province in the great movement of Good Roads.

Yours truly,

W. D. LIGHTHALL,
Hon. Sec.,-Treas., U. C. M.

“GARBAGE DUMPS.”

A garbage “dump” is a disgrace to any city or town. Of what advantage is it to remove the numerous private rubbish-heaps to build a gigantic communal rubbish-heap? Is the unsightliness or the dangerous filthiness in any wise reduced by piling all the refuse into one vast, festering, disease-breeding mass? It may be some advantage to those parts of the town remote from the dump, but only at the expense of some other portion of the city, and it is grossly unfair. No true citizen from a high-class residential district could feel satisfied if the cleanliness of his particular portion of the town were achieved by the utter spoiling of some other portion. Any man who is proud of his city would feel as much shame that there should be a filthy civic back yard as that his own back yard should be dirty. The only satisfactory method of removing refuse is to burn it in an incinerator or, failing that, to have it buried.—Conservation.

Municipal Preparedness

To the Editor:

Montreal.

Through your kindness (for which I thank you very much), I have had the opportunity of reading some of the recent issues of "The Canadian Municipal Journal," and have been deeply interested in many of its articles, more so as they dealt with subjects that have occupied my attention for years, and, in fact, have played their part in my own life, therefore I feel impressed to write you some of my opinions and suggestions.

Your editorial, "Municipal Preparedness" is especially good and most seasonable, and should be issued as a leaflet (together with Mr. J. S. Woodsworth's "Organizing the Community Resources"), and scattered broadcast throughout the country, because they contain concentrated truths that should first be made known to every individual citizen, and tell him to take action. Then we could expect to obtain good results.

To quote from these articles, "Is the Empire—which means Canada—going to take advantage of the lesson taught by the war, or is it to sink back to the same state of divided responsibility—we might say irresponsibility—that prevailed before. The answer will concern every Empire Citizen."

"One great problem we must meet when the war is over is—Immigration."

"The Municipal Councils of Canada, as governing bodies, have probably done more than any other authority in rising to their responsibilities in this present war! Why not after? But preparations must be made now!"

"Municipal Canada to-day has the opportunity of its life in taking the lead to perpetuate the Amity and Unity so spontaneously created by this terrible world catastrophe. But municipal Canada must get together.

To quote Mr. Woodsworth, "The 'Organizations' need organizing—they must learn to work not in their own immediate interests but for the welfare of the community at large."

Now, sir, I have underlined certain phrases above to indicate my hearty concurrence therewith, and would say that I think the time is ripe for the organizing of a "People's Efficiency League," whose main object should be educating and organizing the people so that they may become the most efficient citizens possible, well qualified to intelligently co-operate and use their political powers (municipal, provincial, etc., etc.) to bring about the many needed reforms. And the first of these to my mind are the problems of Employment, Unemployment, and Immigration, and these demand immediate attention, and united action.

And the very first necessity is the establishing of a sufficient number of efficient National Labor Bureaus whose first and constant duty would be genuine reliable registration of all unemployed workers (male and female) in each district; then we would know how to regulate our immigration so that no more immigrants should be admitted (except they had ample means to establish and maintain themselves) each season than could be assimilated by the country. And one great lesson of the war should be the establishing of efficient standards of qualifications needed by all future immigrants. Quality not quantity should be the aim if we want to really progress as a nation. And one of the regulations that I would suggest would be the establishing of a system of Compulsory National Insurance against Unemployment, and Old Age by the Dominion Government, and that a hard and fast rule required every immigrant to take out a Policy therein suitable to his or her means or desires, but that the minimum policy should be so calculated as to provide against starvation and want. Thus in a few generations the need of many of our present charitable institutions would be done away with, and instead thereof would be established a practical scientific system of co-operative insurance against poverty and want and distress that would ultimately banish such from our country and at the same time elevate and strengthen the moral fibre of the nation instead of pauperising it; because it would help one to help themselves.

May I point out that all the efforts and suggestions advanced at present with regard to providing employment, etc., for our soldiers after this war could be extended to include this suggestion of mine, only instead of being confined to our soldiers (who would rightly be entitled to first preference) it should be established as the permanent National Policy providing for the casualties of our national labor army in times of peace as well as in war times.

Can I prevail on you to give this your favorable consideration and co-operation and possibly you may be able with the assistance of more powerful friends to get this subject discussed and some action taken at the forthcoming Annual Convention of the Union of Canadian Municipalities which is to be held shortly in this city.

Thanking you in anticipation, and hoping you may have every success with your journal. I remain,

Yours Sincerely,

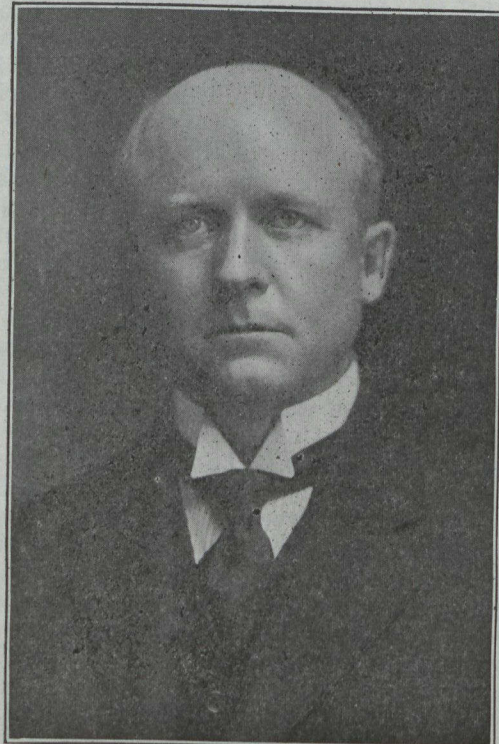
W. N. DIXON.

RECOGNIZES MUNICIPAL GRIEVANCE.

"A teamster was arraigned in police court this morning, charged with wilfully damaging a city shade tree on Dalhousie street by backing his waggon against it. It was one of the first offences of this kind which has been brought to the notice of the police, and Magistrate Askwith, deciding that an example should be made of the offender, sentenced him to pay a fine of \$5 and \$2 costs, with the alternative of serving one week in jail."

The foregoing report from the Ottawa Free Press of May 12, demonstrates that a new interest is being taken in city shade trees. In every city trees have been damaged by drivers tying horses to them and allowing them to bite the bark. Electric wire men also cause much destruction of shade trees. Interference with the stringing of wires is the only excuse for lopping off large branches, thus disfiguring, and, in many instances, killing, the trees. City authorities are responsible also for the loss of many beautiful shade trees. They construct sidewalks regardless of whether a valuable shade tree is crowded at the roots by concrete. The trees are thus stunted in their growth and are deformed.

Several of our more progressive cities have already appointed tree experts to care for municipal shade trees. Appreciation of their value as a civic attraction is becoming more general. A few examples of the offenders being punished, as in the foregoing case, will have a wholesome effect upon those who, either maliciously or carelessly, would injure the already severely handicapped city shade tree.—Conservation.



W. A. McLEAN,
Deputy Minister of Roads, Ontario.

Provincial Union to be Formed in Ontario

A number of representatives of the leading municipalities of Ontario met in Toronto City Hall on June 12 for the purpose of forming an Ontario branch of the Union of Canadian Municipalities.

Those present included: Controller Nelson (Ottawa); Ald. A. W. Eagle (St. Catharines); Controllers Thompson, Jas. C. Forman, Geo. Wilson, Toronto; Mayor Frank Warren and Reeve Jas. H. Downey, of Whitby; Ald. Jacob Smith, St. Catharines; ex-Controller Spence, Toronto, (Sec. Ontario Municipal Association); Mayor Bowlby (Brantford), and W. D. Lighthall, K.C., Sec. Union of Canadian Municipalities.

Mayor Church, president of the Union of Canadian Municipalities, who presided, in welcoming the delegates to Toronto, said that the Union of Canadian Municipalities had done good work during the past fifteen years. They had a branch in every province except Ontario, and this meeting was to organize one in Ontario. The annual Canadian convention would be held in Montreal, August 21st to 24th. This union should be known as The Union of Ontario Municipalities.

"The recent sessions of both Federal and Provincial Parliaments have shown an absolute necessity of the Municipalities having in Ontario a more active organization that will be able to cope with the invasions of municipal rights in this province, and watch legislation generally. What is wanted is not an organization that will meet when they feel like it once or so a year; attend a dinner; pass a few formal resolutions; listen to a few addresses from some gentlemen with high-sounding names and then adjourn, but an active, working organization all the year around that will make itself a factor in guarding the interests of the municipalities against invasion; and safeguard their interests; oppose reactionary legislation and be of some active assistance and help to municipal rights in the province.

"An organization is needed that will plan ahead to prepare the municipalities to meet conditions after the war is over. It should not be necessary, but it is a necessity for us to watch the actions of the Federal and Provincial Legislatures in their invasions of municipal rights, and some of those members of both Houses on both sides who invariably take a stand opposed to the interests of the municipalities. A slate of these men should be prepared.

"This municipal organization should aid and help Hydro expansion and development in Ontario; aid Hydro-Radials, and actively urge Ontario Railway Board reform in the province, and some better regulation of electric railways who to-day are a law to themselves; as well as take up assessment reform.

"The key to all good municipal government is to have good heads of departments and give them a free hand to administer their departments. The municipalities should loyally and actively assist the Federal Government as long as the war lasts, and also by assisting the militia and overseas units in every way possible and promoting the cause of recruiting."

Mr. Lighthall, Sec. of the U. C. M., thought an Ontario branch of the Union of Canadian Municipalities would fill a very great gap.

"We have never been able to get the sympathy of the Ontario Municipal Association, and have never been able to get their support in some of those desperate fights which we sometimes have before the Dominion Parliament.

"We would like to see the Ontario municipalities working harmoniously and actively with us, so that we can stand together on quick notice."

Mayor Bowlby, of Brantford, said the Dominion Union was of vital importance.

Controller Nelson, of Ottawa, wanted to know if the new organization would duplicate the work of the provincial association.

"We have never been able to get the sympathy of the officials who run the Ontario Municipal Association," replied Mr. Lighthall.

Controller Nelson said that in Ottawa it was realized that the Canadian Union of Municipalities had the earmarks of a good thing.

Ald. A. W. Eagle, of St. Catharines, thought it would be well to seek the co-operation of the Ontario Municipal Union.

T. J. Hannigan, secretary of the Hydro Association, could not recollect the time when the Ontario Municipal

Association rendered assistance to the municipalities when electrical matters were being considered at Queen's Park.

Ex-Controller (and Sec. of the Local Municipal Association) F. S. Spence, thought the Ontario Municipal Association covered all the ground which any association could cover. "If they fail in anything affecting the welfare of the municipalities, why not have representatives of the Hydro or the municipalities appear before them and make known their desires?" He said it would be well to see if it was possible to affiliate the Ontario Municipal Association with the Dominion body.

Mr. Hannigan entirely agreed.

Mr. W. D. Lighthall, said that he was glad that matters had taken such a turn. For ten years it had been impossible to persuade the officers of the Ontario Union to affiliate with the Canadian Union of Municipalities.

"The mere writing of articles will not get municipal rights in the Province of Ontario," replied Mr. Church, to one of the speakers who paid glowing tributes to the ability of the officers of the present Ontario Union. Mr. Church went on to say that the best thing was to appoint a committee to confer with the officers of the Ontario Union, with a view to affiliating that body with the Canadian Union. This committee to present their report to the Canadian Union of Municipalities at the annual convention in Montreal in August.

The following is the committee appointed: Mayor Church, Controllers Cameron and Thompson, and Ald. Maquire, of Toronto; Mayor Walters, Hamilton; Mayor Stevenson, London; Mayor Duffus, Peterboro; Mayor Burgoyne, St. Catharines; Mayor Mahoney, Guelph; Mayor Mulholland, Port Hope; Mayor Barnsdale, Stratford; T. J. Hannigan, Guelph; W. D. Lighthall, K.C., Westmount; Controller Nelson, Ottawa.

THIRTY YEARS AGO.

Ottawa, May 26.—The annual meeting of the Royal Society of Canada is in progress. Among the reports to-day was that of Mr. W. D. Lighthall, of the Montreal Numismatic and Antiquarian Society.—From The Montreal Star, May 26, 1886.

William Douw Lighthall, well known throughout the Dominion as a writer and an authority on Canadian folk lore, was born in Hamilton, Ont., on December 27, 1857. He practiced law in this city, was made a K.C. in 1905, and has been identified with many literary and scientific movements. Mr. Lighthall has specialized in the study of advanced municipal government, and with the late Mayor O. A. Howland of Toronto, founded the Union of Canadian Municipalities. He was Mayor of Westmount from 1900 to 1902. Mr. Lighthall was the discoverer of the Indian burying ground at Westmount. He was made a chief of the Iroquois tribe in 1909, with the name of Ticonderoga or Two Chimneys.

Some of his best known publications are: "Montreal After Two Hundred and Fifty Years," "The Young Seigneur," "Prehistoric Hochelaga Burying Ground," "Hiawatha the Great," "Songs of the Great Dominion," (perhaps his best known work), and "Canadian Poems and Lays."—Montreal Star.

MUNICIPAL GOVERNMENT IN GREAT BRITAIN.

In Britain, municipal government has been developed on thoroughly democratic principles, and the Canadian system is based on the same plan, although the conditions are not quite alike. In Britain the councillors, aldermen and the mayor, by virtue of long service and the steady growth of the towns and cities, are able to administer the affairs with considerable measure of success. In Canada, however, the number of men who have had considerable experience in municipal government is limited, and owing to the critical attitude of the public many capable men are unwilling to place their services at the disposal of their fellow citizens. It must also be remembered that as the cities and towns develop in Canada at a much more rapid rate, the public duties of aldermen and mayors absorb a great deal more time.—R. O. Roberts.

The New Patriotism

By J. S. WOODSWORTH.

"I'm glad that I do not live in Canada. Your politics are corrupt; economically you are in a bad way; the church has lost its soul; there is no leadership." Such was the summing up of his conclusions on conditions in Canada, as given to me privately in conversation by a member of the British House of Commons.

Some may feel inclined to resent such a criticism. We have been so long accustomed, in Canada, to be patted on the back and told what a wonderful country we have, that a statement of this kind comes like a cold douche after a warm bath. But a cold douche, after all, is wonderfully stimulating, and may prevent us taking a bad cold. So instead of petulantly resenting adverse criticism, let us "grin and bear it"—and profit by it!

Undoubtedly the statement is altogether too sweeping. The gentleman who made it was not attempting to give a carefully balanced judgment. He was simply, as it were, "touching the high spots." But such an impressionist sketch is well worth our consideration. It came from a man who is a keen student of men and affairs, and has had a good opportunity of gaining a knowledge of conditions in Canada. Not a few Canadians are forced to admit that it contains altogether too much truth. But it by no means contains the whole truth. No son of Canada who has imbibed anything of her history and traditions and spirit, who has endeavored to respond to the ideals she has held up, who has felt in his own throbbing brows the laboured beating of her heart,—no true, native-born Canadian can believe that this over-seas visitor has gained an insight into the real life of Canada.

Nevertheless she may have seen defects which we had not fully realized. He may have observed tendencies of which we were almost unconscious. His criticism merits careful study. He expressed satisfaction that he did not live in Canada. We live in Canada; our forefathers opened up the country; it will be the home of our children. It is of the utmost importance to us that Canada should be all that we have imagined it was, or dreamed it might be.

If conditions are at present unsatisfactory, is it not a challenge to heroic action on the part of patriotic young Canadians? One of the greatest evils of the war—so far as Canada is concerned—is that it has diverted our attention from our domestic problems to so-called "Imperial problems." Perhaps, however, when our eyes are turned again to Canadian affairs they will be more widely open, and we shall bring to bear a spirit of critical enquiry that may lead to rapid and sweeping changes.

In the meantime, those of us who are not wrestling with "Imperial problems" should be studying their ever-present home problems. The enemies of Canada most to be feared are not the nations of Europe or Asia, but the forces of evil within our own gates. Many young men urged by patriotic impulses have offered their lives on the battlefields of Northern France. Are there not to be found others, equally patriotic, who will be willing to offer their lives in the upbuilding of a worthy Canadian national life?

"Your politics are corrupt." Who can deny it? Read, however critically, some of the unofficial histories of Canada that have recently appeared. Read the wholesale graft charges that have recently been proved in Manitoba, and remain to be proven in at least one other province. Read the sordid, sickening transactions in connection with the supplying of army equipment. Listen to any group of men at the club who know "the inside" of our public life. Listen to "the man on the street." Surely not only our politics are corrupt, but our political standards and ideals are low.

Some months ago, while visiting one of our agricultural colleges, this was brought home to me very forcibly. The students had arranged an inter-class debate on a subject that was engaging public attention, and directly affecting the farmers of the province. A member of the debating team wrote to a government department for information. No information came. Instead came an order, through the principal of the college, forbidding the debate. Talk about Kaiserism! Talk about Russian Bureaucracy! Could anything be more subversive of liberty than this autocratic action of a Canadian provincial department?

But this was not the worst feature in the incident. The students lay right down and took it. I could not understand. I thought I knew students, and those whom I knew were not always so tamely submissive to arbitrary authority. At last came the reason: "Oh, yes, the boys were very indignant, but, you see, our strongest men are all looking for government jobs in connection with the department, and they knew that if they protested they would be black-balled." There was the reason in all its naked ugliness! Although it was given in a matter-of-course way—yes, because it was given in a matter-of-course way, it came to me as a shock. I was prepared for that kind of thing from some of our professional politicians. But from our cleanest, straightest, sturdiest young Canadian boys! Among that group surely one might have been found who, for the sake of liberty, of his country, of his own manhood, would have been willing to risk a prospective job! "Your politics are corrupt." Not because of the scandals at Winnipeg or Ottawa, but because of the attitude of those farm boys my head is bowed in shame, and no denial comes to my lips.

Yet, in my inmost heart I passionately protest. "That is not Canada!" I pass on the story to you, because I know you will re-echo my protest, "That is not really Canada." Forth from our colleges there will come young men and women who will fling back prospective jobs and speak out for themselves and for Canada,—and young men and women, we will follow you!

"Economically, you are in a bad way." For some of our younger people another startling charge! Have we not been told of our wonderful natural resources and splendid opportunities in Canada? Unfortunately, our natural resources, inexhaustible as they may seem, have not been carefully conserved, and, what is more serious, have largely passed into the control of a comparatively small group of men, some of whom are not even resident in Canada. Fortunes have been made out of the rise in land values, but for most of us this simply means a greatly increased cost of living. Our critic gave two illustrations. He himself lives within ten minutes of the British House of Commons, situated, as we all know, in the heart of the Metropolis, with its population equal to the whole population of Canada. He pays for a comfortable little house a rental of 15 shillings a week, roughly \$15.00 a month. In one of our little cities, such a house would cost two or three times as much.

Here is another illustration that suggests the reason for our high cost of living. A certain mine owner in England, with a capital of £1,060,000, or a little over \$5,000,000, employs 30,000 men, and turns out a minimum of 30,000 tons of coal a day. A syndicate in British Columbia bought certain mine properties for \$11,000,000, formed a company capitalized at \$25,000,000, and employs some 2,500 men, who turn out about 3,000 tons of coal a day. That is, I take it, that 3,000 tons must in Canada earn dividends on \$25,000,000, while in England 30,000 tons, or ten times that amount, is expected to earn dividends on only \$5,000,000, or about one-fifth the capital. Is it any wonder that while our coal operatives are poorly paid, we still pay high prices for coal?

Our great improvements, of which we are so proud,—our railroads and canals, our cities with their up-to-date utilities and brilliantly-lighted streets,—all have been paid for by borrowed money. And ultimately the producer,—the despised laboring-man and the neglected farmer,—must pay the bills. Before the war it was estimated that our interest charges alone on foreign capital invested in Canada amounted to \$150,000,000 a year. The whole of a bumper wheat crop must be sent over-seas every year just to pay the interest on our public debts!

That was before the war. Think of the war debts that are daily piling up! There is a real danger that the rank and file of Canadians may become simply hewers of wood and drawers of water.

We, in Canada, have in the past enjoyed a considerable measure of freedom. We have not won it. We have simply inherited it. But if we are to keep our freedom we must fight for it! If we are not willing to fight for it we do not deserve to have it! And this fight is to be fought not with rifle and bayonet, but with keen brains and

(Continued on Page 369.)

Growth of Canadian Towns

The urban population of Canada is not concentrated in one or two great cities. At the census of 1911 there were four towns with over 100,000; three with over 50,000, all three of which have since passed the 100,000 mark; four with over 40,000; two with over 30,000; two with over 20,000; eleven with over 15,000; eighteen with over 10,000; twelve with over 8,000; eight with over 5,000; seventeen with over 4,000; forty-two with over 3,000; sixty-nine with over 2,000; seventy-four with over 1,500; and 104 with over 1,000. In the following table the estimated population of forty-three towns having a population of 12,000 or over early in 1915 is compared with the population according to the Dominion Census in 1901 and 1911. The estimates of population were furnished by the city clerks and in the majority of cases represent the estimates made by city assessors in the autumn of 1914. As there has been little increase of population since the outbreak of war the estimates made in 1914 may be considered approximately correct for 1915. In some of the western towns there may have been slight decreases during the war which are of course only temporary. The terms "Greater Montreal," "Greater Winnipeg," "Greater Vancouver," mean these cities and the suburban towns, which are merely outgrowths of the cities. The suburban extensions of the city of Montreal on the island of Montreal have a population of over 100,000, while the towns of St. Lambert and Longueuil on the opposite shore of the St. Lawrence river are mere residential suburbs of Montreal. Vancouver's growth since the census of 1911 has been chiefly in suburban towns, and Winnipeg has also populous suburbs. Toronto has annexed all its important suburbs, but there are several contiguous villages still outside the limits. According to the estimate of city assessors in 1914 Toronto's population was 470,144, but according to the estimate of the Toronto City Directory for 1915 it was 534,000.

THE NEW PATRIOTISM. (Continued from Page 368.)

strong moral purpose. Young men and women of the prairies, it is on these Western plains that the destiny of Canada is to be decided. Prepare! Yours is the conflict, and "yours, the shining future."

"The church has lost its soul." Too serious an indictment to discuss in a paragraph. But is our conventional churchy religion at all adequate to the tremendous tasks that face us to-day in Canada? Is there an impelling message? Are we lifted out of ourselves and sent out with a burning desire to spread abroad the new found truth? Are we co-operating with and relying upon the great Unseen Forces? Surely we await the New Prophet who can strike the key note of this new age,—a key-note to which many eager hearts will respond.

"There is no leadership." No! We have few recognized leaders. But leaders will arise,—must arise! Perhaps in these modern days, with our facilities for rapid diffusion of ideas, and our democratic institutions, we may not develop a few outstanding leaders, but rather advance may come here and there all along the line. In the repairing of the broken walls of Jerusalem each patriotic builder "did his bit" "over against the walls of his own house."

To purify and ennoble the life of Canada seems an almost overwhelming task. But let us think of Canada as a series of communities and the task is by no means an impossible one. You—the reader of this Canadian Municipal Journal—may become a real leader in your community. You may stand for clean citizenship, for economic reform, for a more vital religious experience, and gradually, but inevitably, your community will be transformed. Let each reader pledge himself to that, and, say, four thousand communities have felt the thrill of a new life. That is the New Patriotism—a Patriotism that demands the best of every Canadian man and woman,—a Patriotism that seeks not to get the most out of the community but to put the most into the community. Before such a Patriotism economic difficulties will vanish, and Canada herself will have found her soul.

	Census 1901.	Census 1911.	Estimate for 1915.
Montreal City	267,730	470,480	617,000
Greater Montreal	717,000
Toronto	208,040	376,538	524,000
Winnipeg	42,340	136,038	212,889
Greater Winnipeg	273,047
Vancouver	27,010	100,401	106,110
Greater Vancouver	197,283
Hamilton, Ont.	52,634	81,969	102,000
Ottawa, Ont.	59,928	87,062	101,795
Quebec City, Que.	68,840	78,710	100,000
Calgary, Alta.	4,392	43,704	75,000
Edmonton, Alta.	2,626	24,900	59,339
Victoria, B.C.	20,919	31,660	60,000
St. John, N.B.	40,711	42,511	58,000
London, Ont.	37,976	46,300	56,358
Halifax, N.S.	40,832	46,619	55,000
Regina, Sask.	2,249	30,213	50,000
Saskatoon, Sask.	113	12,004	25,000
Brantford, Ont.	16,619	23,132	26,389
Moose Jaw, Sask.	1,558	13,823	23,000
Peterborough, Ont.	11,239	18,360	20,653
Windsor, Ont.	12,153	17,829	22,993
Sydney, N.S.	9,009	17,723	22,000
Hull, Que.	13,993	18,222	20,257
Kingston, Ont.	17,961	18,874	18,874
Three Rivers, Que.	9,981	13,691	20,000
Berlin, Ont.	9,747	15,186	19,056
Sherbrooke, Que.	11,765	16,405	19,310
Brandon, Man.	5,620	13,839	18,000
Fort William, Ont.	3,633	16,449	27,176
Port Arthur, Ont.	3,214	11,220	18,325
St. Catharines, Ont.	9,946	12,484	17,296
St. Thomas, Ont.	11,485	14,054	17,029
New Westminster, B.C.	6,499	13,199	17,198
Glace Bay, N.S.	6,945	16,562	17,000
Stratford, Ont.	9,959	12,946	17,500
Guelph, Ont.	8,856	14,579	16,799
Moncton, N.B.	9,026	11,345	15,000
Sault Ste. Marie, Ont.	7,169	10,984	12,397
Chatham, Ont.	9,068	10,770	12,714
Galt, Ont.	7,869	10,299	12,000
Charlottetown, P.E.I.	12,080	11,198	12,000
Niagara Falls, Ont.	5,702	9,248	12,000

—Watson Griffin, in Canada, the Country of the Twentieth Century.

CITY SHADE TREES.

The protection of trees in cities is rapidly assuming a much more important position in municipal affairs. Twenty years ago, the trees received no special care, and were, as a whole, in much better condition than at the present time. But as a result of the growth of cities and towns, the trees cannot now obtain the pure air, moisture, humus, etc., necessary to their growth, and many beautiful city trees are forced to grow under conditions entirely foreign to their natural element.

Noxious gases from manufacturing processes are poisonous to shade trees. Roadways and pavements are laid entirely regardless of the damage done to tree roots. In some cities and towns, the chief essential is to have a sidewalk perfectly straight, no deviation to save a tree being considered, and the tree is sacrificed to this obsolete engineering theory. Careless teamsters, electric and telephone wiremen and malicious persons are also causes of serious damage to the shade trees of city streets. Many cities engage tree-butchers, whose only qualification for the work is the low wage at which they can be engaged, regardless of the great damage they do to the trees.

It is generally admitted that the shade tree is necessary in our cities, and should at least receive proper care and protection. Many trained arborists are now available for this work, men who have made close study of the conditions under which city shade trees have to exist. With the growing appreciation of the value of shade trees, there is no doubt that at least the larger cities will eventually have trained city foresters in charge of the trees.

"Clean-up Week" Work in Montreal

By F. A. COVERT,

For many generations "House-Cleaning Time" has stood for that time in Spring when all good housewives, apparently in unison, and with joy in their hearts, attack the quiet routine of their homes, and make war upon the dirt, dust, and rubbish which during the winter months, will accumulate because of the weather conditions which prevent the houses from being swept and aired, as freely as during the other seasons of the year. For a few days the turmoil is carried on from basement to attic. Their weapons being soap and water, scrubbing brush and broom.

To this instinct of the housewife for spring cleaning, and cleanliness of the home, mankind owes much. How much we are just beginning to realize. Although "Cleanliness is next to Godliness" has been an axiom for centuries, medical science in these later years has taught us another great truth—that "Cleanliness is Health." During the last fifty years it has been clearly proven, that many of the more dangerous diseases are caused, or greatly aggravated by unsanitary conditions. This is specially so in the summer diseases of children. As mankind came to understand that dirt was such a handmaiden of disease, the cleaning of the inside of the home only, did not satisfy, and so the surroundings of the home—yards, lanes, and streets—as well must be clean. Because of winter conditions, however, these surroundings are always dirty in the early spring and as a means of getting this accumulated winter dirt and rubbish removed quickly and en masse "The Clean-up Week" movement was started. The object being to induce every occupant of factories, stores, and homes to have their premises cleaned by a certain specified week. So successful has this been that "Clean-up Week" is now a recognized annual event in thousands of villages, towns, and cities, and among the list of the larger cities where this is so, Montreal occupies a prominent place.

The benefits of "Clean-up Week" in Montreal were first brought to the attention of our citizens by The City Improvement League, but it was not until 1914 that a clean-up campaign in a large way was carried on. Then under the auspices of The Montreal Publicity Association an organization known as The M. P. A. City Improvement Campaign was formed, for carrying on an educational clean-up campaign. The results were greater than expected, and this warranted the same campaign to be carried on for 1915, when again the advantages of such a campaign were very clearly seen. So interested have the citizens become in having clean yards and lanes that "Clean-up Week" is firmly established as an annual event of great value to the health and well-being of the citizens, and to the better general appearance of the city.

As the methods employed by The M. P. A. Improvement Campaign in carrying on their campaigns may be of interest to those in other cities and towns who are undertaking similar work, this article is written in the attempt to place our methods before them.

In beginning our organization care was taken to place the work on the solid foundation of co-operation, because we believed that in union there is strength. The M. P. A. City Improvement Campaign was formed from representatives of various bodies, among the more prominent of which were The Montreal Publicity Association and The City Improvement League. The heads of the City Departments directly concerned with such work were approached, the objects aimed at outlined and their co-operation asked. They gladly promised that, but also became members of the organization. To this co-operation and the subsequent work of these departments much credit must be given for the successful results achieved. The co-operation of the clergy, the school boards, and the merchants was also secured. The City co-operated by voting sufficient money to meet the expenses of our work. And the mayor proclaimed an official week.

Having secured this basis of co-operation, a campaign of publicity and education was undertaken. In this the press of the city gladly helped, giving a great deal of attention to the reports of the progress of our work, and also using freely their editorial pages. Through the fire department, literature dealing with clean-up was distributed to the offices and homes. Placards carrying the programme for the Clean-up Week were prominently displayed by the merchants in their windows. They also had special sales of goods used for cleaning purposes, and so their advertising

space in the papers played a useful part. The teachers gave special lessons on the subject, and distributed to their pupils, a button carrying the motto "Clean-up Campaign." On the Sunday beginning the Clean-up Week, the clergy preached special sermons urging the needs and benefits of cleaning up both physically and morally. And during Clean-up Week the street cars carried, in bold type a sign "This is Clean-up Week."

Such was our first campaign, and just a few words as to its results may be of interest. The 1st tangible result was that there were nine thousand tons more garbage removed during May than in any other May in the city's history. The 2nd tangible result we learned when the health report of the year was made. The deaths of children under five years of age showed a decrease of 373 as compared with the previous year, and this in the face of an increased birth rate. The 3rd tangible result was that the fire calls were less, by a considerable number than for several years.

The campaign for 1915 was carried on along the same lines as the first one, with the added feature of holding ten mass meetings throughout the city. Fully 15,000 people were instructed by speeches, and picture slides in the benefits of the Clean-up work. The way people attended these meetings was the strongest possible proof that cleaner and more beautiful premises are what most people are desirous of having, and are only waiting to be instructed in the proper methods to get them. Two motion picture films were purchased, which were educative along sanitary lines, these the picture theatres ran free as a part of the show. Some of them also used slides provided by us.

The results of this campaign were greater than before as the people entered more heartily in the work. The yards and lanes were never as clean as during the summer of last year. Many people made little vegetable gardens in their back yards, and thereby turned what used to be an empty can and weed infested place into a spot of cleanliness and production. In at least 90 per cent of the yards flowers were planted, with most of the front yards were made into lawns. The City placed rubbish receptacles in the parks and along the streets, and had the by-laws against throwing papers and other rubbish on the grounds and streets enforced. The comment among visitors was general that Montreal was indeed a clean city. The most gratifying result, however, was that although there was an epidemic of measles and whooping cough during the first three months of the year from which many children died, the deaths of children under five years for the year showed a decrease of 375, as compared with the previous year. For the first three months of this year there has been a decrease of 375 as compared with the same period of last year, so everything points to a big decrease in children death rate for this year.

The same educational campaign will be carried on as during the previous springs. The new feature of our work, however, is going to be far-reaching in its effects, as through a competition for children not alone will clean-up be encouraged, but a strong appeal made for the planting of flowers and vegetables. Dividing the city into five districts, and working through the schools this competition will be carried on, and a prize list given in each district totalling 150 prizes of a cash value of \$250.00. This with a city grand prize of twenty-five dollars will make \$1,275.00 distributed as prize money. This particular part of the competition ends the latter part of June, and following that another list of prizes will be distributed the end of September. This means that the interest in clean, beautiful and useful premises will be kept up all through the summer, instead of only for a few weeks as formerly.

From the way the School Boards are offering their co-operation, and the voluntary way judges are coming forward, everything points to this competition being very successful. The M. P. A. City Improvement Campaign are going to be disappointed if at least 15,000 children do not enter into the race for the prizes. The later part of the competition closing the end of September will be relative to the care given in keeping the premises clean, the flowers and vegetable growing, and the conditions the yards are left in for the winter. Details of this part of our work are still to be worked out. Through this competition our organization hopes and expects to give a greater impetus to having a clean and beautiful city, the saving of lives, and the engendering of a greater civic pride among our citizens.

LABOUR AND MUNICIPAL AFFAIRS IN ENGLAND.

It is not in the field of national politics only that Labour is exercising its influence. In municipal affairs throughout Great Britain Labour is taking an increasing part. Incidents which occurred at the recent municipal elections indicate the attention that is being given to this branch of public affairs. Party political divisions are not wholly unknown in British municipal affairs, though it is right to say that while this is true as respects some of the elections, in the Councils there is usually cordial co-operation of all in the carrying on of the public business. In the principal cities and towns the election of Lord Mayors and Mayors, who are chosen by the councils, is usually brought about by a friendly arrangement between the parties. In the large manufacturing city of Leeds, the Liberals and Conservatives had quietly arranged that Mr. Howarth should become Lord Mayor. But Labour had not been consulted, and therefore raised a protest, which is thus reported:

"Alderman J. Hayhurst opposed the nomination on behalf of the Labour Party. He did so with regret, but with a sense of duty, and he wanted Mr. Howarth to understand that there was not the slightest personal element in his opposition, nor would any remark he was going to make be directed against Mr. Howarth personally. But he and the party to which he belonged took this course because of the very unjustifiable way in which Lord Mayors were nominated in that Chamber. All the Chamber knew it was common talk that there was a good deal of cant about such occasions as these. The first thing required of a Lord Mayor in these days was a long purse. The Lord Mayor must be prepared to give to all creeds and denominations, temperance societies, and spirit and beer associations that came his way. Those who had not the cash seemed to be regarded as not having the ability to be Lord Mayor. Again, at present two parties only selected the Lord Mayor. Such a system would be justified if the ratepayers had entitled these two parties alone to select the Lord Mayor; but they had not. At the last two contested elections the Labour Party polled more votes than any other single party. That entitled them to have some say in the nomination of the Lord Mayor, and they ought not to be excluded therefrom by a combination of other parties.

"Mr. T. W. Stamford supported the contention that a new system of nomination should be instituted which would secure strict equality of treatment between the three parties, and the recognition of character and ability only as qualification for the post of Lord Mayor. There was only one reason why the Labour Party were ignored in the matter, and that was that they consisted of men belonging to the working classes, and not possessing much of this world's goods. He recognized the financial difficulty, and the only way out was to attach a salary to the office of Lord Mayor, as had been done in some cities. He hoped before next election an honest attempt would be made to secure a conference of the three parties, when the whole method of the appointment of Lord Mayor could be discussed and satisfactorily readjusted."

In a number of towns the Labour party made their views so effective that Labour Mayors were chosen.

The expense which, as was pointed out, the present system entails on the occupant of the chief magistrate's chair, where no salary is provided, will usually exclude the representatives of Labour from the chair. The probability is that this will lead to an agitation for an extension of the salary system. The same difficulty existed in relation to Parliamentary representation so long as the members were unpaid. Payment of was ultimately adopted, and is now an accepted part of the British system. Similar movements may lead to the adoption, in a larger degree than at present, of the system of providing salaries for the occupants of the Mayor's chair.

Such a departure from the time-honoured system of voluntary service is one of the things that may be expected in a democratic age. From one viewpoint the change foreshadowed may be regretted. British municipal affairs have on the whole been well managed, through the voluntary service of a class of citizens who perhaps would not be so willing to serve under a payment system.—Hon. W. S. Fielding, in Journal of Commerce.

CONSERVATION OF CITIZENS.

Municipal public health matters assume as the years go by, an increasing volume of importance and variety. Municipal public health matters could be stretched to cover almost all municipal things that have to do with humanity, and we take it, that municipal powers should feel their prime responsibility to be the physical, mental and moral welfare of the citizens. Owing to civic mistakes made in the past, such as dumping the untreated sewage into the source of our drinking supply, there is a fearful amount of undoing of mistakes as well as preventive and constructive work to be done. Preventive measures never appeal as strongly to the "powers that be" as do construction and re-construction work. Preventive measures do not often give visible, immediate, concrete results, the other kinds do, and indeed, often produce votes as well.

In a very excellent address given in Washington by one of the foremost social scientists of the present day, Mr. Edward T. Devine, he points out that society might almost be made ideal by preventing the multiplication of the defective and by the abolition of alcoholism. These are indeed two very great factors in creating and complicating, most if not all, of our social problems. But then did anyone here ever suspect that we might do better than we have done, by following the advice of a social specialist? We do not call in the plumber to do the work of an oculist, nor a carpenter to do our dentistry, but we have hitherto gone on the plan that anybody at all, if charitably inclined, would have the vision and the wisdom to deal with pauperism, poverty, defectiveness, slums or any sores that affect the body politic. If we could, as Devine points out, utilize the wasted material, the defectives, by taking care of them and giving them work they were able to do; and do away with alcohol, we would at once lessen the evils of criminality, illegitimacy, prostitution, slums, disease, and infant mortality. Then we would have a better chance to rear a great race and would not have the reproach that 25 per cent of those offering for military service are rejected by the Militia Department as physically unfit, nor that half the children born never grow up. When education of the masses came to be a desired end it was not left to the individual parent to educate the children, it was undertaken by the state, and when it became clear that children were not by any means universally receiving religious and moral education in their homes, Sunday Schools and other similar classes were inaugurated and have flourished. Physically, however, we have allowed the parents to do or not do what was for the good of the child. Many municipalities now have medical inspection of schools, which ought to go far towards improving what is often the result of apathy and ignorance in the parents. This is not accomplished by the Medical Inspector treating or prescribing for the child in the school, but by putting it up to the parents that they must do what is necessary for the child's physical well-being. Put the defective under proper custodial care, abolish alcohol, prevent economic disability, by preventing physical inability, give the boys and girls vocational and physical as well as book education, and we will be doing the greatest conservation work possible for our country and its citizens yet to be.

Maeterlinck's terse summary of what is happening on the battlefields of Europe should haunt us, waking and sleeping, until we take steps to counteract the results. He says: "This European War is a monstrous sort of selection of the unfitted for the ruin of the species."—Mrs. Adam Shortt, in Ottawa Free Press.

CHARACTER OF RURAL COUNCILS.

"I myself have lived in a rural municipality for thirty-three years, and have seen something of the class and character of the men who are called upon to administer its affairs. They are men who have the confidence of their neighbors and can proudly say that they are elected by the men who know them best." — Lieutenant Governor Lake at Convention of Saskatchewan Association of Rural Municipalities.

ST. JOHN, N.B.

The city of St. John has signed an agreement with the Street Railway Company whereby they will do the concreting work of the company at the rate of \$5,000 per mile per track.

Economic Preparedness of Our Cities

R. O. WYNNE-ROBERTS.

Economic preparedness of our cities is a vast subject for it touches on every problem which confronts cities. It will be well to define the meaning of the text.

The term economic or economy implies the management, regulation and government of a family, community, city or state. This again involves the questions of judicious and frugal use and expenditure of money, so that the best results are obtained, without waste; it involves also the prudent management of all the means by which property is saved or accumulated; the judicious application of time, of labor and of instruments of labor. Economy then, has an intimate relation with everything which concerns our cities and human life. Domestic economy has to do with domestic life as State economy has with a nation. The Germans, prior to the war, coined another term, namely, "World economy," and their universities, colleges and institutes were enthusiastic in the promotion of education, organizations and international relationships, which would assist in establishing the idea. The world to-day is discussing how best to organize business and finance and the German conception of world economy may yet be realized, but in a different manner. The thought which actuated this movement is identical with that necessary for the development of the best in our cities, namely, to establish economy in its true sense. Such education, however, has often been initiated by the means of business-tradesmen, who have to bear a good share of the financial burden of a city. When a calamity comes to a city such as an acute outbreak of disease the tradesmen suffer severely, so that to protect themselves they must be pioneers in sanitation. The public, as a body, is not so ready to promote movements for public works which entail more rates and taxes.

Preparedness of cities is a most important function for if we plan for the future it is possible to avoid many mistakes and obviate heavy expenditures. This is the essence of town planning.

Combining municipal economy and municipal preparedness we have the fundamental factors which are necessary for efficiency in city government. We, therefore, need a carefully thought out plan of government, a strong, efficient organization to carry it on, and a loyal patriotic body of citizens to support and encourage the administration of the laws and regulations, which have been formed for the welfare of the public. A citizen of such a city could re-echo the proud boast of St. Paul when he declared to the chief captain of the soldiers who guarded him, "I am a man of Tarsus, a citizen of no mean city."

Cities are built for utilitarian purposes such as centres of industries, market towns, "go into the cities and buy and sell and get gain," as points of distribution of goods, as educational centres, etc., or as a combination of these. Each city was located in more or less convenient place, this was essentially true of the older towns, and some particular circumstance gave it birth. It is desirable that each city should have characteristic features of its own, either physical, architectural or otherwise. Older cities are often noted for beautiful features and can frequently be distinguished by their silhouettes.

London (England), Liverpool, Paris, Naples, Florence, Edinburgh, New York, and Moscow, are examples of cities which have characteristic silhouettes. So that "A city cannot be hid."

There are many cities which have some local natural features which should be carefully preserved, and the layout of the city should be governed by them. Montreal for example has the Mount Royal as a magnificent natural background. If the city had been laid out by Housemann, who rebuilt Paris, or by L'Enfant who designed Washington, or by Sir Christopher Wren who planned London after the great fire, it is very probable that Montreal would be quite differently laid out.

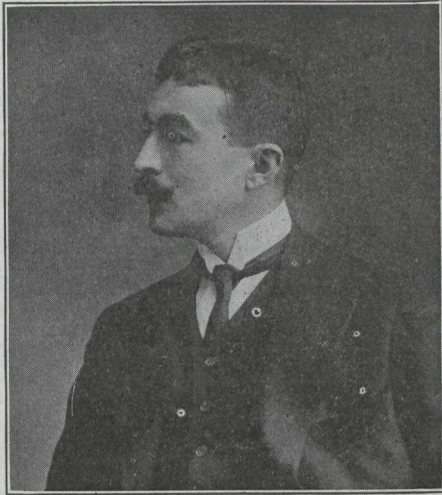
There are many places in Canada which have the making of most beautiful cities. Natural features are there waiting to be utilized and developed. We should pride ourselves in the exquisite beauties of our surroundings and endeavor to take the fullest possible advantage of such conditions so that wherever we live we can say like Ezekial of old, "What city is like Tyrus."

Economic preparedness of our cities then is a function of grave importance. It is associated with everything which is necessary for good government—good laws, regulations and administration. It concerns our health, our comfort and happiness. It affects our prosperity, for healthy citizens are more valuable as wealth producers than sick ones. Forewarned is forearmed, and many troubles can be avoided by being prepared. When people are overtaken by a calamity their efforts to safeguard themselves are often exceedingly feeble, but if similar steps had been taken previously, how powerful they would have been. An outbreak of fever and its calamitous results, or a disastrous theatre fire with the loss of lives, will stir the public, and cause ink to be spilt in great quantities, but such belated actions will afford very little comfort to the bereaved, nor will they help to rehabilitate public confidence.

The public, however, by timely action has unlimited authority over its own affairs and it is the people who can confer a blessing or a curse upon themselves. They are like the elements; when furious they smite everything regardless of who are guilty and who are innocent, and on the other hand they have capacity for great good. They are like the rain which, when uncontrolled, swells the brooks, overflows the banks, sweeping, as a deluge, everything which obstructs it, spreading devastation, waste and sorrow in its tract. That is the penalty of unpreparedness. The rain rises as vapour from the ocean and is carried by gentle breezes to the hills and mountains where it condenses and falls like dew on the earth. It sparkles with iridescence in the sun and as the water trickles down the crags forms exquisite tapestries on the rocks. Under regulation and control it irrigates, fertilizes and refreshes the valleys and plains so to produce bountiful crops. It develops into rivulets and streams, generates power, light and heat for the service of man. It carries in its bosom the argosies which bring merchandise from all parts of the world. In every way it spreads beneficence upon all who contributed in the work of harnessing the powers of nature. These are the fruits of preparedness.

Different Types of Roads

(By B. MICHAUD, Deputy Minister of Roads, Quebec.)



The question of what type of road to choose is very important from a double standpoint. First, how far will a certain type of road be suited to the traffic it will have to carry, and secondly, the cost of the road and its maintenance.

Every one knows the various types of roads. First of all we have the rudimentary or dirt road. Of course, underneath this, we have a path which has not been shaped at all. Let us take this rudimentary road first. This road has been built to a certain extent; it has probably been drained, ditches and culverts have been put in, and it really is a good road for a moderate traffic, especially if the soil is of a nature to stand the weather and the wear and tear of the traffic.

The Clay Road.

The clay road is not as desirable as the dirt road. In July and August, when it is hot, a good clay road is ideal. Some clay roads are as hard as concrete; there is nothing better. Unfortunately, this only lasts through July, August, and sometimes September. When the rain sets in with October, a clay road becomes almost impassable; it is the same in the spring.

After the clay road, we get the "sand-clay" road. The Roads Department of Quebec made an experiment on a short section of "sand-clay" road, about two years ago, at the request of certain people who had very little money, but a lot of sand and clay. We sent down an engineer to build this sand-clay road, and the following year, we had a block of it cut, and we found it to be a remarkably hard paving block. The clay, evidently, gave it adhesion, and the sand prevented the surface from being slippery.

However, we cannot always make a road out of sand and clay; sometimes we have a lot of clay and nothing else; or else a great deal of sand and no clay. All the same, it is worth while mentioning this kind of road, because there is a possible chance that money could be saved by this combination. We are quite ready to spend money, we don't ask any better than to do so. I am speaking here for the Government and also for the population of my province; we have seen how ready the latter is to spend money in order to improve conditions, but we are obliged to put the drag on sometimes, as our farmers want to spend too much at times. Of course, this is a good sign; the farmer is getting progressive; he is getting out of a rut, and the worst rut you can possibly get into, is that of saving every cent. We have made some sort of propaganda, and I must admit that our best propaganda has been the good roads we have built; they were something tangible, and so we gradually got the good people of Quebec to see that some money must be spent. Naturally, it must be spent as carefully and as economically as possible. But to get back to a very essential point; if there is good material at hand, you must not think of bringing other materials from a distance, which probably cost ten times as much. And there we get back to the "sand-clay" road.

The Gravel Road.

After these, we get the gravel road. A gravel pit is as good as a gold mine. In the States and in Ontario there are many sections entirely of gravel formation. In many

places, you only have to use the drag on the road, taking off the larger boulders, and you have at once a very good road, and one which will stand traffic well; it even gets better with traffic on it, so long as the drag is used now and then. All that at a very moderate cost. There is a gold mine to be exploited. In all districts with a gravel formation, that is decidedly the road to be built, unless there is an enormous traffic of motor trucks; with those you would not use macadam either. Begin by careful calculations; look around you and see what you have at hand; we must do like the savages do, use the smallest blade of grass, the smallest pebble, if it doesn't cost anything.

Permanent Roads.

The Government of Quebec does not only give advice in political economy and in road building, but it tries to carry out those same principles. Three or four years ago, when we began the present system of improved highways, we had a few general principles on the subject. We knew perfectly well that a macadamized road was a permanent one; those were the old French and English ideas, which have had to be modified with the change in traffic. We knew that and we said: "we are going to build permanent roads, macadam roads, gravel roads, and if necessary, we shall do even better than that."

In improving some fifteen or twenty miles of road, the first idea is the popular one: Let us have a permanent road, a good macadamized road, the government is going to pay for it, so it's all right.

Perhaps we encouraged this movement; there is one thing that must not be forgotten; you must look for your materials. We ourselves have built some macadamized highways, and while we were building them at the urgent request of the public and because they were absolutely needed, at the same time we were prospecting to see if we could find some gravel banks. People who go around with their noses in the air, never pick up any money; keep your eyes on the ground, and you may not find any gold or silver, but you may find gravel. A macadamized road can be built for \$5,000, \$6,000, \$8,000 or \$12,000 per mile; you cannot do it for less than four or five thousand dollars; but you can build gravel roads for \$2,500, \$2,000 and \$1,800. Exception would have to be made for provincial highways, where bridges, culverts and getting the road into good shape entails additional expense. As a rule, a municipality can build a gravel road for \$2,000 or \$3,000.

Road Economy.

I especially want to draw your attention to the question of economy. Study your soil well, and see if you cannot make a good road with it; look around you and see if there are not any gravel banks within easy distance. If the gravel is some four or five miles off, then you had better make some macadam.

We must make some distinctions here; you must reckon up what sort of road is most suited for your purpose, what kind of gravel it is, how far off it is, and what is the quality of the stone. All such questions must be discussed before you make a final decision as to the kind of road you want to build. The engineers of our Department of Highways are always at the beck and call of the people of the Province; it may cause a delay. The demand is so insistent for improved roads, that no service can possibly keep up with it, but we are always ready to help.

Now we come to the macadamized road. The real difficulty lies in the foundation. For a gravel road, a foundation of broken stone is often better, if the stone can be had at a reasonable cost, and if the gravel is not good enough; with a macadamized road, you must have a foundation, unless the subsoil is pure rock. In all plans sent out by the department, allowance is always made for the foundation in macadamized roads.

For certain kinds of traffic, macadam is permanent; it has to be kept up, if there is a great deal of traffic; if I were speaking on macadam, I should not talk about its construction, but about its up-keep; I want to draw your attention to that fact; don't lose the money invested in macadamized roads by neglecting the maintenance of them.

You have to begin the maintenance of a macadam road immediately after it is finished. There are several ways of maintenance. In France, there are two systems: One, a renewal of the surface, and the other, "the stitch in

(Continued on Page 385.)

The Union of Canadian Municipalities

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Official Organ "THE CANADIAN MUNICIPAL JOURNAL" Coristine Bldg., Montreal.		G. S. WILSON, Asst.-Secretary, Bureau of Information, Coristine Bldg., Montreal

The Annual Convention, August 21, 22, 23

TO ALL MUNICIPAL COUNCILS.

The annual convention of the Union of Canadian Municipalities, which will be held August 21, 22, 23, in Montreal, and to which we have already sent you an invitation, will be the most important in the history of the Union, and will mark an epoch in the civic life of the Dominion, and for the reason that the municipalities of Canada are to-day face to face with problems, the seriousness of which can only be gauged by their magnitude. The problem of finance (borrowing, taxation, assessment, accounting)—the problem of responsibility of the municipal council in this war—the problem of public works, streets, etc.—are each of vital interest to every municipality. There is also the problem of municipal responsibility in Canada's preparedness, which must be studied and action taken almost at once if the municipal councils are to rise to their opportunities and responsibility.

These, and other problems, can only be met by free discussion between municipality and municipality on common ground. For this purpose the Union would strongly urge the Councils to send representatives to the Montreal convention, at which papers on the following live questions will be presented by the most authoritative speakers, and ample time given for free discussion.

Topics and Papers for the Programme, 1916.

Municipal Responsibility in Canada's Preparedness.

- (a)—Returned Soldiers:—Employment, Soldiers' Homes, Hospitals, Memorials.
- (b)—The Patriotic Fund:—Federal, or Provincial, or Municipal Tax?
- (c)—Immigration:—Rural Clubs, People's Forums.

(d)—Public Employment Offices.

(e)—Encouragement to Industries.

Municipal Finance.

Municipal Accounting.

How Best to Introduce Modern Systems of Municipal Work.

Municipal Assessment.

Hydro-Electric Railway System of Ontario.

Montreal Electrical Situation.

Forms of Municipal Government.

(a)—Aldermen and Committees.

(b)—Controllers and Council.

(c)—Commission only.

(d)—Manager.

(e)—The Ideal Form of Civic Government and Administration.

Provincial Government Municipal Boards.

The Town Planning Outlook.

Good Roads Movement, and its Influence on Urban Municipalities.

City Bill Board Advertising.

Proportional Representation.

Teaching of Civic Government in Public Schools.

Daylight Saving.

A complete programme will be mailed later.

Yours Faithfully,

W. D. LIDTHALL,

Hon. Sec.-Treas., U. C. M.

The Daylight Saving Question

The Daylight Saving question having advanced from a theoretical position to a question of the day, open for legitimate discussion as to whether it is practical or not in Canada—in view of its being actually introduced in Great Britain—it is desirable that municipal opinions as to the advantage, or not, of its introduction, be collected. Consequently the Union of Canadian Municipalities will be glad to receive the opinion of municipal men generally on any aspect of the question. The subject will also be placed on the programme of the forthcoming annual convention at Montreal.

W. D. LIDTHALL,

Hon. Sec.-Treas.

EFFECT OF HEAVY SNOW STORMS ON WOOD BLOCK PAVEMENTS.

The severe weather, with an excess of moisture, which has characterized the past winter has proved very destructive to pavements of all kinds both in the coast and prairie cities.

The lumber interests of British Columbia, anxious to have the causes of any failure on the part of wood paving investigated with a view to the application of the remedy necessary to prevent a recurrence of similar troubles, approached the Minister of Lands with this object in view. As a result, the Forest Branch has been delegated to conduct an early inquiry into the matter.

In this connection it is of interest to know that enquiries have already been set on foot by the West Coast Lumbermen's Association, whose engineer has submitted a preliminary report, and there is no question but that the chief causes of trouble with wood paving are due to faulty treatment of the blocks themselves, and defective methods of laying. The report reads as follows:

"A brief report is here given on the condition of some of the wood block pavements in Oregon and Washington after the last heavy snow storm. Seattle's wood block pavements were practically unaffected by this snow. In only one case, that of Fourth Avenue, was there any damage at all. Here the damage was entirely confined to the car tracks, and was very easily remedied. Only a few square yards of pavements had to be taken up and relaid. This pavement is almost seven years old.

Wood block pavements laid in Seattle have been constructed in accordance with improved methods which accounts for the absence of difficulties from such a severe snow storm.

The best type of construction has not been used in all cities, and some of the older types of pavement have given some trouble.

In Everett conditions were by far the worst. Here practically every wood block street having street car right of way gave more or less trouble by heaving. A thorough inspection of all these pavements showed two very important causes for this bulging:

(1) Not a single block was found which contained more than a coating of oil on the outside; no appreciable penetration having been secured. This left the blocks free to absorb all available moisture, and without the aid of the necessary expansion joints bulging was invited.

(2) Only 60 lb. T. rails were used in all track work. The vibration resulting from the use of these light rails allowed the snow and water to run between the rails and the blocks, and freezing raised them.

The condition existed not alone in the wood block streets, but also in brick right of way paving along the rails, and on an equally extensive scale. A different type of construction was used on the wood block paving along the rails, and where this was put in last year no trouble was experienced. Considering the kind of blocks used and the poor rails, the pavements have done remarkably well. The city and railway officials state that they are satisfied that proper conditions would prove wood block entirely satisfactory.

In Tacoma no appreciable damage resulted, only a few square yards of car track paving having been damaged.

But very slight damage occurred to wood block pavement in Portland. A small amount of bulging occurred on Fourth Street, which was readily repaired at very small expense, only a few square yards of pavement being affected. It must be remembered that the recent storm was extremely hard on all types of pavement, and wood block did not suffer unduly in comparison with other types of pavement.

In Seattle alone 45 miles of track pavement is reported to have been damaged, making it necessary to remove 250,000 bricks.

The Sherbrooke, Que., City Council has passed a By-Law making it compulsory for all manufacturing plants using soft coal to instal smoke consumers."

As there are some twenty such plants in the city which must comply with this By-Law, Manufacturers' of Smoke Consumers will do well to cover the field, and secure the business."

HEARTS AND FACES.

J. MURRAY GIBBON.

Mr. J. M. Gibbon, of Montreal, in his novel, "Hearts and Faces," has entered a new field of literature. His writing in the past has been confined to articles and sketches, though they have covered a wide range of subjects—from philosophy, for which he is specially qualified by his training in the universities of Europe, to art, of which he is also a student. Since he gave up the editorship of "Black and White," a popular illustrated weekly published in London, Mr. Gibbon has travelled in most countries, and a book from his pen based on his experiences, would be invaluable at this time, when people are wanting to know something more about other countries, particularly China and Japan, which the author knows well. As a writer Mr. Gibbon shows much breadth of thought and sympathy with the weakness of human nature. This is especially shown in "Hearts and Faces."

Some time back Mr. Gibbon wrote a very interesting study of the "Scotsman in Canada," that is not so well known as it might be considering its valuable data and well written criticism.

CANADIAN INDUSTRY, COMMERCE AND FINANCE.

By J. J. HARPELL.

The Journal of Commerce, which is under the editorship of the Hon. W. Fielding, has just published its second edition of "Canadian Industry, Commerce and Finance." The book, which is divided into two parts, was written and compiled by Mr. J. J. Harpell. The first part is the one that interests us the most, as it deals very thoroughly with Canada's basic industries, and it is only by the reading of such a volume that one can get a true perspective of the vast material wealth of the Dominion—its fisheries, its forests, its agriculture its minerals and its manufactures. The book shows that the author has gone to a great deal of trouble to secure his data, which is put into good and convincing language, that will go far to popularize the publication. The second part is made up with complete lists of Canadian producers, manufacturers, foreign manufacturers of special machinery and supplies necessary to the industries of this country, importers, exporters and wholesale houses, and marketable commodities. "Canadian Industry, Commerce and Finance," is issued as a companion volume to the Journal of Commerce, and published by the Industrial and Educational Press, Montreal.

HYDRAULIC FLOW REVIEWED.

By ALFRED A. BARNES.

This book can be recommended as one of absorbing interest for the student of hydraulics, since it throws fresh light upon a subject which has never previously been gone into thoroughly. First, collecting the various formulae and data of those who have made the rules which all engineers are in the habit of following in the design of pipes, channels, weirs and other passages for flowing water, the author proceeds to show in what way these rules are erroneous. Next, taking us into his confidence, he tells us of his own experiments, explaining fully, both by figures and by diagrams, how he arrived at the more accurate formulae which he now advocates. The ground covered includes the flow of water in pipes of all descriptions and ages, as well as through rivers, notches, weirs and circular orifices. The method of work employed by the author has the double value of being practical as well as theoretical. Every rule set down has been demonstrated by numerous experiments, which are here described quite fully. The subject is handled in a way that makes everything perfectly clear and easy to follow, and many practical examples are worked out to show in exactly what way the formulae should be used. The diagrams at the end of the book are by no means the least valuable part of it.

Published by E. and F. N. Spon, Limited, London, and Spon and Chamberlain, 123 Liberty St., New York. Price \$3.25.

NEW MUNICIPAL TELEPHONE.

A new telephone company is proposed, to be owned, operated and controlled by the citizens of New Glasgow, Westville, Stellarton and Trenton.

Affairs in British Columbia

By JACK LOUTET.

Tax Sale Redemption.

At a meeting in North Vancouver recently it was arranged to send a delegation to Victoria to press for a two year redemption period after tax sales. It was contended by one of those present that it was more important to protect mortgages than debenture-holders and that the latter could do without their interest until the end of the war. This viewpoint received little support, few mortgages being present. Another desired a five year delinquency period and the power to sue for taxes to be taken away from the municipalities. The war and "the poor man likely to lose his home" were freely mentioned, but no one remembered that no property, even this year, will be sold for taxes which were levied after the commencement of the war. No owner living in his own home has been sold up and no municipality would object to further extension of time being given if such a case came along.

The City of New Westminster this year will probably be 20 mills net.

Vancouver has recently passed a traffic by-law which has been the subject of much criticism. It takes a large area within which an automobile may not stand more than ten minutes. Previously this restriction applied only to carline streets. The new by-law makes business more difficult and while suitable in New York is a little early for Vancouver.

The Sumas Dyking scheme which after careful examination was dropped about seven years ago is again before the government in the form of a request for guarantee of bonds to the extent of \$1,500,000. The area proposed to be reclaimed is about 25,000 acres, and is reported to be very rich soil. The depth of water in the Sumas Lake is about four feet, rising to fifteen in flood time. An extensive pumping plant would be necessary to keep the land from flooding annually. The government has promised to consider the proposal.

At a conference in Victoria on the question of taxation of right-of-way of railroads it was decided by the U. B. C. M. executive to leave out the tramways until the union could go into the matter more fully. The street car systems operated under franchise are so fixed up with the interurban lines working under charter that it was thought advisable to gather more data before making a request to the government.

War Contracts.

Victoria City Council has recently taken up with the Militia Department at Ottawa the question of war contracts and the share which, in their opinion, the West is entitled to.

Lately a letter was received from the Acting Minister of Militia, in which he said that the manufacturers of British Columbia had little cause for complaint. The letter was characterized by one of the aldermen as little less than an insult, and the general opinion seemed to concur with this view.

Goods were shipped from the East through Vancouver to Victoria and then back from Victoria through Vancouver to the various regimental headquarters. For some time new B. C. regiments could not be uniformed owing to congestion in the East, yet no attempt was made to ship cloth to B. C., and allow tailors there to do the work. There is admittedly some improvement now, but in the opinion of many public bodies much remains still to be accomplished.

Prior to the war many municipalities in British Columbia were heavily stocked with material purchased for work which later it was found impossible to finance. With the rise in prices in manufactured goods this resulted in a great saving, and in some cases where improvements had been abandoned it is possible to make a substantial profit. A case in point is noted in Victoria, where the council had 77 tons of lead pipe bought for under \$10,000 which can now be sold at a profit of over 100 per cent.

South Vancouver's Financial Position.

South Vancouver's financial position is stated by the Reeve to be gradually improving. The Council has effected many economies, and its members are working together in a way which promises to rescue the municipality from an unfortunate position.

It is satisfactory to note that this municipality has rejoined the Union of B. C. Municipalities, which they left last year.

An action of general interest to municipalities will be fought out in Vancouver, where the District of North Van-

couver is endeavouring to prevent the District of West Vancouver pledging all its taxes to the Bank of B. N. A. as security for a temporary loan without providing that a sufficient portion of the loan be set aside to pay interest and sinking fund due annually to North Vancouver under the West Vancouver Incorporation Act.

West Vancouver has now taken over the ferries under a by-law recently passed. The auditors report shows a loss of about \$10,000 annually during the past four years. Under the reorganization it is hoped to keep the loss to a much smaller figure.

Burnaby Sells its Bonds.

Burnaby has disposed of its \$1,000,000 issue of serial bonds to Wood, Gundy and Co. This firm is also negotiating with Point Grey in regard to a proposed issue of \$4,500,000 20-year serial bonds to retire the existing 50-year debentures.

North Vancouver City has lately experimented in fire apparatus by purchasing second-hand high powered touring cars now available at low figures and adapting them as hose and chemical wagons, the changes being made by the firemen and mechanics.

To Amend the Municipal Act.

The Bill amending the Municipal Act has now been reported by the committee of the House, and is expected to become law without further change. It gives authority to municipalities to construct public baths, a power long desired and supported strongly for years by the Union. The much debated clause relating to assessments was finally settled as follows:

Until after the expiration of the year following the year in which a peace treaty between Great Britain and Germany shall have been signed, there shall be no appeal in respect of any lands from the Court of Revision if the following provisions have been complied with, namely:—

(a)—If the aggregate assessment of the lands in the municipality is less by ten per cent. than the assessment as fixed by the Court of Revision of the next year preceding; and

(b)—If the assessment of the land in question is less by ten per cent. than its assessment as fixed by the Court of Revision in the next year preceding; and

(c)—If the assessment of the land in question is fair and equitable in comparison with other lands in the municipality. Such comparison to be made by reference only to the assessment roll of the municipality for the year 1914:

Provided, however, that nothing herein contained shall preclude any appeal as to the area assessed or as to the classification of the lands.

Power is also given to a municipality to sell at a price equal to the amount of taxes and interest to date of sale any lands unsold at tax sale, provided that action be taken within six months of the tax sale date. The redemption period to remain the same as before in such cases.

In most municipalities tax arrears continue to come in in a satisfactory manner, and it is anticipated that collections generally will be better than last year.

CITY LOTS AND WEEDS.

At the last annual meeting of the Commission of Conservation especial stress was laid upon the increasing prevalence of weeds. Earnest pleas were made for action to overcome this detriment to agriculture.

While farming interests are exerting themselves to eliminate this serious handicap, they have just cause to complain of the prevalence of weeds on city lots and subdivided land upon the outskirts of cities and towns. This land, once forming some of the best farms, offers ideal conditions for the growth of weeds, and they flourish in great luxuriance. The owners in many cases are non-residents, and, consequently, do not appreciate the condition of the property.

Municipal officers and roadmasters should be given the authority, and be compelled, to have weeds cut upon vacant property, the cost of doing the work to become a legal charge against the land. The majority of owners would be willing to pay the cost of weed cutting, and would appreciate the service. It is hoped that action will be taken, so that vacant urban property may no longer be regarded as a dangerous weed menace.

Municipal Finance

JAMES MURRAY.

HOW TO PROCURE MUNICIPAL ECONOMY AND EFFICIENCY.

We were pleased to receive a letter from Mr. W. A. Gordon, City Clerk of Revelstoke, B.C., enclosing some good suggestions. As this Journal is a forum for the discussion of anything and everything conducive to good municipal government, we gladly welcome criticisms and suggestions on this important subject. We will let Mr. Gordon speak for himself:

Your valuable Journal seems to have a number of readers who are very good critics, but I consider the Journal would be of more interest if we had suggestions for remedying defects instead of criticism. The present conditions will enable municipal councils to achieve efficiency, for the ratepayers now want economy instead of enormous expenditures for improvements. In order to bring up a discussion and have the different opinions of municipal officials the following suggestions may finally result in promoting economy and efficiency.

1. Dominion statutes with a commission (non-political) composed of one member from each province; each province to have a municipal inspector's office, where all by-laws would have to be passed and uniform statistics would be on file from each City in their province.
2. The total debt limit fixed by a percentage of improvements only, say—School 10 per cent; General 15 per cent; Public Utilities 25 per cent.
3. Only three classes of municipal bonds, namely:
 - General—embracing all improvements except School and Public Utilities;
 - Public Utilities—including Light, Waterworks and Sewer, Telephone and other utilities having interest, sinking fund and running expenses paid by the actual consumer.
4. No frontage taxes, as they are only loopholes for extravagant expenditure and high taxes. At present one may find a tax bill giving the rate as 20 mills, but taking the rate on the total amount of taxes due, one will find it is actually 30 or even 45 mills. All monies required for financing a city (utilities excepted) should be raised by a mill rate yearly after deducting estimated sundry receipts. At the present time the city at large is usually taxed for one-third. Why not for the whole amount?
5. The Council in every city to be directly responsible to the Provincial Inspector's office for the carrying out of their duties in accordance with the statutes.
6. Only registered property-holders to vote. The Council elected to hold office at least four years, and be bonded in order that they might fulfill their duties according to the Statutes, for it is very difficult for members of a Council to perform their duties faithfully when the rate-payer considers the Council under no liability.
7. Property-owners to vote on the yearly estimates and at the end of the year ascertain from the financial statement if the money had been spent as estimated. This would induce citizens to take an interest in municipal affairs.
8. Where there is a rented house or building on a property upon which taxes are unpaid at the end of the year, the City be given power to collect all rents until taxes are paid.
9. Cities be given power to impose heavy licenses on all agents selling outside real estate or stock in wild cat propositions. 80 per cent of outstanding taxes is the direct result of the public investing in too many of these propositions, where they are promised \$1,000 for \$100 investment.
10. A Dominion Statute for schools giving a uniform system of education and text books.
11. A Dominion Year Book published, giving the financial statements and statistics of every city, also a list of all money by-laws passed, the purpose, extent of the work and its cost, which would be valuable information for city officials and bond houses.

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COMPARATIVE COST OF CITY GOVERNMENT IN BRITISH AND AMERICAN CITIES

Mr. Thomas Adams, of the Commission of Conservation, recently sent out a memorandum to some of the principal cities of Canada on the comparative cost of city government in British and American cities. The memorandum is based on an analysis of Dr. Powers (Washington), of a report sent out by the London County (England) authorities, which appeared in the American National Municipal Review. Mr. Adams' idea is to secure some Canadian figures, and the results should make interesting reading to the students of municipal economy. Of course it will be difficult to arrive at even a fair comparison, as municipal accounting in Canada is not only different from Great Britain and the United States, but it is not uniform—each province having its own system, and Mr. Adams recognizes this great difficulty. We have followed Dr. Powers' article closely, and would say that the writer's knowledge of municipal government in Great Britain is based on book knowledge rather than on practical experience.

The memorandum of Mr. Adams is as follows:—

Dr. Powers, of Washington, D.C., has prepared a comparative statement of municipal statistics, which shows very interesting results. The statistics show the per capita cost of city government in the two countries of Britain and the United States, and, making all allowances for different conditions, they are very favourable to the British cities. It is desirable, however, to use these figures at present merely as a basis for study rather than accepting them as exact standards of comparison.

The following table is prepared from the information collected by Dr. Powers so far as they relate to cities in Britain and the United States. The Canadian figures have been added by dividing the aggregate taxes collected by the number of the population.

London	\$16.04 per capita.	
Birmingham,	} Average Population 464,384	
Liverpool,		
Manchester,		
Sheffield,		
Leeds.		
Bristol,		
Newcastle,		
Cardiff	\$10.79 per capita	
Swansea,	} Average Population 464,384	
Glasgow.		
Edinburgh,		
Dublin,		
New York		\$30.25 per capita.
Seventeen American Cities, with Average Population of 645,756		\$20.13 per capita.
39 American Cities, with Average Popu- lation of 155,489		\$15.13 per capita.
Toronto		\$26.45 per capita.
Ottawa		\$28.38 per capita.
Edmonton		\$38.25 per capita.

Fifty-six American cities, other than New York, had an average population of 304,133, as compared with the 464,384 for twelve British cities. The revenue receipts of the 56 cities from taxes and subventions were 70 per cent greater than the corresponding average for 12 British cities and 10 per cent greater than the city of London.

Of the total taxes collected in London 83.2 per cent was chargeable to rates and the balance, 16.8 per cent, was met by contributions or subventions from the central government. In New York 98.3 per cent was received from property taxes, and 1.23 per cent from subventions.

Dr. Powers says that although the figures are not strictly comparable, "the average costs of city governments resting upon the taxpayer in American cities is not less than 40 per cent, and it may be as great as 70 per cent larger than the corresponding burden resting upon the taxpayer of British cities."

On the American side local improvement taxation represents a considerable proportion of the revenue and a comparatively small amount of British rates are used for similar purposes. This difference exaggerates the excess costs of American cities. On the other hand, British cities make practically no use of special assessments in financing current expenses, which tends to cause the understatement of the excess expenses of American cities.

Dr. Powers adds: "The figures reviewed demonstrate that the efficiency which produces economy in costs of government has been learned in British cities, and that

American cities should study British methods for instruction in this economy."

A question which he does not raise, and one which is of interest, is how far the differences in costs are due to the higher price of labour, and the smaller spending power of the dollar in America than in England. The cost of labour for all purposes must be considerably greater in American cities, although probably the English cities pay as much in salaries for their expert officials as American cities of the same size. Another point to be borne in mind, this time in favour of the British city, is that all British streets are constructed of the standard required by the city or town as building development takes place, whereas in American cities there are many miles of streets in new suburbs which remain unpaved long after buildings are erected on their frontages.

Cost of Fire Prevention.—Dr. Powers also quotes the following:—

Maintaining fire brigade—Per capita cost, London, \$0.29; New York, \$2.97.

Fire losses.—London, 1912, \$2,045,405; New York City, 1912, \$11,827,994.

Education—Per capita cost in London, \$5.30; New York, \$6.53.

Police Expenses—London, \$1.78 per capita; New York, \$2.97 per capita.

Debts—London, average debt per inhabitant, \$121.49; New York, \$156.57.

In the case of London 51.62 per cent of the debt was for non-revenue producing purposes, and 48.3 per cent for revenue producing purposes. The New York debt is not only a third greater than the corresponding debt of London, but 60.56 per cent has been incurred for non-revenue producing purposes, leaving only 39.44 per cent for purposes producing revenue.

In a number of the specified cities in Britain the portions of the debt incurred for non-revenue producing and revenue producing purposes are about equal, whereas in seventeen cities in the United States, other than New York, the portions were 73.22 and 26.78 respectively.

The above figures indicate the need for careful study of the comparative costs of British and American cities. When a proper basis has been found for making this comparison it will be possible to compare British and Canadian cities more easily and on a more accurate basis than can be done at present. The most uncertain element in making the comparison is the extent to which allowance should be made for difference in compensation to labour in Britain and Canada. There are certain things to set off against this, but it would appear as if the spending power of the dollar would not be sufficiently accurately ascertained to enable conclusive figures to be arrived at.

Any views regarding the above figures and my comment upon them will be gratefully received.

EDMONTON CITY COMPTROLLER'S REPORT.

City Comptroller Mouat, of Edmonton, in a recent report on the city's finances for 1915, shows a \$775,000 reduction in controllable expenditure as compared with 1914. By these economies Edmonton had a revenue surplus for 1915 amounting to over \$110,000, which will go towards reducing the taxes of the current year. The total revenue for the year amounted to \$2,663,351, as against \$2,942,315 in 1914. The gross debenture debt at 31st December, 1915, was \$24,668,000. Deducting those debentures issued against the security of public utilities, and local improvements, and allowing for the sinking fund investment, the net debenture debt is \$10,005,500. The annual instalments required to meet the debentures have been duly provided for and paid to the credit of sinking fund account. However, there is a total of about \$175,000 in arrears to this account on account of former mortgage loans made from sinking fund on real estate in the city—a method of investment that has very properly been discontinued, and is now definitely prohibited by an amendment to the city charter.

The city's outside auditors, in their report, say: "After going fully and completely into all matters pertaining to our office, we are satisfied that control of expenditures has been effectively exercised during the year."

The Road Board of Great Britain recently advised county authorities of its intentions to loan \$1,000,000 during the fiscal year 1916-17 to aid in improving road surfaces.

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BOND DEALERS ORGANIZATION.

The bond dealers of the Dominion have perfected an organization to be known as the Bond Dealers' Association of Canada. A constitution and by-laws were submitted and adopted at a meeting held in Toronto, and the following officers elected: President: William Hanson (Hanson Bros., Montreal; vice-presidents, A. E. Ames (A. E. Ames and Co., Toronto); and J. M. Mackie (C. Meredith and Co., Montreal); secretary, C. H. Burgess (C. H. Burgess and Co., Toronto); treasurer, W. C. Pitfield (Royal Securities Corporation, Montreal); executive committee, J. M. Gundy (Wood, Gundy and Co., Toronto); W. C. Brent (Brent, Noxon and Co., Toronto); G. A. Morrow (Dominion Securities Corporation, Toronto); Mr. Gonthier (St. Cyr, Gonthier and Frigon, Montreal); A. H. B. Mackenzie (Mackenzie, and Kingman, Montreal); A. J. Nesbitt (Nesbitt, Thompson and Co., Montreal).

BANK OF MONTREAL REVEALS UNPRECEDENTED STRENGTH AND RESOURCES.

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"Increase of over \$70,000,000 in deposits not bearing interest and over \$33,000,000 in interest bearing deposits in six months."

These are among the indications of the remarkable strides made by the Bank of Montreal in its half-yearly statement of April 29th, 1916, recently issued.

Canadian interests have, this year, become somewhat accustomed to surprising statements on the part of some of the larger Canadian corporations, but they are likely to stand amazed at the wonderful position disclosed today by the Bank of Montreal.

A position of such unusual strength and resources is shown that one immediately recognizes what a great advantage such an exhibit will be to the Dominion.

With assets amounting close to the four hundred million mark—the deposits of over \$330,000,000, and with \$272,000,000 of assets in liquid form, one can readily understand that position occupied by the Bank of Montreal among the leading financial institutions of the world.

Assets at New High Level.

With the increase of over a hundred million dollars in assets, these now amount to \$390,421,701, compared with \$289,562,678. Of this total the liquid assets amount to \$272,093,194, equivalent to 76.92 per cent of the liabilities to the public. Included in these liquid assets are actual cash equivalent to 19.24 per cent of liabilities to the public. Of this amount gold and silver coin current amounts to \$18,432,736. Dominion Notes \$49,640,567. Among the other principal accounts of liquid assets, the balance due by banks and banking correspondents elsewhere than in Canada amounts to \$67,171,736, compared with \$14,205,378, a year ago, and call and short loans \$90,275,566, compared with \$76,792,482. A large increase in the amount of Canadian Municipal securities and British, foreign and Colonial public securities other than Canadian is to be noted, these amounting to \$12,737,931, as compared with \$044,606 a year ago. Cheques on other banks have increased to \$10,251,161, against \$7,124,471, a year ago.

Tremendous Gains in Deposits.

The deposit accounts show phenomenal gains. The deposits not bearing interest represent a new high level at \$124,601,102, up from \$63,901,200 at the corresponding period last year, an increase of over \$70,000,000, while deposits bearing interest have increased \$194,006,551, from \$166,990,565. This represents a gain of over \$27,000,000, as compared with a year ago, and over \$330,000,000, as compared with the statement at the end of the last fiscal year. Current loans and discounts in Canada amount to \$92,377,873, as compared with \$100,391,317, a year ago, but on the other hand loans to cities, towns and municipalities has increased from \$7,213,855, to \$12,761,460.

The statement of profit and loss shows that the profits of the half year ended April 29th, after deducting charges of management and making full provision for all bad and doubtful debts amounts to, \$1,067,240.21, compared with \$1,030,194.98 for the corresponding period in the previous year. These profits, added to the balance of the profit and loss at October 30th, 1915, brought the total amount available for distribution to \$2,361,193.16. This was applied as follows: Quarterly dividend, 2½ per cent,

WORKMEN'S COMPENSATION BOARD'S AND MUNICIPAL INVESTMENTS.

The Ontario Workmen's Compensation Board, in its 1915 report showing investments in bonds and debentures to the amount of \$1,067,263, of which about half was invested in municipals, as follows:—

Municipal Debentures.	Yield rate %.	Term.	Par value.	Cost. value.
North Bay	6	1917-1942	\$ 10,036	\$ 9,262
Stratford	5½	1934	3,000	2,825
Windsor	5½	1919-1923	50,000	48,571
Port Arthur	5¾	1934	25,000	22,850
Fort William	5¾	1944	25,000	22,352
St. Mary's	5½	1933	17,000	16,013
St. Mary's	5½	1944	2,500	2,320
St. Mary's	5½	1943	4,870	4,526
Smith's Falls	5½	1926-1944	13,457	13,457
Smith's Falls	5½	1926-1931	10,326	10,292
St. Catharines	5½	1929	25,000	23,762
Hespeler	5½	1925-1934	15,768	15,768
Welland	5 2-5	1934	25,000	25,302
Newmarket	5½	1916-1926	11,515	11,197
Arthur	5½	1916-1930	3,139	2,415
Arthur	5½	1916-1920	2,403	2,923
Arthur	5½	1916-1928	1,992	1,936
Weston	5.43	1924-1929	22,783	23,946
Carleton Place	5½	1930-1941	14,659	14,659
Penetang	5½	1916-1928	7,538	7,303
Penetang	5½	1916-1924	4,602	4,492
Brantford Industrial Realty Company, guaranteed by city of Brantford	5½	1924	40,000	40,000
Richmond Hill	5½	1916-1944	9,861	9,861
Orillia	5 2-5	1926-1934	25,523	24,448
Lindsay	5 2-5	1925-1935	19,904	20,121
Cobourg	5 3-10	1934	6,000	5,782
Sundridge	5¼	1915	4,100	4,100
Creemore	5¾	1916-1934	6,323	6,644
Brampton	5½	1916-1934	20,006	20,844
Brampton	5½	1916-1944	3,568	3,184
Perth	5½	1916-1934	5,342	5,342
Perth	5½	1916-1933	1,623	1,559
Perth	5½	1916-1934	627	601
Perth	5½	1916-1944	498	471
Perth	5½	1916-1943	4,049	3,833
Sandwich	5¾	1925-1935	10,353	10,701
Weston	5½	1916-1930	6,029	6,230
Essex	5½	1916-1934	8,228	7,890
Sudbury	5¾	1933-1935	25,263	23,106
Stamford	5¼	1916-1925	8,053	8,345
Oakville	5½	1916-1935	7,398	7,708
Wallaceburg	5¾	1917-1930	8,254	8,467
Tillsonburg	5½	1916-1935	2,475	2,475
Tillsonburg	5½	1916-1935	4,951	4,951
Tillsonburg	5½	1916-1944	1,494	1,494
Tillsonburg	5½	1945	985	985

\$562,602 \$515,334

paid 1st March, 1916, \$400,000; quarterly dividend, 2½ per cent, payable 1st June, 1916, \$400,000; bonus, 1 per cent, payable 1st June, 1916, \$160,000, War tax on Bank Note Circulation to 29th April, 1916, \$80,000. After these payments balance carried forward to profit and loss amounted to \$1,321,193, compared with \$1,252,864 a year ago, and \$1,293,952, at the end of the last fiscal year.

An idea of the progress made by the Bank may be obtained by comparison of the principal accounts at the end of April, 1916, with the corresponding dates last year. This comparison shows as follows:—

	1916. April 29th,	1915. April 30th,
Assets	\$390,421,701	\$289,562,878
Liquid assets	272,093,194	163,358,439
Deposits not bearing interest	134,601,102	63,901,200
Deposits bearing interest	194,006,551	166,990,565
Current loans	90,275,566	76,792,482
Loans to cities and towns	92,377,873	100,391,317
Deposits in central gold reserve	12,761,460	7,213,855
	3,000,000	

The importance of such ample resources and so strong a position can hardly be exaggerated. The Dominion is certainly greatly indebted to the Bank for the confidence it inspires in the Canadian situation at such a time. It was somewhat easier to realize the importance of the conservative policy followed by the Bank even in the boom times.

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NEW IDEAS IN TAXATION.

An entirely new idea of valuation and municipal taxation is being advocated by Ald. Kirk, of Vancouver, B.C., who recently explained it verbally while passing through Montreal.

Briefly, Ald. Kirk claims that the total assessment of any place should not exceed \$1,000 per capita of the population; that the tax rate should never exceed 25 mills on assessed land value; and that the municipality's regular borrowing powers should be limited to 20 per cent of the land assessment. Ald. Kirk has evidently worked it out on the basis of conditions in his own city of Vancouver.

NEW YORK'S BOND SALE.

The bidding for the \$40,000,000 50-year 4½ per cent bonds of the city of New York, and the \$15,000,000 15-year serial bonds, is worth noticing.

Fifty-nine bids were received for the 50-year bonds, sale, on June 29, 1915, 216 bids were received for \$71,000,000 issue.

Comptroller Prendergast made this statement regarding the offers:

"These bids are the highest ever received by the city for 4½ per cent long-term and serial bonds. I consider the syndicate bid headed by Kuhn, Loeb and Company, a very good bid, and I believe that it reflects very well present feelings."

The 50-year bonds were sold at an average price of \$101.253, while the serial bonds, due 1916 to 1930, brought an average price of \$101.306. The average price for the entire issue was \$101.272, which means that New York will receive for its \$71,000,000 of bonds the amount of \$71,903,309.

The issue was subscribed several times over. There were 241 bids received in all, and the total amount was \$320,610,140. The number of successful bids for the 50-year issue was 102, and the number for the serial issue 19. The income basis of the larger issue amounts to 4.437, and of the smaller 4.297.

A. E. AMES AND COMPANY.

As a consequence of the withdrawal from the A. E. Ames and Co., of Toronto, of Mr. Thomas Bradshaw, recently appointed Commissioner of Finance and Treasurer of the city of Toronto, the following arrangements have been made relating to the firm's bond departments: Mr. F. J. Coombs, one of the partners of a number of years standing, in charge of the bond business. Associated with him will be two sales managers, Mr. G. A. Macpherson, who will have special relation to western Ontario and the U. S., and Mr. D. I. McLeod, who has been the firm's representative in Montreal, who will have special relation to eastern Ontario and Quebec and the Maritime Provinces. Mr. H. M. Peacock and Mr. W. E. Young represent the firm in Toronto and in western Ontario, respectively, while Mr. Mackenzie Williams will be office manager of the bond department. Mr. J. B. How, manager of the Eastern Securities Company, in Montreal, becomes the representative in Montreal. Mr. William Carswell continues as Ottawa representative.

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ST. CATHARINES, ONT.

Messrs. Aemilius Jarvis and Company, Toronto, has been awarded the \$195,395 5 and 5¼ per cent, 5, 10, 15 and 20-year bonds. Fifteen tenders were received.

THE CITY OF OTTAWA.

\$1,032,517 to the Dominion Securities Corporation, Toronto. The bonds bear 5 per cent interest and mature in 20 and 30 years. Part of the issue are instalment bonds and balance straight term securities. Price 101.101.

BELLEVILLE, ONT.

\$30,000 5½ per cent. 10-years, to Dominion Securities Corporation, Toronto.

ETOBICOKE TOWNSHIP, ONT.

\$8,000 6 per cent. 15-years, to Messrs. Macneill and Young, Toronto.

NORTH SYDNEY, N.S.

\$33,000 5½ per cent. 20-years awarded to Nova Scotia Trust Company, Halifax.

MONTREAL, QUE.

\$650,000 5½ per cent. 30-years Protestant School Board bonds, awarded to Messrs. Wood, Gundy and Company, Toronto. Price 104.6404.

CAPE BRETON COUNTY, N.S.

\$68,000 5½ per cent. 10-years awarded to Nova Scotia Trust Company, Halifax.

GRANTHAM TOWNSHIP, ONT.

\$3,500 6 per cent. 1930, awarded to Messrs. Mulholland, Bird and Graham, Toronto.

SASKATCHEWAN RURAL TELEPHONE COMPANIES.

Candiack \$6,500, Goodlands \$6,000, to Messrs. W. L. McKinnon and Company, Toronto.

SASKATCHEWAN SCHOOLS.

Engen, \$1,200; Standard, \$1,700; West Plain, \$1,600; Maloneck, \$1,500; Loverna, \$3,500, awarded to Messrs. W. L. McKinnon and Company, Toronto.

SHAWINIGAN FALLS, P.Q.

The Shawinigan Falls, Que., bonds, were awarded to the Real Securities Corporation. The issue was \$150,000 5½ per cent 30-year bonds. Price, 93.776.

THE COBOURG ISSUE.

The Cobourg, Ont., issue of \$16,000 5½ per cent 10 instalment bonds were awarded to the Imperial Bank of Canada at 100.08.

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CAPITAL (PAID UP)	- - -	\$16,000,000
RESERVE FUND	-	\$16,000,000
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TOTAL ASSETS	- -	\$390,421,701

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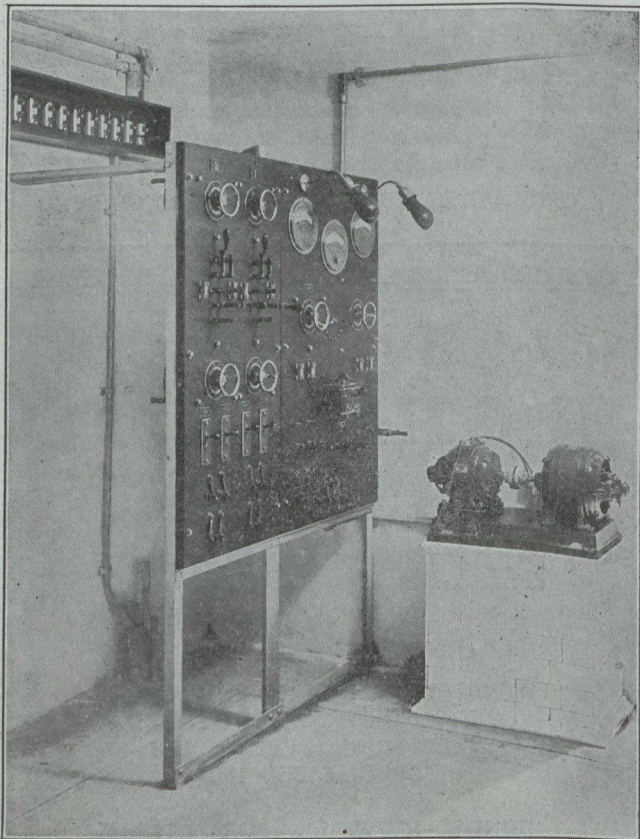
LACHINE'S NEW FIRE ALARM SYSTEM.

The Corporation of Lachine has just completed the installation of a new storage battery central office equipment for use in connection with their fire alarm service. The new office, although not as large as some, is one of the best that has ever been installed in Canada.

When the question of changing the source of supply for their fire alarm system first came up, Mr. Gadbois, City Electrician, under whose supervision the office was designed and installed, gave the matter a great deal of study and investigated other storage battery systems which were in use in other cities in Canada. The result has been that Lachine now has an equipment second to none.

The new office contains the following apparatus:

- 1—2 Circuit Storage Battery Switchboard.
- 1—Motor-generator set.
- 1—Specially Insulated Storage Battery Rack.
- 80—Cells of Storage Battery, 6 ampere hour capacity.



The battery and rack are installed in a special room which was built for the purpose, and the switchboard and motor generator set are installed in an adjoining room, these rooms being in the basement of the new City Hall, which has just been completed.

The switchboard is a combination board having facilities for both charging and discharging on the same set of panels, and is so designed that should it ever be necessary to add additional circuits to the present fire alarm system, this could be done by simply adding another panel to the present set of two. In other words the switchboard is built on the unit principle, the main charging panel being designed to take care of as many as four unit panels of two circuits each.

The storage battery rack is designed to give the greatest insulation possible, both between jars and between

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jars and shelf, the well known principle of using glass rails and two piece porcelain insulators, being employed. The storage battery jars used are of special design, in that they are arranged with special grooved bottoms so that they can be set and held securely on the glass rails, and that they have lugs cast on their sides for the purpose of holding the jars apart and preventing any acid, which might possibly creep over, getting between the jars and short circuiting them.

Mr. Gadbois has also employed a specially designed porcelain cover which will effectually prevent the acid boiling over the jar when charging.

The entire equipment was manufactured by the Northern Electric Company, Limited, Montreal, and the finish and design of the apparatus is in accordance with their well known standard.

DIFFERENT TYPES OF ROADS.

(Continued from page 373).

time." The latter means mending at once any little defect that may appear; if one stone goes, it has to be replaced by another at once. If this system is not followed, the macadam may last two or even five years, but the time will come when you will have to resurface it entirely. The macadam will have to be broken up, a new upper course of broken stone must be laid and rolled; in fact, the macadamizing must be done over again. I hope none of our country districts will let their macadam roads get into that condition.

In some districts we have got some very good results by spreading gravel on the top of the macadam, as most engineers know motor traffic practically pumps up the binder from the macadam; the pneumatic tire has some sort of suction, and if the weather is dry and the road is not watered, all the binder between the stones becomes a dry dust. The hard tires have a tendency to crush the stone, but the pneumatic tire is the worst. The sand that was put down in one of our rural municipalities was, all that was sucked up by these tires, and that saved the upper surface of the macadam.

I do not mean to say that it is the most rational way of protecting your macadam, but it certainly is one way of doing it. In all plans drawn up by the provincial government, based on the experience gathered in England, France and the States, we specify sand with macadam. When the macadam is finished and has been well rolled with a steam-roller over it; it preserves it wonderfully.

But we have pavements now which are much more durable than macadam. Instead of water-bound macadam, we have the bituminous macadams; there you need not be afraid of the stones getting loose. Of course, it is a question of money; it is much more expensive, and perhaps the traffic will not warrant the extra expense.

In Laprairie county, there are some roads built two or three years ago which are still in very good condition; although there is a good deal of hard tire traffic on them, market cars, etc. In municipalities where there are no autos, the hard tire traffic tends to act as a roller, and any bituminous pavement need not be thought of; bitumen would only come in there as an anti-dust device. The dust question is a very interesting one, but it does not play any part in village life. The most important thing for the farmer is his financial interest in the soil, in his crops, the price he can get for them and the quickest way he can get them to market.

I was reading an article lately in some American magazine about the penetration method, which seems to have been given up in some states. It had not given complete satisfaction, because sufficient attention had not been given to the size of the broken stone; if the grade of stone is right, you will have enough penetration, and this system would be better than the mixing system, and also less expensive. In the Province of Quebec, we have not tried the mixing methods; we used the penetration method for the King Edward Highway three years ago, and the results have been excellent.

The bituminous road needs maintenance; it does not require it as much as the water-bound macadam, but it does need some.

Then we have the concrete road. The immediate advantage of this type of road is that it takes little or no up-keep; some people claim that it will last fifteen to thirty years, without any money being spent on it for maintenance. In one county in Michigan, a good deal of mileage of concrete has been built, and by calculations made in the last ten years, the up-keep of these roads did not cost more than \$25, \$30 to \$40 per year. In a cold climate like ours, we cannot always rely on experience gathered in other countries. We have to be very careful. We made one experiment on the King Edward Highway, at Napierville, which seemed to be quite conclusive; we built one section of road in concrete without any foundation; that is to say, the substructure is the foundation, well-drained and very solid. If you have a clay soil, and you have a good drainage, both of the surface and underground, you have got a sub-structure sufficiently solid and forming a part of the ground itself. That is what we did with that highway. The concrete was six inches thick at the sides, and eight at the centre, without any foundation; the road is all right.

In a concrete road, the cracks are very detrimental; if the crack is an inch or two inches wide, it's very bad, but if the crack is so small, you can hardly get any tar or asphalt into it, why, there's no great harm done; it may look bad, but it will not interfere with the even surface of the road, and it ought not to stop us from building concrete roads.

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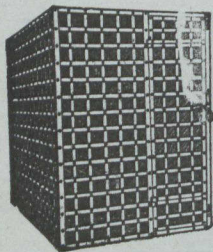
I am no particular advocate of concrete roads; I am an advocate simply of good roads. In a few years, we shall be able to judge of the results of the roads we have laid down, and what we shall have to do to maintain what we have built. In the old countries, and in the States, where they have been building roads for years, no one has yet arrived at a definite type of road. I do not think we shall ever do so, because everything wears out in this world, and constant traffic is bound to entail wear and tear. Whoever discovers a permanent road, will have discovered the philosopher's stone, or something like it. In the meantime, we can wait and draw our conclusions later on; we can try different types, remembering always that economy is a virtue.

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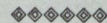
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Brantford	North Bay	Manitoba	Millet
Caledon East	Ottawa		Redcliff
Cobalt	Palgrave	Brandon	Lethbridge
Cottam	Port Arthur	Portage la Prairie	Red Deer
Cochrane	Port Colborne	Winnipeg (2)	Wetaskiwin
Elk Lake	Port Robinson		
Essex	Preston		British Col'ba
Fergus	Ridgeway	Saskatchewan	
Fonthill	Saulte Ste.	Balgonie	Arrowhead
Fort William	Marie (3)	Broadview	Chase
Galt	Sth. Porcupine	Fort Qu'Appelle	Cranbrook
Hamilton	Sth. Woodalee	Hague	Fernie
Harrow	St. Catharines (3)	Kandahar	Golden
Humberstone	St. Thomas (2)	Moose'aw	Invermere
Ingersoll	St. Davids	Nth. Battleford	Kamloops
Jordan	Sparta	Prince Albert	Nelson
Vineland	Thessalon	Regina	Natal
Kenora	Timmins	Rosthern	Revelstoke
Listowel	Toronto (17)	Saskatoon	Vancouver (3)
London	Welland (2)	Wilkie	Victoria (2)
Marshallville	Woodstock	Wynyard	

SAVINGS DEPARTMENT:

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

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

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

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

Agents in France: Credit Lyonnais; Germany: Deutsche Bank

The Merchants Bank

OF CANADA

HEAD OFFICE - - - - MONTREAL

Capital Paid-up..... \$7,000,000
 Reserve Fund and Undivided Profits..... 7,250,984

BOARD OF DIRECTORS:

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

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

A GENERAL BANKING BUSINESS TRANSACTED

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

206 BRANCHES AND AGENCIES IN CANADA

Extending from the Atlantic to the Pacific

SAVINGS DEPARTMENT AT ALL BRANCHES

Deposits received and Interest
 allowed at best current rates

New York Agency: 62 and 65 WALL STREET

Fluxphalte

“The Premier Road Dressing and Binder”

(NOT A ROAD OIL BUT A LIQUID ASPHALT)

The Best Municipal Engineers of to-day are using “FLUXPHALTE” for the following reasons:

“Fluxphalte” is an Asphalt Macadam Binder, produced from the vast natural oil resources of Mexico, by refiners who have spent years of careful investigation in perfecting the methods of refining, aided by the best available experts.

It is absolutely free from greasy oils and has demonstrated its superiority over all other dressings in the following points:

PERMANENCE.

Has remained a carpet on the road surface long after tar, applied at the same time had disappeared.

SILENCE.

This bituminous carpet on the road surface is plastic, resilient, silent, and non-slippery.

CEMENTING POWER.

It penetrates the road surface and binds the metal.

NON-POISONOUS.

It contains no poisonous elements to contaminate streams or rivers, with consequent danger to fish life.

COST.

Practically as cheap as tar, and the many so-called asphalt and bituminous binders.

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