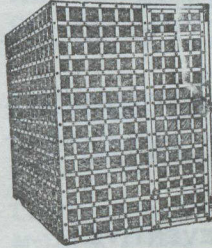


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- 1,530 For Consolidated Debt, June 2, 1915.
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"We have much pleasure in notifying you that Mr. John J. Robson, chartered accountant of Montreal, who was recently appointed Provisional Liquidator, has, by order of the Court, been appointed Permanent Liquidator to this company. The Court has also granted our application to be allowed to continue the business for a period of six months.

"We take this opportunity of notifying you of these facts and advising you that we feel able to demonstrate to our creditors that we will succeed in the efforts which will be put forward to reduce our stock, collect our open accounts and materially reduce overhead charges, with a view to getting into a position to reorganize and continue in business.

"While we are in liquidation, we are carrying on an active support. We have a good connection throughout the country, and all purchases made by us from now on will be paid for by the liquidator.

"Since the liquidation proceedings were put into effect, we have been flooded with letters from the manufacturers, as well as from our customers, extending their hearty support and assuring us of their continued patronage.

"We also desire to impress upon our customers the fact that we are carrying on 'business as usual,' and that, although we were always pleased to receive their orders, we are now more anxious than ever to be favored with same."

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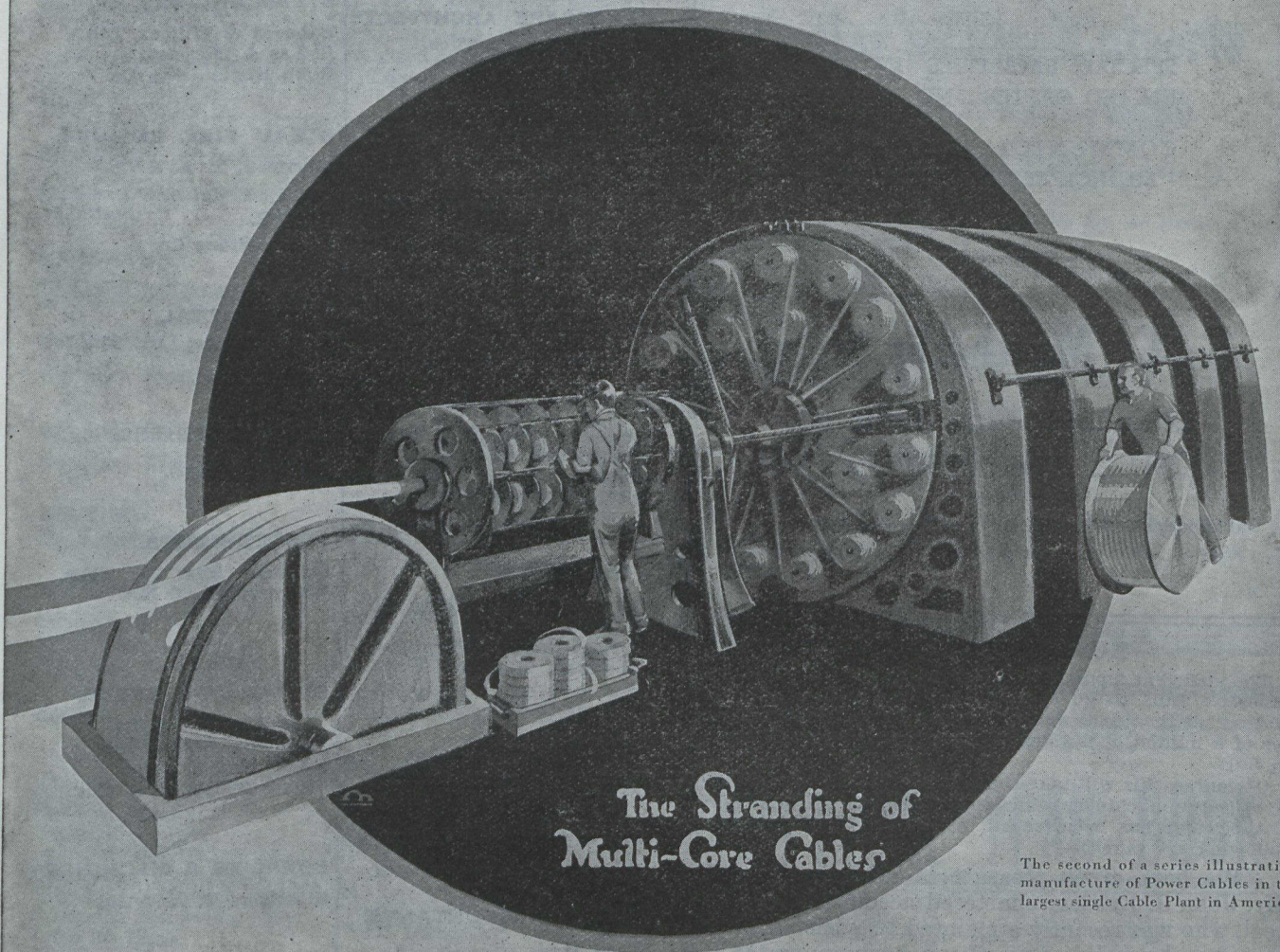
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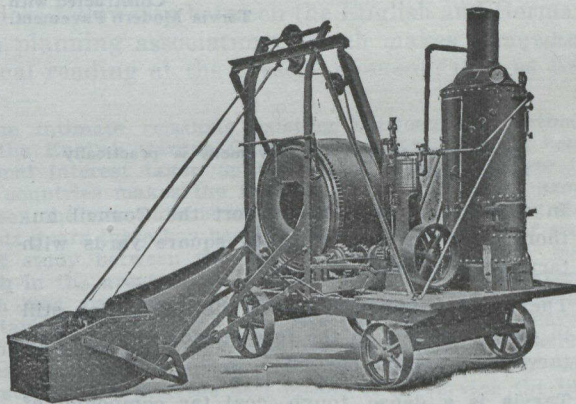
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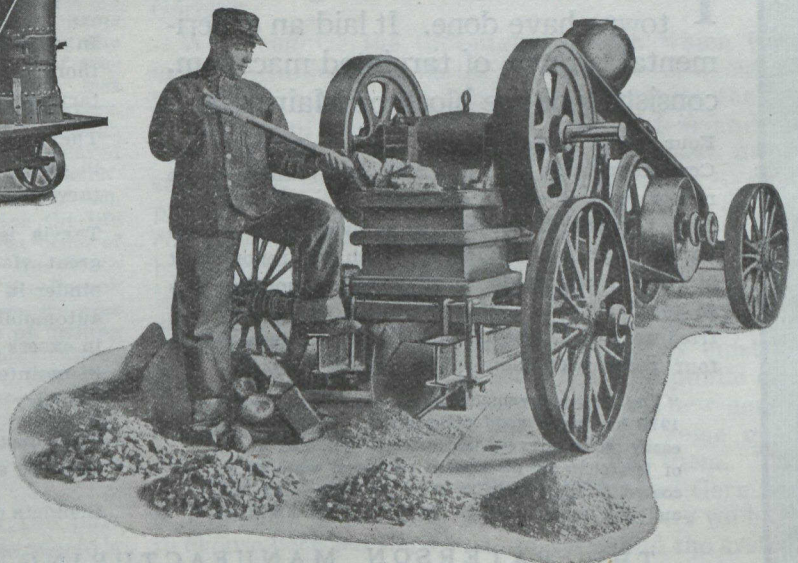
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APRIL, 1915

No 4

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## Germany and Town Planning

On looking through the Annual Report of the Garden Cities and Town Planning Association of London for 1914 we saw an extract given from the August Number of its official organ, as showing the close fellowship between the English and German town planning associations, which makes somewhat ironical reading at the present moment; it is as follows:—

"The intimate relations existing between the German and the English Garden Cities Association, and the keen personal interest taken on both sides in the progress in both countries makes the thought of the conflict of arms between the two nations almost unbelievable. During the last six years there has been continual interchanges of visits of study between the two nations, culminating last month in the great and successful International Congress, which was arranged jointly by the German and English secretaries. Only on the very day that war was declared did the last batch of foreign visitors leave England—French, German, Russian, Austrian, Italian, Belgian, and English, they studied together the best means of preserving the life and happiness of the people, and now by the most cruel of ironies, they are ranged on different sides in the death struggle which is taking place somewhere along the French frontier, and whose echoes reach even to the peacefulness of Gray's Inn Gardens, now filled with hundreds of drilling recruits. Whatever we may have to deplore in other directions, and whatever faults we may have to find, the town planning world in particular has much to thank the German nation for—they have been the world's teachers in this, as in other matters; but the die has been cast, and we can only hope that out of the tumult of things may emerge a surer basis for the peace of the world."

The particular exception we take to in the paragraph is in the words "They have been the world's teachers in this (Town Planning) as in other matters". This we cannot understand as coming from such a responsible body as the G.C. and T.P. Association. It would seem that the teaching of Germany has been anything but conducive to the "happiness of the people", and no plan, town or otherwise, based on the spirit of bureaucracy can be permanently suc-

cessful in democratic countries like England or Canada. It is true that Germany has made strides in town planning, made easier by her system of government, which is paternal to a degree, and no doubt many of the ardent advocates of town planning in England would be delighted if a little of it was even introduced into England. Not so, though Thomas Adams, our own particular town planner, who is democratic to his finger tips and whose teachings are based on common sense principles—certainly not German.

We recognize the thoroughness with which German officialdom dominates the civic government of the nation, but we also know that underlying the acquiescence of the people is the sense of fear and no town planning scheme, however good in itself, using such means to bring about its consummation—supposedly the greater happiness of the people—can be commended to a democracy for the thing would fail before it was half way through, and rightly so. Any town planning scheme to succeed in this country must be with the full approbation of the people affected and before that can be done they must be educated up to their responsibilities. The public certainly will not be coerced into accepting new conditions they cannot understand, because some good people consider the change good for them. The spirit of coercion is now rapidly dying and Germany is helping in its demise. In all such matters we have to choose between the system of force and the system of persuasion—autocracy and democracy—external compulsion and internal conversion. Ex-Chancellor Von Bulow devotes a third of his recent work "Imperial Germany" to discussing the ever-imminent danger of popular revolution through the hatred of the vast Social democratic masses for the bureaucratic and upper classes in Germany.



## The Awful Price of War

On another page we give an extract from a recent despatch which is a terrible illustration of the price of war. The writer describes the ancient nation of Poland as it is after 7 months of terror, and when we read that 200 towns and cities and 9000 villages have been devastated — which if the same had happened in Canada would have wiped out the whole of our urban life — we cannot help but appreciate our privileges as belonging to an Empire which can look so well after its own, that not one citizen need lose a moment's sleep over the safety of himself and family. Canada is so far from the seat of war that it is only the rape of Belgium and the spoilation of Poland that can bring to our minds its hellishness. Its magnitude we can hardly conceive and its full effect we will never know because it will not touch us in our homes—at least directly. Indirectly the war will touch many Canadian homes whose sons have gone out, though not so many as one might wish. But there is a reason, the stupidity of the military authorities. Many bright Canadians who have given up their jobs and enlisted and even passed the doctor have after a week or so in the King's uniform been dismissed; the usual reason given

being "medically unfit." This system of recruiting is not conducive to recruiting for what young fellow, however patriotic, is going to risk the chance of being seen one day in uniform and the next day branded a "misfit". Recently comparisons have been drawn of the scarcity of native born Canadians in the Canadian contingents. Such comparisons are always odious and never fair for in not one instance, where they have been made, have the conditions or reasons been mentioned. We believe that the spirit of patriotism is just as strong in the native born as amongst those who come from the homeland, but it just wants touching in the right way and by the right people. We would suggest the military authorities copying some of Lord Kitchener's methods of recruiting, one of which, that of giving local names, would be more effective than numbering the battalions. The Montreals, the Torontos, the Winnipegs, the Saskatoons, the Victorias, the Sydneys, would create more local patriotism and pride than the 2st, the 22nd, or 23rd battalions, and would get better results. Of course a partial tribute to the principle is such names as The Westmount Rifles, Victoria Rifles, the Royal Canadians, and others.

## One Hundred Million Dollar Unemployment Scheme

Controller McDonald of Montreal recently sent a remarkable letter to the Prime Minister and principal cities of the country, which to say the least gives food for thought, not only because of its scope, no less than the borrowing of one hundred million dollars on the combined credit of the Dominion, Provinces and Municipalities, for the benefit of the unemployed, but its bringing home of the fact that so many men in Canada are out of work. The figures given by Mr. McDonald (approximately 100,000) being if anything less than over the mark.

The proposal is that the Federal, Provincial and Municipal authorities vote a credit of \$100,000,000 to be applied to works specified, as follows:—

Construction of permanent roads, subways, bridges, thoroughfares and all municipal, suburban and public works of the nature in and around large cities, so as to offer work when it is needed without compelling workmen to displacement of their actual domicile. The Dominion, the Provinces and Cities concerned to share equally one-third of this indebtedness of \$100,000,000 or \$33,000,000 for each of those categories. To ensure a higher bid for the forty year loan to be made by the three borrowers, it should be agreed that all three be individually and severally responsible for the full amount.

The Controller suggests the division of the \$100,000,000 as follows:—

Montreal . . . . .	\$25,000,000
Toronto . . . . .	20,000,000
Winnipeg . . . . .	10,000,000
Vancouver . . . . .	8,000,000
St. John . . . . .	5,000,000
Halifax . . . . .	5,000,000
Regina . . . . .	5,000,000

Edmonton . . . . .	5,000,000
Quebec . . . . .	5,000,000
Ottawa . . . . .	5,000,000
Other miscellaneous cities	7,000,000
Total . . . . .	\$100,000,000

The proportionate amount that each city should be responsible for is given as follows:—

	p. c.	
Montreal . . . . .	25	\$8,250,000
Toronto . . . . .	20	6,600,000
Winnipeg . . . . .	10	3,300,000
Vancouver . . . . .	8	2,640,000
St. John . . . . .	5	1,650,000
Halifax . . . . .	5	1,650,000
Regina . . . . .	5	1,650,000
Edmonton . . . . .	5	1,650,000
Quebec . . . . .	5	1,650,000
Ottawa . . . . .	5	1,650,000
Miscellaneous . . . . .	7	2,310,000
Total . . . . .		\$33,000,000

Whatever might be the merits of the scheme, and there are many, it is hardly likely to succeed, though it deserves to, for the obstacles to overcome are so many — too many even for big brained Duncan McDonald, but it is not fair that the burden of the big army of unemployed and their families should rest entirely on the municipalities as it does at present. It is the duty of the Federal and the Provincial authorities to take up their share and it is "up" to the parliamentary representatives of the urban centres to see that they do it. To act through the Union of Canadian Municipalities would be the best way, and doubtless the Union is open to a suggestion to that effect.

## Prevention of Tuberculosis

We have just received the fourteenth annual report of the Canadian Association for the Prevention of Tuberculosis, which might be termed 300 pages of strong evidence of magnificent work nobly done in the elimination and the prevention of this scourge of humanity. Twelve years ago there was but one consumption sanatorium in the whole of Canada, now there are thirty. These institutions have been made possible by the donations of private citizens and the untiring efforts of the Association. When it was formed there was no legislation of any kind in regard to tuberculosis; to-day on the statute books of the Dominion and of all the Provinces are useful laws that have been the means, not only of preventing the disease from spreading but also of stamping out many of the causes through which it reaches the human being. The effectiveness of these precautions is well exemplified in the report from Ontario, which shows that ten years ago there were 148 deaths to each 100,000 of population. Last year (1914) this was reduced to 90 per 100,000 of population; and this proportion is fairly illustrative of the whole of Canada, though there are one or two bad exceptions.

But in the report there is one phase of this great war against tuberculosis which does not make good reading and that is in the showing of the comparative apathy of the municipalities, particularly the larger cities and towns. It is true that in the laying out of parks and open spaces the municipal councils are doing much towards the prevention of the disease, but as the chief danger is to the poorer classes, whose environments are not always conducive to health, the community has a direct responsibility in supplying, out of the public funds, the means that will stamp out consumption in every district. Means that, as already mentioned, are at present supplied by private charity.

This disease of the masses, as the great white plague has been aptly termed—is just as much a care on the State as any other infectious disease, or just

as much as insanity, and when we have it on the authority of Sir William Osler that 90 per cent. of our race had tuberculosis in some form, the responsibility of civic authorities in guarding at every point against its insidious growth is increased proportionately.

Realizing that milk from infected cows was one of the principal agents in spreading consumption amongst human beings the Association urged the Federal authorities to pass regulations preventing, as far as possible, the sale of infected milk, with the consequence that last May an Order-in-Council was passed to put into practice its recommendations. The association's report on the subject in part reads:—

The Federal Government is taking steps to prevent the spread of tuberculosis through milk from infected cows. "An Order-in-Council has been passed authorizing regulations providing for the co-operation of the Federal authorities, and cities and towns all over Canada, for the eradication of bovine tuberculosis from herds supplying milk to such municipalities. It is specified that the city or town must first provide for licensing all milk vendors for clean and sanitary dairies, for the prohibition of the milk sales within two years of the test of the cattle of any dairy unless a clean bill of health is shown, and for the appointment of a Municipal Inspector. On fulfilment of these conditions, and on application being made by the municipality to the Veterinary Director-General, Federal Inspectors will be sent to make tuberculosis tests. Any diseased cattle may be slaughtered, and compensation to the owners is to be allowed at the rate of one-half the appraised value of the cow in a case of open tuberculosis, and one-third the value if destroyed as a re-actor at the request of the owner. No compensation is to be made to the owner, unless, in the opinion of the Minister of Agriculture, he assists as far as possible in carrying out the instructions of the Inspector as to disinfection and other necessary precautions."

If the association had done nothing else than in bringing about these preventative regulations, it would deserve the gratitude of every citizen of Canada, and no municipality, whether urban or rural, dare let the opportunity pass of thus eradicating the chief cause of that awful disease that at present lies lurking in every community.

### ROADS IN THE WESTERN FIGHTING AREA.

In a contribution from that acute observer "Eye-Witness," published recently, an interesting sidelight is thrown upon the road question as it affects the war in the actual fighting area. "It is difficult," says the writer, "for those who do not know something of the problem of maintaining an army in the field to realise what immense efforts and how great an amount of material are required to keep the roads in repair, especially under motor traffic. As has been already mentioned, one great difficulty of doing this in the part of France and Belgium in which we are operating lies in the fact that the paved portion of the roads is in most cases so narrow that vehicles cannot pass each other without going off it, and that the soft earth on each side is, in wet weather, soon churned up by the heavy lorries in use into a mass of mud upwards of 2 ft. in depth. It has been found necessary, therefore, to improvise some method of increasing the width of the hard surface of the roadway, so as to allow of traffic on each side. This is now being successfully done.

"Although the pave is one of the most ancient and durable forms of road, even it is broken up in time by the continual passage of heavy motor lorries. The stones get displaced, and water percolates into the foundation, which is often merely sand or chalk, and washes it away. Then, if there should be a frost after the surface is thus cracked, the moisture which has penetrated freezes and breaks it up still further. The consequence is that the pave itself needs continual attention."

### CO-OPERATION IN CITIZEN MAKING.

Several weeks ago The Tribune commended and welcomed the evening classes in citizenship. They are to be a permanent feature of the city's school system, although the beginning this year is a very modest one. Only a few schools have such classes for the benefit of aliens seeking to fit themselves for naturalization, but it appears that more may be added in the immediate future. The demand for such instruction is likely—perhaps certain—to grow, for even the alien who comes at first merely in the hope of being helped to obtain "his papers" soon learns to appreciate the value and the interest of the classes. Much, of course, depends on the instructors—their skill, their enthusiasm, their knowledge of the various races and elements that are attracted by the classes.

A new development that deserves special approval is the announced readiness of the superintendent of the school system. Mrs. Young, to co-operate with voluntary instructors and sentiment classes in citizenship. Where, for example, a social settlement or other civic centre has pupils and teachers, but no suitable accommodation, the school building in the neighborhood is to be placed at their disposal in the evening once or twice a week. Since we owe the classes in citizenship to civic and voluntary enterprise and initiative, this recognition and this cheerful co-operation are as grateful as they are natural. There is plenty of room for such team work, and no better field for it is conceivable than the one in question. The assimilation and fitting of aliens for intelligent citizenship and better living—for living in America rather than underneath America, to use the striking expression of a naturalized Polish leader—is a task as difficult as it is important.—Chicago Tribune.

## Minister of Education and Civics in Schools

In the February issue of this Journal appeared an editorial on "Civic Instruction in Schools," a copy of which was mailed to educational executives of each Province, together with a request for their opinion on this vital subject. In the March Journal some of the replies were given, and in this number appears others, all of which show that school authorities throughout the Dominion recognize the importance of teaching the children the civic life of the country, but what was surprising—agreeably surprising we might say—was that civics was a principal subject in most of the provinces. It is to be hoped that this teaching will bear fruit when the children come to the age of full citizenship. In the meantime, would it not be a good thing if these children would teach their fathers something of their responsibility as voters, for they, poor men, never had this opportunity, otherwise they would not be so remiss in their exercising the franchise, which is not only a privilege, but a responsibility as well.—Ed.

From the Minister of Education, Alberta.

The Editor,—

I have the honor to acknowledge receipt of your favor of February 23rd inviting my criticism of your editorial entitled "Civic Instruction in Schools," and beg to say that I am not in a position to speak for the other provinces of Canada, but I am quite certain that your comparison of the instruction given in American and Canadian schools respectively, from which you leave the impression that much more satisfactory instruction is given in American schools than in ours, is a very unfair comparison, in so far as Alberta is concerned. I am quite confident that we are giving as thorough instruction in civil government, which we describe on our programme of studies as "Civics," as in the most advanced state of the American union. To be sure we do not undertake to specialize our students in the public schools nor even in the high schools in the art of municipal government, but what we do undertake is to see that all students in so far as their capacity will permit are fully instructed in our system of government, municipal, provincial, federal and imperial. We have a text-book on the subject and are undertaking at the present time to have a new one prepared which we think will answer our purpose more satisfactorily.

I am sending you under separate cover a copy of our programme of studies from which you will see that Civics has an important place in the public school. We set an examination on this subject in the same way as we do in arithmetic. In the High School we teach constitutional history as well as Civics.

In order to be sure that all the teachers of the Province will be capable of teaching this subject properly, we see to it that all teachers who come to us from either the Old Country or the United States are given a special course in our Normal School and pass an examination upon Civics. Those who have been educated in Canada of course are familiar with our system.

Yours truly,

J. R. BOYLE,  
Minister of Education, Alberta.

From the Superintendent of Education, Manitoba.

The Editor,—

I beg to acknowledge, with thanks, receipt of a copy of your February issue, and I note your request for an expression of opinion regarding the article upon "Civic Instruction in Schools."

As far as the Province of Manitoba is concerned, the members of the Advisory Board have long since recognized the value of such work.

Our programme of studies prescribes for the 5th Grade "The Idea of Government (Local)." For Grade VI. "The Idea of Government (Provincial)," and for Grade VII. "Government, Federal and Imperial." There is also prescribed for Grade VIII. a review of the work of the previous grades.

We have authorized, as a Teacher's Handbook in connection with this work, the Manitoba Edition of "Jenkin's Civics", Copp-Clark, Ltd, Toronto. I may say that this Handbook is used as a text in the first year of the High School, and that candidates for examination in all Courses are required to write upon the subject.

According to your contributor, "all that is required is adaptability on the part of the educational authorities in changing the syllabus to allow the introduction of one or two text books or even chapters on municipal government—the teacher will do the rest."

As far as Manitoba is concerned, these conditions have been compiled with for a number of years. I may say that the study of the subject has evoked considerable interest amongst teachers and pupils, and Mr. T. A. Hunt, K.C., City Solicitor of Winnipeg, has been good enough to give addresses upon the subject in various schools in Winnipeg, which have been thoroughly enjoyed by the pupils and favorably commented upon by the public in general.

I have the honor, etc.,

CHAS. K. NEWCOMBE,  
Superintendent of Education for Manitoba.

From Headmaster of a Private School.

The Editor,—

Your article on Civics in the February number of the Municipal Journal occasioned me much pleasure. I have read with some interest the replies printed in the March issue.

The least any school should do for the boys (or the girls) who attend it, is to teach them their obligations to themselves and their duty to their country. The one is closely akin and merges into the other.

To do one's duty to one's country is surely impossible if one is ignorant of her history and her government. In a country, confessedly democratic where every man enjoys the franchise, what an enormous waste of power and abuse of privilege through ignorance and apathy of the proletariat. The cause of this apathy at the polls is traceable to the indifference manifested on this point in the child's education.

As it is a crime to send a boy into life ignorant of his powers for good or ill—unto himself and others—so is it a senseless waste to send out boys ignorant of their duties to the state and devoid of civic pride. The national loss is incalculable. As the higher the development of the individual the greater the national prowess—so the keener the civic conscience, the brighter the national ideal.

Mr. Editor, we should make Civics not a profession—but a passion. To know our powers would suggest the control of our functions. To meet the need—what can we do?

This we do at Berthier. First, last, and always, we remember that we are of Canada. We are preparing boys for Canadian life. We would give them Canadian ideals unhampered by the useless impedimenta of an effete society—but chastened by the serious knowledge of the power they must yield.

To this end we hold ever before their eyes the to-morrow, as the unfolding of to-day. To acquire knowledge useful and imperative for that to-morrow—we have what we call our "Civic Scrap-Book." Each boy may clip articles which impress him as being of interest and value to Canadian life. These after passing the school censorship, are pasted in the book. We believe that we shall all greatly profit from this gleanings.

Then there will be essays written on five subjects. For dictation, articles of civic interest will be read, and reading-subjects will be chosen irrespective of authorship or nationality. Of course, I need hardly point out that this is an advantage which the private school enjoys.

I agree with you, then, in the need you point out. Canadian children need civic knowledge. All their subjects really should be tinged with it. The method must vary according to circumstances. But as we value a precious jewel—let us develop intensely the civic conscience of our children.

I am, yours sincerely,

(Rev.) W. J. M. ANDREW.

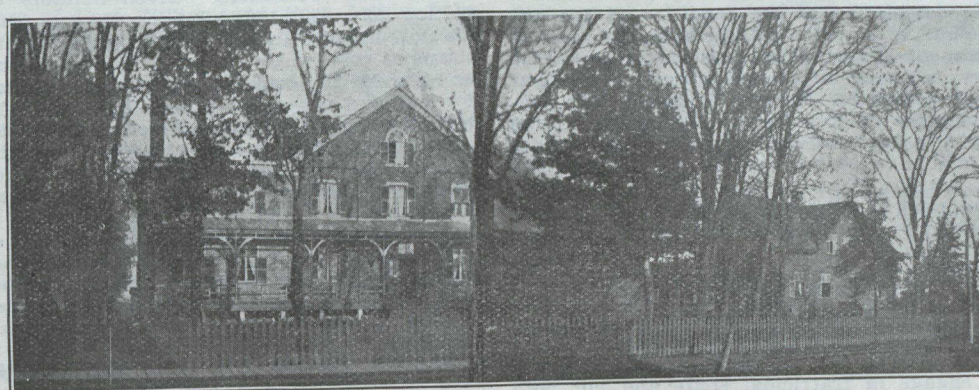
The Grammar School,  
Berthier-en-Haut.

### GOOD ROADS.

The campaign for good roads being carried on throughout Canada is only part of the general awakening of the people to the causes which have led to the enormous increase in the prices of the necessaries of life. That the transportation problem is all-important for the farmer-producer is without question. That he may at all seasons reach his markets at a minimum of time and expense is a necessary factor in the making of reasonable prices for his products. For the consumer, good roads have an advantage in the fact that by enabling the farmers to reach the markets in greater numbers, the supplies of produce will be keener. A further consequence of this larger attendance will be that more attention will be paid to the condition of the produce offered by those displaying it for sale.—Exchange.

## An Old Canadian Grammar School

By STELLA



It has been said that Canada educationally is too prosaic for her real intellectual development; that she misses the real aim for which education was primarily intended, the enlargement of the mind so as to understand better the fundamentals of life and its effect on the nationhood of the country. No doubt there is a great deal of truth in the statement, the principal reason being too much specialization and cramming of facts, without the why and wherefore of their meaning, or to put it another way, educational authorities are too prone to turn out inane products of a machine-made system, rather than the student of the older countries, whose love for his alma mater is not so much because of the system of teaching as of the personnel, the character and the environments. Cecil Rhodes in his will leaving the whole of his fortune to found scholarships at Oxford University, laid great stress on the character building of the environments of the old University. He, himself, though he made his fortune in the hard field of pioneer building, never forgot what he owed to the cultured surroundings of his youth and likewise there must be in Canada educational institutions which have left their mark on men and women who are today leaders of thought and the public life of the country.

This train of thought was brought to the mind of the writer when sojourning last summer in the little town of Berthier, P.Q. As a matter of fact we occupied one of the masters' houses of the old English Grammar School, so that we had many opportunities to study at first hand the life of one of the old grammar schools of Canada and to mark its possible influence on the lives of the boys, and one could not help but compare the old world environments of the place with the newness of some of the up-to-date schools visited in Canada. The very desks, carved all over with initials of the earlier boys, and no doubt of some of the present pupils, impressed one with their associations, and the whole atmosphere was such that must indelibly leave its impression on the minds of the boys who studied there. No greater temptation than the village tuck shop, and an occasional visit of a travelling circus to take the mind from the business in hand, which would seem to be the building up of clean cut Canadian manhood; and the retaining of that boyishness we all like which is the result of masters and boys playing together after school hours, rather than the imitating of that spirit which too often enters into Canadian sports, the spirit of winning even at the cost of sportsmanship.

The school was founded in 1849, though there are

indications that a day school existed since the early part of the century, but sixty-five years is a long record for a new country and though it has met with many vicissitudes since its foundation — one master recording that for three weeks the entire school lived in the attic owing to eight or nine inches of water on the lower floor—the academy has always maintained a good reputation for teaching and many prominent Canadians of today and the past, including the Hon. Mr. Rogers, the Federal Minister of Public Works received the rudiments of three "Rs" at Berthier. From the beginning the school has been fortunate in its masters, each one vieing with his predecessors and colleagues for its honour and reputation, and it would be hard to find another school in Canada which has sent out so many professional men. And no wonder. Situated out of the world, and yet near it, where nature, summer or winter, is always at its best, with the old church reminding one of old English families who came over at the Conquest, and the new church (fifty years old) taking one still further back in mind to the old Anglican service as rendered at the time of the English Reformation, with the stately St. Lawrence on whose bosom 400 years ago sailed the doughty pioneers of New France, and surrounded with soil, every foot of which had been trodden by the Indians of Fenimore Cooper and Henty, and amongst a people whose language and habits are the same today as when they first came from Brittany, some three centuries ago and with a peaceful quietness only disturbed by the singing of the birds and the croaking of the bullfrogs, surely in this place there can be no disturbing factor to detract the mind, and everything must be conducive to bringing out the best in a young nationhood. It is. The joyousness of the boys themselves was a sufficient guarantee that their minds were attuned with nature. No false note was heard in their language, no selfishness found a place in the communal life, but a spirit of bright optimism and confidence seemed to permeate the whole atmosphere. How those boys loved to hear of the unknown world and its distant seas, and lands, and peoples, and how trusting they were in the goodness of mankind. Chivalry seemed to be second nature to them. And why? The school was small enough to allow almost individual teaching — at least to give the masters a chance to study each boy and bring out the best in him. And yet there was a sufficient number to keep the boys from priggishness. It was good to be amongst these boys. I saw in them the potentiality of Canada's manhood and I was not afraid for her future.

# ALL AROUND THE WORLD

## UNHAPPY POLAND.

The Daily Chronicle, of England, recently published the following graphic description of the condition of the ancient nation of Poland, after seven months of fighting, which is an awful indictment of the ravages caused by war.—Ed.

"For no country, not even stricken Belgium, has the war spelt greater tragedy than for unhappy Poland. The people of Belgium, despite their intense sufferings, can find some comfort in the knowledge that their misfortunes spring from a common cause and are mitigated by a common inspiration, but the Poles have no such satisfaction. An appeal by the general relief committee for the victims of the war in Poland brings home the meaning of the war to that distracted country.

"Over a line of 650 miles some 3,000,000 Austro-Germans and four million Russians are fighting each other. For more than six months they have been treading down and tearing up in turn the Polish land and famishing and exterminating its inhabitants. Forced to a cause which is not their own, the Poles must engage in fratricidal strife and put both sides in the first line of battle, they very often kill one another in bayonet charges.

"The Poles have hitherto furnished 1,500,000 soldiers, almost equally divided between the Russian and Austro-German armies. Up to now four hundred thousand of them have been lost, killed, wounded or taken prisoners. Everywhere the tide of fighting has repeatedly over-run the country. It has submerged about 200 towns and 9,000 villages. The material damages amount to more than \$600,000,000. About five thousand of these villages have been razed to the ground either in battle or in retreat. To stay pursuit innumerable country houses and farms have been burned. More than one hundred churches have been pulled down, and more than one thousand badly damaged.

"All stores of corn and forage have been seized or destroyed, and one million horses and two million cattle have been taken for the armies, or have perished for want of pasture. Ruin has come equally upon the peasant population and the great land-owners, who have forfeited considerable investments. The rural population of 7,000,000 is reduced to beggary.

"Three-quarters of the towns are equally in the midst of the operations of war. Some, like Kalise, with 50,000 inhabitants, have been destroyed. Others, great industrial centres, such as Czenstochowa and Sosnowice, of 70,000 inhabitants each, and Lodz, which was twice captured with 450,000 inhabitants, are suffering a terrible financial crisis. Warsaw, the capital, with its 900,000 inhabitants, nearly twice as populous as Brussels or Rome, has also been sorely tried by being constantly threatened with capture, overwhelmed by aerial bombardment and cut off from the wealthiest western districts of the country.

"All factories have stoped working. Many are greatly damaged; one hundred very important ones have been destroyed. The whole of the industrial production, amounting to above \$400,000,000 yearly, has been ruined, and 400,000 workmen are now without means of subsistence, together with a multitude of artizans and tradesmen deprived with their families of any earnings. The great majority of townsmen, three million in number, are destitute."

## GERMAN TOWN PLANNING.

In a recent lecture on German town planning at Birmingham University, Mr. Raymond Unwin said the same spirit had been shown by the Germans in their town planning as in their army planning. Mr. Unwin remarked they have planned their cities with a thoroughness and concentration entirely creditable, but lacking that touch of imagination which has given opportunity for the development of the social instinct as evidenced in English garden suburbs. The Germans have made much of wide main streets, producing great effects, but resulting in congested tenement holdings and high land prices. Giving first regard to transit problems, and also to facilitate for physical recreation, they have in practically all their schemes ignored the human side of life. In this we have a strong contrast to the German ideals of two generations ago, when the domestic side of the Fatherland was more akin to that of our own. In later years the Germans have lost that in their search for power and military greatness.

## SOUTH AFRICA'S FUTURE.

The future of South Africa, economically, is bound up in the development of our industrial activities. This view

appears to have been entirely overlooked by our would-be guides and counsellors. Given suitable conditions—protection for capital and labor—we can manufacture what we now import, and so provide employment for skilled artisans at good wages, which would necessitate immigration, and provide the country with the one element which counts for national progress, viz., a virile race of workers. We have made a start in this direction, and if a census of production was taken it would be found that the production of the various factories of the Union would reach a very big figure—probably approximating to some forty million sterling annually. And yet, an oversea scribe tells his readers that "British South Africa is a country of great actual and potential wealth, but it is not a manufacturing country, and therefore has to import a large number of commodities that its people require."—South African Commerce.

## RUSSIAN EX-MAYOR RESPONSIBLE FOR BAN ON VODKA.

Michael D. Tchelisheg, the man responsible for the present Governmental ban on vodka, the demoralizing Russian drink, is a peasant by birth and originally a house painter. Then he became mayor of the City of Saamara and is now a millionaire. Physically he is a giant, standing over six feet four inches in stocking feet and of powerful build. Although he is fifty-five years old, he looks much younger.

Eleven years ago he began the campaign which resulted in the official order against liquor soon after war was declared. Following his term of office as mayor of Samara he was elected to the Duma on an anti-vodka platform, and managed to secure the passage of a bill bearing on the question, which was finally tabled in the imperial council.

Nothing daunted, he secured an audience, after a time, with the Czar and has at last seen his efforts crowned with success—for the period of the war at least.—Montreal Mail.

## REFUSE DISPOSAL IN SMALL CITIES AND TOWNS.

To the Editor,—

In reviewing the article on the above subject, published in your issue of March, while agreeing with the writer on the whole, I am of the opinion that the possibility of small towns adopting disposal by destructions of all noxious matters, is I think, produced by the figures given as the cost of erection of incinerator capable of destroying noxious matters.

As small communities below 5,000 population and even communities of 10,000, do not have sufficient garbage and destructible refuse to keep an Incinerator running continuously, it is not economical to build an incinerator that will be an emergency producing one.

Nor is the intermittent use of an incinerator advisable from a maintainance point of view.

The incinerator erected at St. Lambert, P.Q., in 1913, illustrated and described in your issue of March, 1914, is dealing with the garbage from a population of over 4,000 and is not run more than 20 hours per week. It reduces to clinker all noxious and destructible matter, without creating any nuisance to the district, notwithstanding that the stack is only 50 feet high.

This incinerator has one natural draught, and the amount of coal used costs 6c per ton of garbage destroyed, and the operating charges are, for the year, 40c per ton.

The garbage is dumped into chamber and, being under, burning dries out as it is consumed. The flame passes over a bridge into the combustion chamber, where it comes into contact with steam and gases from drying garbage, where secondary combustion takes place, both in chamber and flue leading to stack where the heat generated is such that a cast iron flue placed at a distance of 15 feet from combustion chamber was melted and collapsed, and the metal stack 25 feet away had to be ventilated to prevent it from buckling and collapsing owing to overheating.

The whole of the incinerator is built below the ground level, this to a great extent prevents damage to Brickwork from expansion. The total repairs for 18 months has not totalled \$20.00, and the initial cost was about \$300.00. Under any circumstances this plant could be erected for a sum not exceeding \$600.00. The President of the Municipal Journal is familiar with this plant, and I think would verify the above statements.

Yours truly,

E. DRINKWATER,

Town Engineer, St. Lambert, P.Q.

## Municipal Officers Association

As indicated in the February issue of the Journal, the municipal officers of Fort William and Port Arthur have formed a Municipal Officers Association, with the following objects:—

- A.—To encourage the study and promote a knowledge of the principles of municipal government.
- B.—To provide means of and to encourage social intercourse amongst the members for their improvement and benefit.
- C.—To deal with matters relating to the status of members.
- D.—To invite the formation of similar associations in other municipalities.

From a letter from J. M. Cosgrave, secretary treasurer of the new association we gather that two committees have been formed—one dealing with **Municipal System** and the other with **Municipal Management** in planning which Mr. Cosgrave says:

"During the past year, our city council has occasionally referred questions of administration to the Heads of Departments for consideration and recommendation, and these in many cases, dealt with matters that could not properly be substituted to any but the Heads of Departments.

The municipal management committee was formed to take care of these on behalf of the Association. This system of referring certain matters to Heads of Departments for consideration and report appears to be extending. It has been customary in Port Arthur, and has been recently adopted in Kingston and I believe in other Ontario cities.

The municipal system committee will be called on to bring matters bearing on municipal organization, administration and systems before the general meetings for discussion; in fact, to arrange the programs for these meetings."

In an address before the first meeting, Mr. R. R. Knight, City Engineer, Fort William in explaining the objects of the Association said in part:

"I contend that there is a distinct division between the duties of a Council and the officials. You may not agree with such a statement or my further enlargement of it, and I make the point as much for discussion as to express a conviction. This division is I claim Policy on the one hand and Executive on the other or in other words, it is the duty of the Council to define the policy or objective of any matter and that of the official to work out the details, or otherwise much valuable time is wasted and the result not good.

You may wonder what an Association of this kind can do in order to put into practice the policy laid down. First of all it must be accepted and understood that the Association will have the decided advantage of co-operation, not only among its actual members but with its honorary members namely, the members of the Council. Now having established some means whereby such co-operation can be consummated and brought into real evidence by meeting under the auspices of the Association it only remains in order to attain the object, to engender a wholesale feeling of communion and as soon as this state is created there is no reason why the Council should hesitate at leaving the executive work to a body of officers who will be in close touch with them constantly.

It would seem to me from a Councillor's view point to be an ideal state of affairs just to have the real work to perform that which calls for the best in a man, viz:—His expression of opinion and his argument on matters of policy by which the people are governed, and in leaving the details to the official he is excused all the irritation contingent thereto. The officer is trained to that work and can better handle it because of his training and further he has access to information which builds up the fabric of intelligent detail.

Occasions will arise when men of certain ideas, and even specialists in municipal systems and management may become elected to the aldermanic seat. This man may say of our Association "What can you benefit me?" We answer that "Your presence, Sir, is none the less cordially asked and if we have nothing to teach you, then we can learn from you," and that I think expresses the key note of our organization.

We are joining hands to learn one from the other, each to find out and perhaps profit from, the opinion of the "other fellow." That benefit is derived from discussions, is accepted throughout the universe and Associations, Conventions and Conferences in all parts of the world for the

purpose of bringing together men of different calibres and opinions and with diversified purpose and motives to get by a majority of opinion sane government.

Ours is only a small affair compared with others but we hope to make it larger by interesting other Municipalities. We think we are working in the right direction and we are doing the pioneer work for what we believe will be a valuable organization from the point of view of Municipal Management.

I am now going to explain the objects of the Association as laid down in our constitution and taking the question of "Status of Members" first I wish to make the following remarks:

There are a few who at the first mention of an Association of Municipal officers would immediately think of organized strikes, trades unions, and such like, and I want to state here that nothing is further from the objective than such procedures.

Let us look at the City Official. He is a man trained in Municipal affairs, he has spent years in the service and is a man who would find it difficult to accustom himself to any other class of work. The official becomes swathed in the lore of his work, there are attachments and procedures peculiar to his work which make him singular. You can "tell him in the street"—"he looks the part"—"You could pick him out of a crowd." It is not his fault and he is not complaining but he wants and deserves some measure of protection.

In the transaction of his business he is bound to run foul of some people and in the honest execution of his duties will be questioned. His only reply in most instances is "The Act says so," or "I can only obey the law or statutory legislation." There have been many occasions when officials have been "asked to resign" for lesser reasons. What we as an Association hope to do is, to bring this man's case into the full light, give him a chance to explain himself before the Association and having the co-operation of the Council the real issue and not an imaginary one thrashed out. In this case, our aims are towards mutual better understanding as between officer and councillor.

Another objective of the Association respecting the status of members is to obtain legislative measure for providing superannuation for civic officials. This object needs very little explanation but perhaps it may be worth while pointing out the particular claims a Municipal servant has for some visible means of support after his useful term is over. His fellow worker, the government official has his pension and the two are allied in many respects.

The social objective of the Association is one which needs little or no explanation but I wish to say that there is no better way to keep men together in an Association of any kind than an occasional "affair" at which the cares and duties of life are forgotten and man meets man under conditions conducive to better understanding and relationship.

The educational value of the association will be a great asset. There is nothing more enlightening than healthy discussion. To the junior member who has the bulk of his career before him, the experiences of his seniors expressed in argument will be invaluable.

It is our intention that every one shall benefit and no one is going to act as either teacher or pupil. We want discussion and expressions of opinion and everyone will be the wiser and better and the municipalities will reap the benefit in the long run. To a newly elected councillor or alderman the workings of the Municipal organization will be strange and years of experience along ordinary lines would be necessary in order to grasp the whole scheme. We invite our new comrade to our meetings for his and our benefit.

To encourage the study and promote the knowledge of the principles of Municipal government are among our objects and one cannot imagine a wider field for discussion and expressions of ideas and convictions and I think that a programme of subjects for discussion should be mapped out with names of members delegated to read papers on those subjects at our monthly meetings."

So far the work has been confined to the municipal officials of the Twin Cities but to be really effective it must be nation wide and as already mentioned one of the objects is to write similar associations in other municipalities and enquiries from other municipalities have already been made, which the parent organization hopes will culminate in a Canadian organization.

# Town Planning

Recent Progress in Canada.

During recent months there has been little actual progress in most of the provinces owing to the preoccupation of the legislature and local authorities with matters connected with the war. In spite of this, however, there is a good deal of activity taking place in the Maritime Provinces.

**NOVA SCOTIA.**—Since the passing of the Town Planning Act in May, 1912, it has been a disappointment to the people of Nova Scotia who are interested in town planning that no use has been made of the Act, and at a recent conference the conclusion was arrived at that the Act was not quite workable in its present form. It was therefore decided to submit an amended Act to the Legislature during the current session and this is now being done. If this amended Act is passed it will represent the most advanced legislation on the subject of town planning probably in any country. The draft proposes to make it compulsory for every city, town or municipality to appoint a Local Town Planning Board, and such Board, must within three weeks after the passing of the Act, prepare a set of town planning by-laws for adoption in its area. These by-laws have to deal with (1) fixing building lines on all existing roads so as to secure, as far as practicable, that the distance between the buildings to be erected or reconstructed on opposite sides of the road shall not be less than 60' and shall not exceed 100 feet; fixing building lines on all new roads so that no building shall be nearer to the centre of any main thoroughfare than 40 feet or to the centre of all other roads than 30 feet; (2) reservation of land for new main thoroughfares, limitation of houses to the acre, securing adequate light and air to windows, prescribing areas to be used for residential purposes or factories, etc.; (3) providing for variations in the width of streets so as to give owners of land the opportunity of laying out narrow streets of short length where such streets are not required for through traffic. The Commissioner of Public Works of Nova Scotia has the power to prepare a set of model by-laws for submission to such municipality, and the municipality may adopt these instead of preparing their own by-laws.

Apart from these compulsory clauses, the Act then follows the precedent of the British Act, and it exempts any authority which prepares a town planning scheme from preparing town planning by-laws. In certain respects the provisions of the British Act are strengthened. For instance, "any land" may be included in a scheme, and not merely land which comes within certain descriptions. The provisions with regard to compensation have been improved and a schedule is annexed containing regulations as to expropriation of lands.

The effect of this Act, if passed, will be to secure that the whole Province will come under either town planning by-laws or be dealt with under town planning schemes. The great advantage of this is that every local authority is secured against inaction or indifference on the part of every other authority, and that the small local authorities, which are too poor to employ engineers or to prepare elaborate maps, can secure all they want by the mere adoption of a series of regulations. It is believed that in effect this method will secure the best results of town planning if the larger cities proceed with the preparation of schemes, leaving the more rural parts of the area to be governed by town planning by-laws.

It is not proposed to set up any new provincial machinery in the Province, but to place the control of provincial machinery under the Commission of Public Works and Mines, who is already the authority in regard to highways.

**HALIFAX CITY CHARTER.**—The Halifax Board of Control propose to ask for power to prescribe a certain portion of the city area for residential purposes only, and is endeavouring to get legislation incorporated in the city charter for this purpose. This will be in addition to the powers they already possess under their official plan.

## Canada's First Town Planning Scheme.

**NEW BRUNSWICK.**—The absence of any definite action on the part of any of the cities in New Brunswick is probably due to the difficulties created by the somewhat novel procedure which is involved in preparing a town planning scheme. The New Brunswick Act is quite a good one, and there is no reason why a satisfactory scheme should not be prepared under it. It is satisfactory to learn that St. John, the largest city in New Brunswick, has decided to take steps to prepare a scheme under this Act. A Town Planning Commission has been appointed, consisting of the Mayor, two commissioners and two ratepayers,

and a resolution has been passed that the Commission apply to the Legislature for authority to prepare a scheme. The Board of Trade of St. John has approved of the steps taken, and the movement has enthusiastic support from the press and the public. A large area has been selected comprising an area taking in all the unoccupied land within the city limits and considerable portions of the county parishes adjoining both sides of the city. A map of the area is being prepared by the engineer, and early application will be made to the provincial authorities. This will be the first application to prepare a town planning scheme in legal form in Canada, and St. John has the opportunity of giving a lead on this matter to the whole Dominion.

## THE GARDEN CITY AND MARKET GARDEN.

A comprehensive land development scheme calculated to give practical relief to the Belgians and incidentally to settle a few of the outlying subdivisions of Regina with market gardeners this year has just been announced, and it is learned that two local business men are the originators of the idea and have had their plans for its development under way for some weeks. According to information gained, it is the intention of these gentlemen, who propose to do business under the name of The Regina Garden City and Agricultural Company, to break two or three hundred acres of land just north of the city, and rent it out in five-acre plots to Belgian refugees for market garden purposes. It is claimed that the field for this produce will be practically unlimited, especially in view of the demand created through the war, and that on the other hand, such an opportunity would be a Godsend to Belgians who could be reached. They have already got into touch with nearly a hundred Belgians in Holland, France and England, and it is felt by the local men that a large number will be brought over later on in the summer when the situation opens up.

Other schemes having in view the increasing of truck gardening are being put into practical form, and will be given a good try-out at Regina during the present year. The vacant lot gardening scheme, which was tried out with considerable success during last year, will be greatly extended during the present year. The Vacant Lot Gardener's Association will operate its own market, where produce may be sold at a nominal cost.

A still larger scheme provides for the utilization of large tracts of broken farm land in the vicinity of the city for truck gardening. It is proposed to have Regina's business men handle this proposition on a co-operative basis. It is estimated that large profits will result.

## FREDERICTON, N.B.

The section of the Valley Railway between Fredericton and Gagetown has been opened up and a freight and passenger service inaugurated by the Intercolonial Railway, as a part of that system. At present two round trips are made each Tuesday, but the service will be enlarged as business increases.

The last report of the City Analyst on the water supply shows the efficiency to be 97.6 per cent pure. The report states that the results indicate a very good efficiency on the part of the filters, and a comparatively low bacterial count in the filtered water.

There is a good prospect of an improved market in England for New Brunswick potatoes. The trade demands a potato that will boil white and floury, and keep white when boiled.

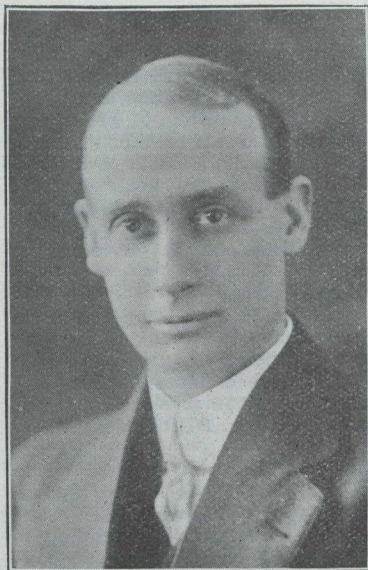
Factories and workshops are running full time, and while orders may not be too plentiful, it is the policy of the manufacturers to keep their men at work, so that they may be sure of their services when the busy days come again.

## AN OVERSIGHT.

In the last issue of the Journal we published an article by Samuel Greeley on "Refuse Disposal in Small Cities," but by an oversight did not give credit to the American City for its kindness in giving us permission to publish the article. This we regret, for our estimable contemporary has always been courteous itself, and ready to reciprocate with this Journal in every way it could.

# Municipal Chemistry

By T. LINSEY CROSSLEY.



While most of the larger cities own well-equipped municipal laboratories, the smaller cities and the towns and villages feel that it would be out of the question for them to endeavor to maintain such institutions. Just what numerical limit of population might be set as the dividing line between the need for such protection and the absence of need is rather an indefinite proposition. If one hundred thousand people find a municipal laboratory a necessity, are ninety thousand people exempt from the dangers and unnecessary ex-

penditure that one hundred thousand are exposed to? Will unscrupulous contractors, epidemics, frauds and adulterators have mercy on corporations below a certain population, or having only a certain tax revenue? It will be admitted of course, that if a large city needs a municipal laboratory, a small city or even a village will need one in proportion. In the large city the staff of the municipal laboratory will use some initiative in instituting investigations and making tests. They will be appointed by, and do work for, the various departments of the municipal service. Experience in these various departments would put the heads in the position to make use of the chemist. In the smaller municipalities, only a few departments are in continual operation under salaried officers. In some cases, especially those of smaller towns a good deal of very important work is carried on by committees of the council, whose members have no qualification other than membership in the said council. Some of these members would be interested to know what materials, problems, or investigations become fit subjects for the consideration of the chemist. What are the qualifications of the municipal chemist of to-day? At once we dismiss the idea of a mere manipulator of evil smelling mixtures whose chief business in the opinion of some is to find out whether your neighbor is feeding arsenic to your prize cattle or adding water to the milk he sells. To give some idea of the various lines of work in which a chemist can assist a community, we will divide his work up into its several important departments, citing a few cases in each:—

(1)—CONSTRUCTIONAL.—Road-making, sewer and water-pipe laying, purchase of bricks, stone, cement, sand, lime, etc. In every one of these classes of material or operation, municipalities have met with more or less serious loss or received service below the standard paid for. In one case a contract was for a dustless road to be constructed of a certain kind of rock. The contractor assumed that any rock would do, a long expensive highway was built and proved to be very dusty indeed. A good municipal chemist could have prevented that almost at a glance. A shipment of cement was rejected as being very inferior. Inquiry later elicited the information that it was sold. Of course, it went into some work in which the material was not subjected to tests. Cement is not very often found defective now, but the occasional failure may be worth many tests. We have come across several cases where important and expensive operations were imperilled or much delayed by the use of inferior sand in concrete, a five-dollar test would have prevented such a trouble. Many of the smaller pieces of municipal work contain small amounts of cement and are not considered expensive enough to warrant getting close inspection or a consultation with a municipal engineering chemist. These works are left entirely in the hands of foremen, yet frequently fulfil functions, the failure of which for any reason would mean disastrous expense and, perhaps, loss of life.

When a town is large enough or ambitious enough to take up the question of permanent paving, a set of specifications

is drawn up or borrowed from another town or city with a few alterations. Many of the specifications so drawn up are vague or ambiguous, some indeed it might be found have been so written that they serve certain interests. A more or less real "engineer" is mentioned in them, and everything is required to be subject to his "approval" or to be "satisfactory" to him. In some cases the specifications are general, merely requiring goods to be "of uniform quality and satisfactory to the engineer." Others are specific about some parts of the work, and very vague about others. Contractors are always on the alert for the "joker" in such specifications and if one is found, it usually works against the interests of the town. There are many points in connection with the laying of bituminous pavements which are best foreseen by an experienced asphalt chemist.

The payment for such work is usually spread over twenty, thirty or forty years, whereas the contractor may be let off with a five-year guarantee. If, as has happened, a pavement gives out in five or six years, from bad workmanship or materials, the community might find itself obliged to replace the paving in many parts, while the original bonds are still to be paid. This is not always the fault of the contractor. The town committee may have interfered with the work or cut down some of the items in the tenders which appeared unnecessary to them.

(2) MAINTENANCE.—The purchase of supplies for maintenance is another source of expense. Fuels, oils, and even stationery supplies may be the subjects of economies under proper inspection. In the case of stationery, not only should consideration be given to the question of expense, but also due attention should be given to the purposes for which it is to be used. Many municipal documents are not only of great historical value, but of legal importance involving the status of a community and its citizens.

As to oils, the various companies competing for this business have developed a very sharp selling fraternity deeply versed in dealing with the "elect." The result is often the purchase of unnecessarily large quantities of some oils and improper grades of others. Even if a town only has one engineer or one dynamo and a pump, it is essential that these be kept in the best running order, and that lubrication should be subject to as little fluctuation as possible. Very few municipalities there are which do not have to buy more or less coal. Coal is not a substance of uniform composition. It may be soft, steam coal having a large proportion of volatile combustible matter, or hard anthracite yield very little volatile matter, but carrying up to 20 per cent of its weight of ash. This latter figure has been found in coal, said to contain not more than 15 per cent, a difference of five tons in every hundred is worth attending to. Paint is another case where much depends on quality.

(3) HEALTH AND SANITATION.—The administration of a municipality has a responsibility in these matters that is not sufficiently recognized. Disinfectants are often bought by municipalities in quite large quantities. These fluids vary greatly in germ destroying power. Some are effective in destroying bacteria in dilutions of one part in 500 or 1,000 of water, while others are only effective in dilutions of one part to 100 or 200 parts of water. The former class are worth three to five times the price of the latter, but can frequently be bought at the same price. If diluted too much, the money spent for them is practically thrown away. Disinfectants should always be tested. It is dangerous to depend on unknown protectors.

(4) FINANCING.—Of course it would be difficult to persuade the ratepayers of a town of 3,000 to 5,000 people that it would pay them to support a chemist, but groups of towns not far from each other could easily support a good man and laboratory jointly at a cost of ten to fifteen cents per head per year. The consulting services of a good municipal chemical engineer could be retained at a moderate fee, and all specifications and purchasing questions could be referred to him for consideration, as well as proposed regulations for milk, water and food inspection. In any case, all materials used in construction of public works should be inspected for quality, uniformity and fitness for the work to be done and the actual cost of the work or works should not be made the basis of their need for tests and inspection. The economic value of insuring as far as is scientifically possible, the safety and permanence of public works, and the proper performance of their functions, should in all cases be considered first. It costs less to be sure than sorry.



# Municipal Affairs in British Columbia

By COUNCILLOR J. LOUDET

## Collection of Taxes.

Several of the municipalities of British Columbia have lately discovered that last year they did not collect sufficient taxes to pay interest and sinking fund. When this occurred in previous years the officials do not seem to have worried much, as work could be kept going by borrowing from the proceeds of debentures sold for other works. The councils of to-day have to face a very difficult situation, which reasonable financing in the past might have avoided. In some cases this appears to be due to lavish expenditure on Local Improvement Work, previous councils being led into heavy outlays under this system because bond issues covering such work do not affect the statutory borrowing power. Why this should be is not very clear, especially where the bonds issued are guaranteed by the municipality as a whole. The only remedy now is to collect the outstanding taxes and many municipalities are fighting shy of the unpleasant task of selling the lands on which taxes are now delinquent.

At a meeting in South Vancouver recently, it was pointed out that a tax sale must be held or bankruptcy would eventually result. One of the audience shouted "Then go broke."

The man who made the remark is typical of a minority in many municipalities—a minority which objects to paying taxes in good times or bad, and when faced with the necessity of drastic action, seeks to drag down all property-owners in a common ruin.

The hard times starting before the war and merely accentuated by it, have brought this question to an issue and it is satisfactory to note that in most instances a determined attempt is to be made to put municipal finances on a sound footing by collecting outstanding taxes, instead of attempting further borrowing at ruinous rates. It has been pointed out that in British Columbia the law is already very lenient to a delinquent taxpayer (rather a contradiction in terms) allowing him to be three years in arrears, before he can lose his property. If the interests of the community are to come before those of the individual, this period should be reduced rather than increased, and the government is to be commended for their recent action in refusing a request for an extension to five years.

A good deal of misplaced sympathy has been expressed for the individual who cannot pay, but while there may be occasionally cases of genuine hardship as a result of tax sale proceedings, these are the exception and not the rule.

## South Vancouver.

South Vancouver continues to occupy a notorious position among British Columbia municipalities. Recently Reeve Gold suspended several officials, including the fire chief and the (lady) police court stenographer. The Reeve's reasons were somewhat lengthy and mainly based on his pre-election promises to dismiss the officials of the previous regime, but they proved unconvincing to the council, which body has unanimously re-instated them.

At the meeting to consider the Reeve's action, an unruly mob became so objectionable, that several of the councillors left the meeting, and one had to fight his way out. The Reeve then expressed his intention of suspending the officials as fast as they were re-instated by the council. For the credit of South Vancouver, it is to be hoped that this condition of affairs will soon cease.

The police commissioners intend to have police at future meetings, and the visit of two government officials is rumored to have some connection with recent happenings.

## Victoria.

Victoria expects to have Sooke Lake water available in April, and in the meantime is using water from Humpback reservoir, which is now full, the amount stored there being about 160,000,000 gallons. This supply became available last month, and the water has been found to be of good quality.

In order to put finances in good shape, it is proposed to issue three-year treasury certificates, which are to be floated in New York and the short term notes now held in London will be retired. The price obtained is understood to be an excellent one under present conditions.

In the Okanagan conditions are still somewhat dull.

Penticton expects to proceed shortly with improvements to the irrigation system, and if money is available the hospital building, projected some time ago will be proceeded with.

There is still an unusual percentage of unemployed, though probably not so great as during the winter.

The Board of Trade of Kelowna does not look with favor on the "Moratorium" Act recently passed by the provincial legislature. The act, however, has been greatly modified from the original draft. It differs from similar acts elsewhere in the important feature that the onus of getting an extension of time for payment of principal on mortgages or land payments is upon the debtor, and the costs of the application must be paid by him. A new low scale of costs will be fixed for proceedings under this act. Interest and taxes must be paid, though in the act, as first proposed, these were to be in the same positions as payments of principal.

## Vancouver Election.

In Vancouver Alderman Hepburn is contesting the mayoralty, with Mr. Taylor recently unseated, owing to a faulty land qualification. A third candidate in the person of Mr. Whiteway has appeared, but his chances appear very slight. The odds are apparently on the re-election of Mr. Taylor, but if there is a heavy poll Mr. Hepburn's chances will be improved.

Since these notes were written, the election has taken place, resulting in the return of Mr. Taylor. The figures were: Taylor, 5,834; Hepburn, 4,656; Whiteway, 85.

The Georgia-Harris viaduct is now nearing completion, and should, when open, relieve to a great extent the congestion on Hastings Street lately aggravated by the increase in the number of jitneys.

An improvement has been noticeable lately in the lumber business, but unfortunately the mills have been unable to take full advantage of the opportunities offered, owing to a scarcity of tonnage available.

Unemployment continues to occupy the attention of all municipalities, and the attitude of "watchful waiting" adopted by the government is not considered a satisfactory one in relieving the situation.

## PRINCE RUPERT, B.C.

Mayor Newton and Alderman Morrissey, of Prince Rupert, B.C., was in Montreal last month in connection with the financial arrangements of their city, with which they were successful. Both gentlemen are enthusiasts for the future of the western terminus of the G.T.P., and if they are types of Prince Rupert citizenship, then there is no fear for the progress of this "pearl of Canadian cities," which was the definition given to the representative of the Journal.

## AMENDMENTS TO "MUNICIPAL ACT" IN B. C.

Some of the more important amendments to the "Municipal Act" of British Columbia include the right of a city or municipal district to pass by-laws for construction of irrigation works, for applying for water under "Water Act, 1914," appointment of boards of commissioners, etc., and to borrow money for this purpose. Municipalities may under the Act consolidate its debt and provide machinery for consolidating.

The amendments provide for rents chargeable for opportunity of user of water, gas or electricity; also for regulation of motor-vehicles.

Municipality may pass by-laws for authority to borrow money anticipating taxes, provided such amount to be borrowed does not exceed total amount of taxes levied in preceding year.

Railway and tramway companies must file annual statements with municipalities, containing its real property within the boundary of such municipalities.

Land occupied and claimed as right of way, and track-age, including sidings, spurs, switches, terminals and stations, shall be assessed and taxed as real property and the assessed value shall be the sum of ten thousand dollars per mile of the track of the railway or tramway.

The amendments provide for an appeal to Court of Revision in respect of wild land tax, and for the establishment of a Board of Equalization.

Abatement of taxes shall not apply to road taxes, school taxes, special rates involving municipal debt, or of taxes on land or real property, taxes on which in any previous year have been unpaid.

Amendments provide for sale of land for taxes and define costs and expense added.

The Local Improvement Act is also amended to permit the construction of any conduit for wires or pipes under and along any street.

## Municipal Affairs in Alberta

S. B.

The most outstanding feature in connection with municipal matters in this Province during the last month or two was the Convention held under the auspices of the Rural Association at Calgary on the 16th, 17th and 18th of February. This rural organization is the largest municipal organization of its kind in the Province, and this Convention was a very representative one, and the discussions were interesting and instructive. Papers were given by representatives of different Municipalities dealing with their problems, which seemed to be much appreciated by the delegates. There was also papers given on municipal problems by representatives of different Departments of the Provincial Government.

Among the outstanding questions discussed was the question of co-operation with the Provincial Government in connection with the building of trunk or main roads; and the question of making some arrangement whereby settlers in the outlying parts of the Province might be able to get medical assistance more readily and at more reasonable rates than at present. Then, there was, of course, the discussion on the ever-present problem of financing the business carried on by the municipal organizations. In addition there was considerable discussion on what in the southern parts of the Province is a very serious matter; namely—the destruction of noxious weeds, also considerable discussion and some general resolutions dealing with the banking question; many delegates evidently being of the opinion that banks were not at present doing as much as they might do to further the interests of our farming communities.

### The New President of the Rural Association.

Mr. H. Greenfield, of Westlock, Alberta, was elected President of the Association for another term. This makes his third term in office, and the unusual procedure of putting him in office for a third term is a striking tribute to the energy and success with which he has guided the affairs of the Association. Mr. Greenfield is a good example of a "green Englishman," who has made good.

Brought up and living in London, England, until he was twenty-three years of age, he came to Eastern Canada and undertook to learn farming. After spending some years in the Province of Ontario, he came to Alberta some eight or nine years ago, and took up land about sixty miles northwest of the City of Edmonton. Despite the fact that everything in connection with farming or pioneering in a new country was entirely new work to Mr. Greenfield, he has made good, and although he has been a very busy man, he

has found time to take an interest in matters pertaining to municipal and provincial government, and as a consequence he has become one of the leading men in municipal work in this Province.

### Municipal Finances.

As the year 1915 goes on, the question of adjusting municipal finances to the present abnormal conditions is being taken up and dealt with by our different municipalities, and it appears on the whole that this problem is being dealt with satisfactorily. In the City of Edmonton, the City Council have been successful in cutting down estimates, and making large savings in their expenditure. They have also recently arranged for a temporary loan which will enable them to finance pending tax collections for the current year. Mayor Henry, although a new man in municipal work, appears to be taking hold of the administration of civic affairs in a businesslike way, and the citizens appear to be of the opinion that the business of the city will be placed on a satisfactory basis during the year.

In the city of Lethbridge the outstanding problem of financing the demands of their schools has been settled by drawing on their sinking fund. This method of settlement is one which may, I think, give cause for considerable thought, as there is good reason to expect that this action may lead to trouble in future.

Calgary has also been grappling with its financial problems. Their street railway system which has until recently been showing good profit has shown a balance on the other side of the ledger. This no doubt is accounted for by undue extension to certain subdivided areas on the borders of the city, but the Commissioner in charge has advocated that the deficit be remedied by cutting down the depreciation charges. Needless to say this method of balancing accounts is rather dangerous, and is likely to bring trouble at a later date. Commissioner Gardner has also undertaken a new departure in the interests of economy by making plans for the bringing into existence of what will be known as the Civic Tailor Shop, in which all the uniforms required by the city will be made. He hopes to make a large saving to the city in this way.

Our Provincial Legislature is at present in session, and as usual, there will no doubt be a number of amendments to Municipal Acts and City Charters. So far, nothing has been made public as to any very important legislation in regard to municipal matters, but it is possible there may be some amendments along this line, which will be of a rather outstanding character.

## SASKATCHEWAN'S MUNICIPAL PROGRESS

(By R. L. S.)

On the tenth day of March, 1915, there assembled in the city of Saskatoon what was probably the largest gathering of municipal men held at any time in Canada. The occasion was the Tenth Annual Convention of the Saskatchewan Association of Rural Municipalities, which lasted for more than three days. Reeves, councillors and secretary-treasurers representing every portion of the wide province were there. Overcoats were not necessary, for the sun shone with the warmth of summer, while the snow had disappeared some weeks before, thus belieing the peculiar impression of our Saskatchewan climate gained by those who never spent a winter on the prairies.

Each official came imbued and saturated with municipal life and activities. He had his problems, he had met in with difficulties which he thought were peculiar to himself, but on conferring with many other delegates from other parts of the province, he found that he was not by himself in those trials which had caused him to become almost discouraged. Each delegate returned at the end of the week to his particular municipality encouraged by the fact that either it was better than many others that he knew, or that he had found a way in which to make it equal to the best.

The University of Saskatchewan is situated on the higher plain across the river from the city of Saskatoon. There nearly five hundred students are in attendance. Many of these are taking an agricultural course, and are securing on the farm and in the barns and other buildings practical education in stock raising, and the many other lines which each successful farmer must master in these modern times. At four o'clock one afternoon several street cars were placed at the service of the delegates to take them to the University buildings and grounds, where they saw to ad-

vantage the actual working of this important institution. It was a tour of education. At 7.30 o'clock in the same evening, however, the delegates were all in attendance at the convention, delving into resolutions and thrashing out questions of municipal law, just as if they had not had their attention diverted during the afternoon.

The executive board of the Saskatchewan Association of Rural Municipalities had invited to its annual gathering the Hon. George Langley, Minister of Municipal Affairs; J. N. Bayne, Deputy Minister of Municipal Affairs; A. F. Mantle, Deputy Minister of Agriculture; A. J. McPherson, Chairman of the Local Government Board, and H. S. Carpenter, of the Highways Commission. Besides these the president of the University and the Dean of the Agricultural College also spoke.

The proceedings were opened by a real practical address by His Honor Lieutenant-Governor Brown of Saskatchewan. His Honor, in the earlier days, had experience in pioneer farming, and studied law in after years. He at present owns and operates a large farm in Saskatchewan. His knowledge of the West and agricultural conditions therein is indeed wide and detailed. His grasp of the difficulties which confront new municipalities surprised many of the delegates.

Mayor Harrison of Saskatoon, with the Secretary of the Board of Trade, welcomed the delegates, and offered them the freedom of the city.

A long list of resolutions was passed, and will be presented to the Provincial Government before the session of the Legislature, which will be held in May. The Convention was business-like throughout, and was productive of much practical benefit to the two hundred and ninety-seven rural municipalities of the province.

The next convention will be held in the City of Regina in 1916.

## SOME BIG MUNICIPAL MEN

(By AJAX.)

### DR. M. C. COSTELLO, MAYOR OF CALGARY



Just how an educated man must feel, when in a community that tests every public aspirant for his personal worth, not for his accomplishments in the field of learning, he is still looked to as the ideal of a man and is elected to the highest office at the disposal of his fellow citizens, I do not know. But Dr Costello, Mayor of Calgary knows ; for he is both — the most popular man in the prairie city

and one of its best educated citizens. His popularity rests upon his strong characteristics as a man, rather than his academic learning and degrees. This is the psychology of the West, man and matter rather than theory and learning. And yet Dr Costello is the better man for his learning, and makes a better mayor of Calgary because he has studied something of the world. In fact it would be a good thing for Canada if more of her public men were better educated in the knowledge, even of their own country — in the fundamentals of its constitution and institutions. But to get back to the man Costello.

I had only five minutes talk with the Doctor, when he was down in Montreal last month on his city's business, and yet that five minutes was sufficiently long to corroborate what we had already learned about him from men who had studied him for years. The man who meets you is a stocky son of the west — and he looks it. But he does not speak it. The quiet voice that greets you is the voice of the son of Erin, and the bright twinkle in the eye is the twinkle of the optimist, so essentially the characteristic of the Irishman. Dr. Costello admits his nationality — in fact is proud of it, but he is still prouder of the further facts that he was born in Canada and that he is one of the pioneers of Calgary where he has been for the last thirty one years. That is since he was nine, which makes him into forty years of age.

In the present mayor of Calgary one sees very concrete evidence of the evolution of a Canadian city in a short lifetime. When the lad Costello first saw Calgary it was a tent town, with a population, including Indian dogs of 150. This was in 1883. Today it has a population of over 80,000 souls, and the boy is the man big in the hearts of his people. Rather a pleasant retrospect for one to think over. His first schooling was in Calgary, he being one of the first pupils of the first school opened in the district. He then became a printer and incidently local secretary of the "Union". Seeing nothing great in slinging printer's type—he did not know in those days the wonders of the printer's trade, — young

Costello determined to be a doctor, and entered Queens University where he received his medical degree. Then two years of post graduate work in Great Britain and on the European continent followed. The young medico then returned to Calgary but not to practice his profession. Possibly the doctor realized that Calgary was so healthy that there wasn't a living in it for him; that is if he wanted to be honest with his patients. And M. C. Costello is honest, and so he went into business, and became a large property owner.

The mayor's civic experience is rather a big one. He was first elected to the Council under the old ward system, and on its abolition was returned as alderman at large for two years. The popularity of the then alderman was illustrated in this election for a broken ankle kept him confined to his house, and consequently could not attend his meetings, but for all that he secured a good majority.

When the citizens were looking around for a good candidate for the mayoralty for 1915, the choice of many fell on Dr Costello who at first refrained from entering the contest. But at last his friends were successful in overcoming his bashfulness by the argument that if they could elect him when he was running "on crutches", he would surely win when whole. And he surely did win. His vote being over 4000, while the two opponants polled only 3000 between them.

As a mayor Dr. Costello has been signally successful. He made no rash promises to the electors, which too often mars the usefulness of mayors and aldermen, so that he entered his duties with an open mind and with the object of "making good". The fact that practically all the public utilities are under the direct control of the city makes the work of the civic head at times very arduous, and all the time very responsible. This the mayor recognises to the full, and no man takes his work so seriously as does Dr Costello. Always on the job, nothing misses his eye and the officials respect him for it. A good Catholic and married with two bonny children the Doctor's home life is everything to be desired, and while he is running the city the Mayoress and two future mayors are running him, and what is more he likes it. But that does not say that other people can run Dr. Costello. Those who know him don't try, and those who do not and try the game are rather sorry for themselves after the "doc" has finished with them. But underlying the determination of achievement is the kindly nature that has done much to make the mayor so beloved by the citizens, and it is this same human kindness that has made the mayer the confidante of half the population; men and women and even the kiddies, looking to him as their father adviser.

Dr. Costello being but a young man, has every opportunity to do a big work amongst his fellows. It is to be hoped that he will confine his abilities and energies to municipal work, for therein lies a great future, as it is the opinion, not of one but many who know, that the future public life of this country, if it is to be respected, must be built up from the municipalities, and we cannot have our municipal builders too big.

# Foundations---The Main Factor in All Road Work

By J. A. JOHNSTON,

What to use for foundations—where, how and when to use materials, and in what quantity—is the science of road building. Many men have attained enviable reputations as road builders, based mainly on the fact that their work was all done in a locality which was blessed by Nature with favorable soil conditions.

In our earlier work in Massachusetts it was our practice to use foundations only in such locations as were unquestionably bad, and to take a chance on places regarding which we were in doubt. We believed it was cheaper later to strengthen the weak places than to use extra material that might not be necessary. Under conditions then existing, with comparatively light horse-drawn traffic, and with mainly gravel and water-bound macadam surfaces, this "take-a-chance" policy seemed a reasonable one, but no one could predict the future developments, and I doubt if we have actually saved any money by such attempts at economy.

Many road materials have been unjustly condemned when the real fault lay in the foundation, and not in the surface material. There are many companies advertising their road materials as the final solution of the road problem, when as a matter of fact, their specialties are merely surfacing propositions, many of which would give excellent results if used over a proper base, but are far from being the whole road, as one might infer from their claims.

## Waterproof Surfaces.

The statement has many times been made that a waterproof surface requires little or no foundation, because no water can get through it to the soil beneath, and so the base is kept dry. Many cases might be cited to show the fallacy of this belief. A little consideration of the capillary action of the soil which draws water from the sides of the road and underground sources (as well as the water that will seep through the soil from higher points), will show that a waterproof surface is not sufficient without a proper base. It must be understood that each road is a problem in itself, and no standard treatment can be devised that will fit all conditions. There are many factors entering into the problem—soil, drainage, traffic, available material—all should be considered.

In some localities good gravel can be had at a low cost, but there are many places where good gravel would have to be hauled many miles, and the cost would be prohibitive. In other places stone is abundant and cheap, while in others there seems to be no material fit for foundation purposes.

It is true that if you can obtain the right kind of gravel it makes an excellent foundation, but to give the best results it should be absolutely free from clay, loam or silt, and rather sandy. For instance, on such a base we have built macadam roads with only 3 in. of broken stone. There were a few soft spots in the spring where pockets of loamy gravel were found, but these were taken out when they developed, and one such road, which carried a considerable traffic on the edge of a flourishing village, was kept in excellent conditions at a low cost for maintenance for twelve years before it was resurfaced. In another place we built a section of road over a very soft bottom (practically quicksand) by first placing a bed of gravel 18 in. deep, and over that 6 in. of macadam. This road has been built sixteen years, and has given no trouble. On the other hand, we have many miles of road, built on gravel bases 6, 12 and in some cases 18 in. deep, that soften up and rut badly in the spring when the frost is coming out. It is our practice carefully to locate all soft spots in the spring, so that when funds are available for rebuilding such roads we may remedy the defect without guesswork.

Most gravel contains enough silt, loam, or clay so to draw moisture by capillary attraction that the frost will work in it, and, of course, when the frost crystals thaw, it leaves the material porous, spongy and wet. This condition is aggravated by the rolling wheels passing over the surface and the tamping action of horses' hoofs, which all tend to puddle it, just as a tamper puddles concrete, drawing the moisture from below. Such a result, unless extreme, may not be serious if your road surface is of gravel or even water-bound macadam, for such surfaces are easily and cheaply repaired, but if the road surface is a high-cost bituminous mixture it may be ruined, and you cannot afford to take such chances. It should, however, be borne in mind that a road may stand two or three years over a poor bot-

tom with little apparent trouble, but almost entirely go to pieces the third or fourth year. This fact has caused a great deal of trouble, for the inexperienced man, finding that a road stands all right the first year, and assuming that it will continue to do so, proceeds with the same type of construction under similar conditions until the first fails and the whole road is ruined.

Gravel alone cannot safely be trusted for foundation, and should never be used under a high-cost surfacing except as a sub-base stone foundation or concrete.

In the last twenty years we have tried many methods of subsoil drainage and many different forms of foundation. On some of our macadam roads with crushed stone 6 in. thick the road has, after one or two years, softened up badly in the spring. We tried the experiment of adding more crushed stone, without breaking up the old surface. In some cases we added 12 in. of new stone, making a total of 18 in. of stone fragments not exceeding 2½ in. in their largest diameter, and also built ground water drains each side of the macadam, and cross drains at 50-ft. intervals. The result was a failure; after two or three years the road broke up as badly as ever. As these results were obtained in several places, I think we have proven that crushed stone of small size is not satisfactory for foundation, and is suitably only for surfacing. My theory is that the units are so small they have little bearing, and, having no cohesion, when wet they sink readily into the mud. Regardless of theory, the fact remains; and some of these stone particles have been found 1 ft. or more below the original sub-grade. It should also be borne in mind that the cost of the crushed stone is nearly three times that of the larger fragments.

When we first began building our roads, if we found a place which seemed to need a stone foundation we used a telford paving 8 in. deep over 6 in. of gravel. The telford stones were set up on edge, the tops broken off to a true cross-section, and the joints wedged up and chinked. French drains, 3.5 ft. deep, were built at each edge of the road. A year or two later the specification was changed, and the telford was only 6 in. thick over 2 in. of gravel, with the continued use of the side drain. Later we abandoned the standard telford and adopted the V drain, so called because it was roughly the shape of a broad V, about 18 in. deep in the centre and 4 in. at the sides, with stones not over 8 in. in their largest diameter. This V drain is a combination of foundation and drain. The water flows in a channel in the centre of the road, and is led off by bleeders to proper outlets. We built many miles of these drains on foundations only 10ft. wide under macadam 15ft. wide. This gave satisfaction in the earlier days, as the traffic did not spread over more than 10 ft. except when passing another vehicle.

While this practice was satisfactory under the old conditions, it has now been discontinued because it is found that, as the high-speed motor requires more room in passing, the whole width of the road is used. In fact, on our main roads we have been obliged to increase the width of the hardened surface from 15 ft. to 18 ft.

## Concrete Foundations.

If a surface of wood or stone blocks, or the more expensive types of asphalt is to be used, a concrete base is accepted as the best practice.

There is some difference of opinion as to whether it is better to build a fairly light base of strong concrete (4 in.) of 1:2:4 mixture, or a heavier base (8 in. or more), or a leaner mix 1:3:6, 1:4:8, or even a smaller proportion of cement. Conditions should decide this. In a mixed soil better results might be obtained by the greater depth of the lean mixture, as there would be less frost action at the greater depth, and the increased depth of the concrete slab should more than offset the loss in tensile strength of the material.

Of course, if it is planned to build a concrete road surface with the ultimate idea of surfacing it at some later time with bitumen or other material, there is no room for argument as to the use of a rich mixture, as it is then necessary so to mix your concrete that it will withstand the abrasion of the traffic. If the bituminous surface is to be only a light one, it is still advisable to use the rich mixture, as the shock of the passing traffic may cause enough surface disintegration to destroy the bond of the bitumen to the concrete.

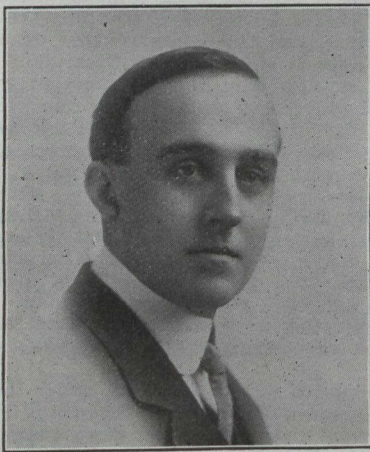
Division Engineer, Massachusetts Highway Commission.

## THE ROAD CONVENTION IN TORONTO



President W. A. McLEAN,

The second Canadian and International Good Roads Convention and Exhibition, which opened on March 22 and closed on the 28th was a decided success. The meeting was held at the University of Toronto, Convocation Hall being used for the lectures and meetings, while the exhibition was held under canvas on the campus, and the fact of it being held under the joint auspices of the Dominion Good Roads Association and the Ontario Good Roads Association and with the support of many other good roads organizations was an assurance from the first of its success. In addition, several provincial governments took a very keen interest in the undertaking. The committee this year departed to some extent from the usual style of lecture, which has been delivered at most of the road conventions in the past. Taking it for granted that the public are now unanimous for road improvement, the committee undertook an educational campaign with the idea of placing before the meeting in a clear and concise manner all available cost data and facts on the practical side of road improvement, in the matter of financing, traffic considerations, location, standard types of foundations and their cost, maintenance, machinery, bridges, culverts, etc.



Sec. GEO. A. McNAMEE.

The results of this change of procedure were seen in the increased interest in the lectures and the discussions that followed. The large tented exhibition hall which was heated and well lighted, was filled with machinery of every kind for the building and repairing of roads. Every kind of known road material and dressing was shown, which were closely studied by the large crowd of municipal engineers, mayors and aldermen, who had come from all parts of the country to get new ideas on the building and maintenance of roads and sidewalks. As this Journal goes to press before the actual closing of the Convention the principal papers and a detailed description of the exhibits are held over until next issue.

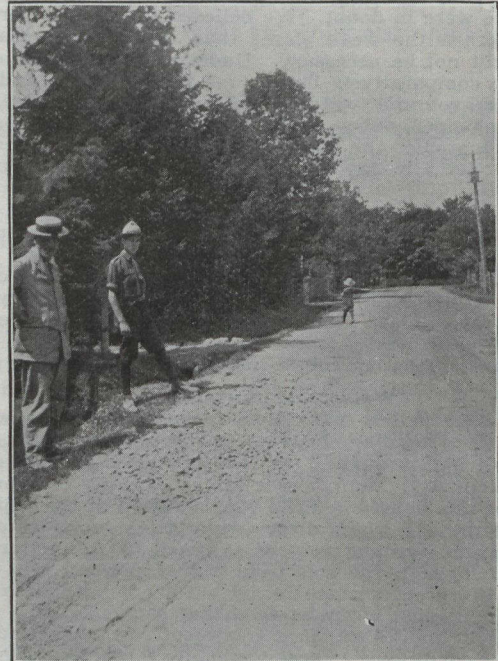
The officers and committee in charge of the Convention were as follows:—President, W. A. McLean, Commissioner and Chief Engineer of Highways for the Province of Ontario; vice-president, J. A. Sanderson, president, Ontario Good Roads Association; sec.-treas., Geo. A. McNamee, secretary-treasurer, Dominion Good Roads Association. Committee: B. Michaud, duty minister of roads, province of Quebec; S. L. Squire, 1st vice-president, Ontario Good Roads Association; Geo. S. Henry, M.P.P., secretary-treasurer, Ontario Good Roads Association; O. Hezzelwood, president, Canadian Automobile Association; U. H. Dandurand, hon. president Good Roads Association; W. H. Leach, superintendent of Exhibits.

## A WATER-BOUND MACADAM ROAD

By GEORGE REAKES.

During the last two seasons the Corporation of Beaconsfield, P.Q., have constructed over five miles of new roads, consisting of asphalt, tavia, and waterbound roads.

The waterbound macadam roads one mile in length, runs from north of C.P.R. tracks, and before being atken over was nothing but a mud track. The road was increased in width to 18 feet, subgrade ploughed out to 15 inches, drained, and thoroughly rolled, and all uneven places filled in with quarry waste until an even surface was obtained, and to grade upon this was spread 8 inches of 4 inch



Engineer REAKES and one of his roads.

broken stone in two layers, each layer being watered and rolled, care being taken to reduce the voids in the layers to the least possible amount by properly proportioning and distribution of the stone. Upon each layer was spread clean lime stone dust, well broomed in, thoroughly watered and rolled, till no movement took place whilst rolling, and a compact mass of stone formed. Upon this course was laid 6 inches of 2 inches broken stone, in two layers, each layer being well watered and rolled, and stone dust spread over and broomed in so as to form a binder; upon this finished course half lime stone and stone dust was spread. Special attention should be given to the rolling and watering of this course, so as to procure a compact and even surface.

The cost of making this length of road worked out at \$5,780, which would have been considerably reduced but for the long haulage of stone from the quarry (2 miles), and water from the lake (three-quarters of a mile).

## TEMPORARY TROUGHS FOR TRENCHING.

In excavating trenches in Vancouver, B. C., when small sewers are being replaced or for any other reason are temporarily out of service, troughs of canvas are used for carrying the sewage meantime. Wooden troughs were formerly used there, as elsewhere, but the canvas ones are less expensive and interfere less with the work. They are made by fastening eyelets to both edges of a strip of canvas, opposit each other, and each pair of eyelets is then hung on a spike driven into the sheeting, the water flowing through the canvas trough keeping the canvas sufficiently swelled out to carry it. The spikes are of course driven so as to give the trough the desired grade or fall. Three hundred feet or more of such trough has been used. Laterals are carried across the trench to this trough by short canvas troughs suspended from cross braces.

## GALT, ONT., TO BECOME A CITY.

The town of Galt, Ont., is to become a city on June 1st. The new city has now a population of over 10,000, which entitles it to its new dignity.

## Road Work For Coming Season

This Journal in reply to enquiries sent to the Provincial Governments has received to date the following replies:—

The questions asked were:—

- 1.—The appropriations for the building of Roads for this coming season.
- 2.—How the appropriations are to be spent—in what proportion.
- 3.—The classification of the material to be used and who provides the machinery.

OFFICE OF THE HIGHWAY COMMISSIONER.

Winnipeg, March 16, 1915.

The Editor:

Your letter of the 12th inst. to the Honourable Dr. Montague was handed to me for reply and in answer I would say:—

(1) The sum of about \$2,300,000 for assisting Municipalities of the Province in the construction of Main Market Roads remains still to be expended under the "Good Roads Act, 1914."

(2) Expenditures under the aforesaid appropriation are made through the agency of the different Municipalities under the direction of the "Good Roads Board" of the Province. A system of roads having been formally accepted under the "Act" contracts are awarded by the Municipality and the work is proceeded with in accordance with plans and specifications prescribed by the Board. The work is supervised and inspected by department engineers whose services are provided free to the Municipality. Upon the completion and during the progress of works undertaken under this "Act." The Government reimburses the Municipality to the following extent:

(a) One third of the cost of constructing earth roads including bridges and culverts. If bridges or culverts are of a permanent character one half the cost of such structures is given.

(b) One half ( $\frac{1}{2}$ ) of the cost of constructing a gravel, macadam or other type of hard surfaced road approved of by the Board, including the cost of permanent bridges and culverts.

(c) One third (1-3) of the cost of constructing permanent bridges and culverts which do not form a part or

are not contained in a plan of "Good Roads" in a municipality.

(3) Gravel, broken stone, Portland cement, Concrete, Bituminous concrete, or other approved materials, in the discretion of the "Good Roads Board" may be used in the construction of Roads under the "Act."

The Government of the Province does not provide any machinery. This is done by the different municipalities when they undertake the work themselves instead of contracting it.

Trusting this information will be satisfactory to you,  
I have the honour, etc.

A. MCGILLIVRAY,  
Highway Commissioner.

DEPARTMENT OF PUBLIC WORKS, ALBERTA.

Edmonton, March 17th, 1915.

The Editor,—

Replying to yours of 12th, I am directed to advise:—First that our appropriation for the construction and maintenance of roads this season is Seven Hundred Thousand Dollars (\$700,000).

Second, I presume this means in what proportion to expenditures by the Municipalities. We have not at present any system of proportionate expenditures with Municipalities.

Third, the material is earth, sand-clay and gravel. The Government provides the machinery.

Yours, etc.,  
JNO. STOCKS,  
Deputy Minister.

PROVINCE OF QUEBEC.

Quebec, March 18th, 1915.

The Editor,—

The Hon. Mr. Caron has referred your letter of March 12th to this Department. In reply, I beg to inform you that the Legislature has voted an appropriation of \$250,000 for roads, which will be expended in accordance with the Revised Statutes of 1909, which I enclose. As to the Loans Act, nothing has been yet decided by the Government as to the amounts that will be available.

I have the honor, etc.,

B. MICHAUD,  
Deputy Minister.

### GOOD ROADS ACT OF QUEBEC

According to an amendment passed February 19, 1915, the following new powers are given to the municipalities:—

A rural, village or county municipality desiring to improve its roads and to benefit by this act shall:

(a) Pass a by-law which shall come into force on the date therein mentioned, ordering the macadamizing, stoning or gravelling of the roads therein described;

(b) Thereafter apply to the Government, by resolution, after a previous understanding with the Roads Department as to the amount thereof, for the sums necessary for the making or improvement of the roads described in the by-law passed in virtue of paragraph a of this section.

Such resolution shall authorize the mayor and the secretary-treasurer or clerk to sign in favor of the Provincial Treasurer, so soon as the Government is ready to supply the necessary money, forty-one coupons containing a promise on the part of the municipality to pay annually, at the time fixed by the Provincial Treasurer and mentioned on each coupon, two per cent interest on the sum mentioned in the resolution.

The resolution shall also provide by means of a special tax or otherwise for the payment of the two per cent interest on the sum which may be supplied by the Government.

When the requirements mentioned in section 2 are complied with to his satisfaction, the Lieutenant-Governor in Council shall approve the by-law and the resolution. The by-law and resolution, when approved by the Lieutenant-Governor in Council, cannot be changed, except with his consent.

City or town municipalities, in certain exceptional cases left to the discretion of the Lieutenant-Governor in Council,

may also avail themselves of section 2 on complying with the requirements of this act.

Upon petition of the majority of the ratepayers, bound to maintain certain roads, any municipality to which this act applies may pass:

(a) The by-law mentioned in section 2 and enact more-over in the said by-law that the improvements therein described shall be made at the expense of the persons who are bound to maintain the said roads or part of roads, and shall be paid for by means of money supplied by the Government;

(b) The resolution mentioned in section 2, except that the part to which the municipality must contribute to the payment of the annual interest, shall be levied by means of a special assessment on the ratepayers who are bound to maintain the said roads or parts of road.

The responsibility of the municipality for its share of the payment of the annual interest is not diminished by the adoption of the by-law and resolution authorized by this section; but the municipality must levy annually on the ratepayers bound to maintain the said roads or parts of roads and who benefit by this act, the money which it is bound to pay to the Provincial Treasurer.

Upon petition of the ratepayers interested in the improvement of certain roads, any municipality to which this act applies, and which has passed a by-law under article 533 of the Municipal Code, may pass:

(a) The by-law mentioned in section 2; and enact more-over in the said by-law that the improvement therein described shall be made at the expense of the petitioners;

(b) The resolution mentioned in section 2; except that it may be provided thereby that the two per cent interest shall be raised by means of a special assessment on the ratepayers who have signed the petition.

## Fire and Police System of Outremont, P.Q.

Beginning the first of this year, the Town of Outremont put in operation a model fire alarm system, and an up-to-date police signal system.

Up to that time the town had been depending upon the telephone for receiving alarms of fire at the Fire Department headquarters, and there had been no means of checking the Police force when on duty, nor of getting any officer on the beat when he was wanted.

The system that has just been put in operation will be of great assistance to the fire and police departments and will improve their efficiency considerably.

Before these systems were installed the town appointed Dr. Herdt of Montreal, as consulting engineer, together with Mr. Duchastel, the town engineer, to look into the question of fire and police signalling systems.

A great deal of study was given to the different types of apparatus on the market, and to the location of different

In order to keep a permanent record of all alarms transmitted, and to act as a check upon the indicator, an automatic punch register was installed, and in connection with this punch register, an automatic time stamp, which is arranged to stamp the year, day, hour and minute that an alarm is received. This equipment also records any stray blows that might come in over the circuit, or any special signals that may be given by the officers of the Department.

The police specifications called for 13 police signal boxes, which were to be of the three-call type, giving the wagon, duty and telephone signal. These boxes are different from any others of this type that have been installed in other towns, in that the removal of the receiver from the hook in the box will immediately transmit an emergency signal to police headquarters, allowing the officer to talk to headquarters immediately without having to wait for the box movement to make a complete revolution, as is the case in the old type boxes.

The police boxes are placed at convenient points throughout the town, and are arranged on two operating circuits which terminate at a receiving desk at police headquarters. At each box there is a green flashlight and a large vibrating bell. These are used for summoning any officer who may be on the beat, to the nearest patrol box to receive instructions from the central office.

This is not a new idea, but there are very few police installations in Canada equipped with this particular feature. The value of it can be readily appreciated when it is known that the central office can get any officer required, who is on beat in the town, within three or four minutes' time; in the majority of cases the time required is much less than this.

The fire and police signal boxes are mounted on handsome iron pedestals throughout the town. In certain cases, where the location of boxes would permit, both the fire and police boxes are mounted on the same pedestals. In other cases they are mounted on separate pedestals.

All the wiring for both systems is underground, and therefore there are no unsightly wires running to each box.

Both systems are operated by storage batteries, there being a duplicate set of batteries for each circuit. These are controlled by means of a six-circuit switchboard, and are located in the city's power sub-station, about 300 feet distant from fire and police headquarters. Every precaution has been taken to guard against over-charging or over-discharging the batteries, and specially insulated battery racks have been provided for them.

As the circuits are all underground more than ordinary attention was paid to the protection of the circuits, and a special protector board was installed for this purpose.

The system, as a whole, is one of the most complete ever installed in Canada, and it is certainly the most up-to-date.

All the apparatus was manufactured by the Northern Electric Company, Limited, Montreal, and installed by the same company.



Police Signal Box and Flashlight Equipment, Mounted on Street Pedestal.

signal boxes throughout the town, before specifications were prepared.

When the specifications were completed they called for a fire alarm system consisting of 27 fire alarm boxes of the latest positive non-interfering succession type, having the outer door arranged to open by means of a new type handle, thereby doing away with the old-fashioned lock and key, or the misleading and often times confusing, keyless door which operates a bell when the door is opened.

At Fire Headquarters there was to be installed a 12 in. gong and visual indicator, which would show at a glance what box had been pulled immediately the first sound had been transmitted, as well as call attention to the fact that an alarm was being received, and allow the firemen to count it by the strokes of the bell, if they were not within sight of the indicator.

### LETHBRIDGE AND ITS PRESENT CIVIC GOVERNMENT.

Up till the end of 1913, this city (Lethbridge) was governed by a Mayor and Aldermanic Council. In 1914 the system of government was changed and placed under a Mayor and two Commissioners. Naturally, there were some bumps on the track on the changing of engines, but it is becoming increasingly evident that the Civic Government under the competent Mayor and Commissioners is of much benefit of the working of the city. What now remains to be effected is the establishment of a COMMUNITY SENSE amongst ourselves, and full of sympathetic support should be given to those whom we have elected to carry on the city's government. A pleasing instance of this community spirit was evident on Arbor Day, when the whole of the citizens turned out and did a day's work in the city's Henderson Park, in generally tidying up and planting trees for the adornment of the Park.—(Extract from Lethbridge Board of Trade's Annual Report.)

### HAMILTON, ONT.

The report of the City Engineer of Hamilton, A. F. Macallum, and assessment commissioner, recommending the construction of cement walks and curbs on the initiative was adopted.

# REVIEW OF CIVIC IMPROVEMENT

Conducted by

W. H. ATHERTON, Ph. D. (Sec. City Improvement League of Montreal)

## CITY IMPROVEMENT LEAGUE OF MONTREAL.

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All communications to be addressed to Dr. W. H. Atherton, Secretary of the City Improvement League, office of the "Canadian Municipal Journal, 221 Coristine Building, Montreal.

## INVESTIGATING THE CHARACTER OF CANDIDATES FOR CIVIL SERVICE.

By JOHN F. KAVANAGH, of the Municipal Civil Service Commission of the City of New York.

Civil Service commissions throughout Canada and the United States have often looked to New York City for guidance in the solving of employment problems, and some of them have adopted many of the reforms installed by the Municipal Commission. One of the most valuable of these reforms is the establishment of the Bureau of Investigation, whose duty it is to obtain complete records of all successful candidates for city positions, not only to ascertain their experiences, but also their character and reputation in the community.

Manifestly, it is of vital importance that government employees should be not only efficient, but of good habits and morals as well, and it is hardly necessary to emphasize the menace to the public in having dishonest, cowardly or immoral guardians or instructors. Especially is this true of men employed as policemen, firemen, or on health or construction work.

Up to two or three years ago little of this investigating work was done by civil service men, the main reason being that its importance was not recognized by the general public, and consequently no funds were appropriated for its advancement. But the police scandal in New York City engendered through the Rosenthal murder by Becker's gunmen, and the finding that some of the police force had had criminal records prior to their appointment as patrolmen, focussed attention on the urgent necessity of insuring that only men of good character should be employed by the city.

Prior to that time investigations of employment, where made, were generally attended to by the various departments acting independently of each other, and naturally were much less thorough than would be the case if trained men had been engaged for this specific purpose. To anyone conversant with departmental duties, it is evident that such investigations should be the work of the department which determines the candidate's mental or physical ability—the Civil Service Commission. This department has at its disposal, through the required filling of application

blanks, details of the candidate's experience and training; and in examinations where experience is given weight in the marking of papers it is obvious that, before rating in experience is given, it should be verified. With this work thus becoming a part of the Commission's duties, it follows that the Commission should complete the investigation and verify not only the experience but the character and reputation of such candidates.

In the business world some corporations and firms make an effort to learn a little of their prospective employees' ability and habits. Most of this is done, however, by correspondence, which of itself alone is not always satisfactory, as many a valueless letter of recommendation is obtained through collusion with the applicant. By firms as well as by municipalities needing the services of employees of whose honesty, ability and character it is essential to be assured, the methods employed by the Bureau of Investigation of the New York City Civil Service Commission might be followed with profit, and a short resume of the work of this bureau may prove of interest.

After the civil service candidate has successfully passed the mental—and where necessary the physical—part of the examination, he is sent a blank form, called a "character sheet," by the Bureau of Investigation. This blank form provides for answers as to age, martial condition, residence for last ten years, employments since leaving school, details of education, and information as to arrests or summonses to court. This "character sheet" must be filled in and sworn to by every candidate and then returned to the bureau.

In conjunction with the statement of training and experience on examination papers, an investigation is then made of the statements contained in the character sheet, the search being especially thorough in the case of candidates for positions of a protective or instructive nature.

A number of cases are assigned to investigators daily, and they write to, or visit when necessary, all the concerns mentioned in the candidate's character sheet as being places where the applicant had been employed since leaving school. The candidate's martial affairs are also subject to scrutiny, and many have been disqualified for employment by reason of their not being lawfully married or legally divorced.

After replies are received to the bureau's letters of inquiry, and a search has been made of the police department files for arrests or summonses against the various candidates, the candidate is then sent for and questioned closely with a view to further verifying what the investigator has already learned. In this way discrepancies between the candidate's written statements and actual facts are often discovered, for it very frequently happens that the candidate will try to hide an arrest or an unsatisfactory period of employment, or claim or deny marriage or divorce when such is not the case.

When this is done, if the fault be a serious one, the candidate's name is removed from the list upon which it appeared. Where circumstances warrant, the name is placed upon the disqualified list, which means that he cannot enter the city service in any capacity.

Where mis-statements are made through error, or if intentional are not serious, the candidate is called before the Commission and given a lecture on accuracy and truthfulness, and then marked eligible for appointment.

The result of this system of investigation has prevented hundreds of undesirable persons from entering the city's employ, and saved the city much in money and reputation.  
—American City.

## BOOKS RECEIVED.

### International City Planning Conference.

We have received from the University Press, Cambridge, U.S.A., the Report of the Sixth Annual International Conference on Town Planning, which was held in Toronto last year. The volume which contains 360 pages with an index, is both a valuable record of the proceedings of the Convention, and because of the attractiveness of its get up and the splendid arrangement of the lectures and speeches, a perfect reference book for the student of Town Planning. It is not often one sees a convention report so well handled and we congratulate both the editor and publishers on their work.



# Municipal Finance

JAMES MURRAY.

## Sale for Canadian Municipals Good.

The sale of Canadian municipals during the last month has been exceptionally good, not only in the United States but amongst the large corporations of this country. The attraction to the American insurance companies and brokerage houses was the large interest yield which in the case of the older and more solid cities of the Dominion runs from 4.90 to 5½ per cent, while the smaller municipalities go as high as 6½ per cent. As yet the smaller Canadian towns have not been encouraged by American houses whose enquiries have been confined to our larger cities. This is largely because of the lack of knowledge on the part of American, and even Canadian, houses of the standing of the small municipalities of this country, and it has been fortunate for them that the Canadian insurance companies and mortgage houses, which know home conditions better, and consequently know the value of our municipal issues better, have diverted their funds from mortgages to municipal debentures. A further factor that helped the recent sales of Canadian municipals was the small margin that the bond houses were prepared to take, which not only enabled many of them to put through some large deals, but created a keener competition in buying, which benefitted the municipalities.

## The English Market and Municipals.

It has been asked in view of the British market closing to Canadian securities, and the opening of the American market for at least Canadian short term debentures and notes, if it is desirable that Canadian municipalities adapt themselves to the requirements of the American market—the principal requirements being short term bonds of ten years or for the life of the utility for which an issue is made. In the British market, on the other hand, long term bonds of at least forty years duration are the most popular; the different standards of the two countries being due to local conditions. The only sane answer to the query is "YES." Not that the American market will be our principal one in the future, but in adapting themselves to its requirements, Canadian municipalities will have trained themselves into a keener sense of personal responsibility, which cannot help but have its effect on the financial status of municipal Canada. But at the best the American market is but a temporary one for Canadian municipals. The British market when the war is over, will again become the great mecca for Canadian securities, for the reason that English investors will loan at lesser rates, and as each year goes by finds the municipal finance of this country on a firmer foundation, so the rate of interest at which Canadian municipalities can borrow will grow less and less as the strength of their securities' rise. And only the English market can meet these low rates. It has been pointed out that English municipalities borrow their money at very little more than 3 per cent, which is certainly not the case in the United States with all their ideas of perfected financial systems, because money is comparatively scarce, and consequently dearer, and it is the business of Canadian municipalities to borrow at the lowest rate of interest.

To find out the exact rate of interest, the municipalities in other parts of the Empire pay for their loans, this department has sent enquiries to the municipal authorities of Australia, New Zealand and South Africa, and as the answers come in they will be published in these columns. According to a volume just compiled by Mr. W. S. Cousins, Editor of the American Banker, the rate of interest that American municipalities have to pay for their loans is from 4½ per cent to 6½ per cent per annum.

## Governmental Supervision Over Municipal Sinking Funds.

The British Columbia Union of Municipalities is urging the municipalities of that province to place their sinking funds in the hands of the Provincial Municipal Department. This would be a wise move, if only to take away the temptation of using these funds for other purposes. There is no doubt that the indiscriminate use of sinking funds has had much to do in lessening the value of Canadian municipalities, and the sooner supervision is made over them, the better for the credit of municipal finance.

## Feeling Out the Market.

A short time ago a certain municipality called for tenders on a million dollar three-year note issue, with the consequence that over a dozen bond houses tendered, the high-

est bid, reaching a 5¼ basis, but the whole of the offers were turned down, the explanation being not that the price was too low, but that they wanted to "feel the market." This system of feeling the market may be thought desirable by some municipalities, but in every case where it has been tried it has resulted in ultimately having to accept a lower price, and it is certainly not conducive to the popularizing of Canadian Municipals. In the said case a responsible Chicago house had sent its representative to attend the meeting, and he was not even given the courtesy of being told by the officials the price of the bids, and he had to find out by other means.

There is also another phase of bond tendering that seems to escape the minds of those who practice the "Feel the market" system, and that is that every bond house when tendering must make arrangements with its bank, which means the tying up of much money, at least for a time. This the bond houses must accept as their part of the business, but it must be galling for them to find out afterwards that some issue was but a feeler, particularly, when in addition the dealers have to spend good money in investigating because of the insufficient data too often sent out with the tender forms.

This brings me to another case of officialdom effecting a municipal issue—not in the underwriting this time, but in facilitating the sale of the bonds. A bond house had bought a large block of an issue and had already resold it, provided details were secured as to how certain assets and liabilities were made up—this information not being given when the issue was underwritten—and the bond house at once wrote the secretary-treasurer for the desired information. This was refused, the stupid explanation being the accounts had not passed the auditor—the gross amounts evidently had. The consequence was that the client would not wait until the chairman of finance had rectified the matter, and the bond house lost the sale. It comes right down to this, that the municipalities must instruct their officials to answer at once any financial enquiry if they want to borrow money on the best terms. The municipalities of this country have nothing to hide—though some people think so—and yet it is much easier for an investor or anyone else for that matter, to obtain official information of the standing of an industrial corporation, than what it is to obtain official information of a Canadian municipality. Why, I don't know. Municipal officials are supposed to have the same amount of intelligence as company officials. Perhaps it is because the municipal official considers himself too superior. Be that as it may, if the municipal finance of this country is to occupy the high standing it should, the municipal officials must be brought to their responsibility, which is certainly not in giving evasive replies to—when not ignoring altogether—enquiries.

## MUNICIPAL SECRETARY TREASURER.

Mr. John Pierre, the Deputy Minister for Municipal Affairs in referring to municipal secretary treasurers before the convention of Alberta Association of Local Rural Municipalities that was held last month said: "Where a change of Secretary Treasurer is being taken into consideration in connection with the possible reduction of salary, that the municipalities should go slow in recommending any change as I have no hesitation in saying that in the majority of cases where a change is made because of the reduction in the amount of salary paid that such change has been poor economy; . . . On the shoulders of the Secretary Treasurer must rest to a great extent much of the burden of financing the District or Municipality, and the proper handling of this work means a great deal to the District or Municipality. It not only means better conditions in connection with the carrying on of the work of the year, but if the business arrangements are such that obligations are promptly met, the municipality soon acquires a reputation for carrying on business in a businesslike way that is worth a great deal to them in many ways."

This is sound advice and coming from a man of Mr. Pierre's experience in municipal affairs should go far in staying the hands of those municipalities whose notion of economy is to cheapen the position around which is built up the superstructure of the body civic and financial.

**QUEBEC MUNICIPAL STATISTICS.**

The Province of Quebec has issued a new volume of municipal statistics, which is a great improvement on previous books issued by the Provincial Secretary on this Branch. But, though the statistics are only just published they are for 1913, not 1914. It is possible that now the provincial authorities are beginning to realize the importance of the municipalities, they will soon issue another one more up-to-date. One would suggest in compiling the urban centres, that the next publication give all the towns and cities, for I notice that the City of Verdun is not mentioned, and the City of Sherbrooke, though given, has no figures mentioned. If the official, who has charge of compiling the work, is shy of information, this department of the Journal is always at his disposal.

**CANADIAN MUNICIPALS IN U. S. A.**

As showing the interest in Canadian municipals in the United States the following question and answer taken from Moody's Magazine, for March, a financial monthly of reputation published in New York, is worth repeating.

Q.—Will you kindly suggest one of two municipal bonds yielding 5 per cent and two yielding 4½ per cent that are first class for investment and give the security back of them?

A.—On account of the fact that investment of this character are for the most part handled privately by a few specialists it is extremely difficult to gauge the market supply at any given time. Issues that we might suggest today from the list of general offerings might not be available at all tomorrow. As illustrating the general character of municipal bonds selling on a basis of 4 1-2 per cent or thereabouts, we might name Los Angeles, or Oakland, Cal., 4½s. Of those selling to yield in the neighborhood of 5 per cent, some of the most popular or recent offerings have been those of Canadian municipalities, like Toronto and Montreal. These are all very attractive investments. But, as we have said, it is difficult to tell whether these or any other specific issues will be available when this is received by the reader. The very best way to get into touch with the municipal market is to establish direct connections with some responsible and experienced banking house specializing in such securities.

**MUNICIPAL ISSUES IN SOUTH AFRICA.**

As showing the way the citizens of South Africa take up their own bonds, the following taken from South African Commerce will be of interest:—

"The £350,000 Durban Municipal loan has been successful. The lists closed on the 12th of last month. The South African applications amounted to £320,320, and the overseas applications to £67,600, the loan thus being oversubscribed. The Union applications were received as follows:

Durban . . . . .	£103,050
Maritzburg . . . . .	30,850
Natal (other parts) . . . . .	40,475
Cape Town . . . . .	67,370
Port Elizabeth . . . . .	800
Kimberley . . . . .	1,025
Cape Province (other parts) . . . . .	23,700
Johannesburg . . . . .	7,925
Pretoria . . . . .	1,875
Transvaal (other parts) . . . . .	10,500
Rhodesia . . . . .	2,200
Bloemfontein . . . . .	1,400
Orange Free State (other parts) . . . . .	950

The Durban Corporation's second loan for £100,000 was closed on the 22nd January; it was oversubscribed to the extent of £10,000. The greater proportion of the loan was applied for in the Cape Province.

**MUNICIPAL BOND SALES IN U. S. A. FOR 1914.**

This work, which is compiled by W. S. Cousins, Editor of the "American Banker," is one of the most useful volumes for the bond dealer and banker, now that Canadian municipalities are looking to the American market to place their issue. A copy should be on every municipal book shelf, as showing the list of American houses, and every issue and its price that has been made in the United States during 1914. The book must have entailed an enormous amount of labor, and Mr. Cousins deserves great credit for the thoroughness with which he has accomplished his object. The work is published by the Steurer Publishing Co., New York.

Messrs. A. E. Ames, Toronto, in their March issue are offering some good investments in municipals, including City of Toronto 4½, City of St. Catharines 5 per cent, City of Brantford 5 per cent; City of Brandon, Man., 5 per cent; Town of Smith's Falls, 5½ per cent; Town of Transcona, Man, 5½ and 6 per cent.

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**BILL FOR LIMITING OF MUNICIPAL BORROWINGS.**

The following bill was introduced in the Ontario Legislative Assembly by Mr. McPherson, M.L.A., on March 16, where it passed its first reading. At the time of going to press the bill is being considered in Committee.

**BILL.**

**An Act to Amend the Municipal Act—Ontario.**

1.—The Municipal Act is hereby amended by adding the following Section immediately after Section 300:—

“300A—(1) The aggregate debt of cities, towns and villages, respectively, shall not exceed the following amounts:

- (a) In Municipalities having a population of not less than ten thousand the aggregate debenture debt, exclusive only of sinking funds actually on hand shall not exceed the sum of \$200.00 per head of the population of such municipality as shown on the last census of such municipality.
- (b) In Municipalities having a population of not less than two thousand, and not exceeding ten thousand, the aggregate debenture debt, exclusive only of sinking funds actually on hand shall not exceed the sum of \$150.00 per head of the population of such municipality as shown on the last census of such municipality.
- (c) In Municipalities having a population not exceeding two thousand the aggregate debenture debt, exclusive only of sinking funds actually on hand shall not exceed the sum of \$100.00 per head of the population of such municipality as shown on the last census of such municipality.

Provided that the Ontario Railway and Municipal Board may authorize a Municipality to incur a debt or debts which will increase the aggregate debenture debt of such municipality to an amount exceeding the limitations above mentioned by an Order made on the application of the Municipality after two weeks notice has been given by the applicant to all persons to whom such municipality has sold any of its debentures within three years next preceding the date of service of such notice, and such notice may properly be served by mailing the same in a prepaid registered letter addressed to the purchaser or purchasers at his or their address.”

2.—The Assessor of every city, town and village shall make an annual census of all persons resident in the municipality, and the said census shall be completed and returned by the Assessor to the Clerk of the Municipality, at the same time as the Assessment Roll or Rolls are completed and returned.

3.—Any Assessor or other Municipal Officer who shall wilfully make an incorrect census return shall incur a penalty of not more than \$—, nor less than \$—, recoverable under the Ontario Summary Convictions Act.

4.—The provisions of this Act shall be in addition to, and not in substitution for, Sections 297 to 300, both inclusive, of the Municipal Act.

Section 288, sub-section 4 of the Municipal Act is amended by adding the following to the end of said sub-section:

“Provided that each annual instalment of principal may be for an even \$100.00, \$500.00, or \$1,000.00, or multiple thereof, and that notwithstanding anything hereinbefore contained, the annual instalments of principal and interest may differ in amounts sufficient to admit thereof.”

Section 288, sub-section 4 of the Municipal Act is amended by adding the following as sub-section 4A:—

“4A—A money by-law may provide for the repayment of the principal of the debt by equal annual instalments of principal during the period of years within which the debt is payable, and in such case there shall be issued one or more debentures for each annual instalment of principal, and each of such debentures shall have coupons attached thereto for payment of the interest, annually or semi-annually, as the by-law may provide, on the principal sum secured by such debenture during the currency thereof.”

Section 288, sub-section 5 is hereby amended by inserting the words and figures “and 4A” after the figure “4” in the first line of said sub-section, and by inserting after said sub-section 5 as to amended the following:—

“In the case provided in the proviso to sub-section 4 it will be a sufficient compliance with this section if the money by-law provides for raising in each year, in which an instalment becomes due, a specific sum not less than the smallest annual payment of principal and interest, and the municipality shall raise in each year any further amount necessary to make up the total payment for principal and interest falling due in any year.”

**RURAL MUNICIPALITIES AND SURTAX**

For the first time the rural municipalities of Saskatchewan have collected the new surtax of \$10 per quarter section on unoccupied land. The result has been to furnish many of them with ample funds, even in war time. The Grain-Growers' Guide speaks of one municipality which in December took in \$5,000 from the surtax alone, in addition to the revenue from the ordinary taxes on non-resident speculators.—Toronto News.

**SASKATOON'S TAX LEVY FOR 1915 CALLS FOR \$775,039.61.**

This year, Saskatoon's total tax levy will amount to \$775,039.61, which is \$241,127.52 less than for 1914. The following is the manner in which the levy is made up for the year 1915:—

Tax for municipal rate on assessment of \$48,207,715, 10½ mills . . . . .	\$ 506,181.00
Tax for library rate on do., 1-15 mill . . . . .	3,213.85
Tax for high school on do., 7-10 mill . . . . .	33,745.40
Tax for public school on assessment of \$47,660,505, 4½ mills . . . . .	214,471.84
Tax for separate school rate, assessment of \$3,485,505 5 mills . . . . .	17,427.52
<b>Total.. . . . .</b>	<b>\$ 775,039.61</b>

**CALGARY FINANCE.**

On the recommendation of the Finance Committee, the Calgary City Council has decided that all mortgages held by the city now due or accruing during the year 1915 be extended at the request of the mortgagor, but that such extension will not include any additional loan over and above the amount necessary to pay taxes and arrears of interest on the property, and that any such extensions shall bear interest at the rate of seven per cent annually.

The Council also decided that no further applications for loans out of the sinking fund be granted during 1915.

**GOOD BUSINESS.**

The rather keen bidding for the several small issues of Ontario debentures that were up for tender this week indicates that the market is not at all over-stocked with this class of security. In fact, the opposite is the case. Prices, moreover, are ruling firm, if not somewhat higher. Individuals are buying bonds as they have not done for some time past, and enquiries are reported to be quite good. One dealer remarked this week that his enquirers ranged from Prince Edward Island to Dawson City. Furthermore, money is accumulating and finding little outlet in commercial activities. These are indications that the municipal bond market will continue to exhibit strength, if not briskness.—Financial Post.

**PAYING OFF DEBENTURES ANNUALLY.**

From the Financial Post, we understand that Mayor Walters, of Hamilton, with City Treasurer Leckie, City Clerk Kent, and City Solicitor F. R. Waddell, K.C., have discussed with Wood, Gundy and Co., who have an option on \$700,000 worth of debentures that the city wants to sell, the question of reverting to the old system of paying off debentures at so much per annum, instead of continuing the present system of making the debentures payable at the end of twenty years, and paying so much a year into a sinking fund, from which to pay off the total amount of the debentures at the end of the twenty year period.

The members of the financial firm, says the Herald, commended the reversion to the old system and stated that the city could save considerable money by it. At a council meeting this matter was reported on by Mayor Walters and the by-law passed last year authorizing the issue of \$200,000 worth of debentures for school purposes was rescinded, and another by-law passed to make the debentures payable yearly in certain amounts, something after the system of annuity payments.

It was explained that the saving on the \$200,000 issue would amount to \$8,322. Mayor Walters announced that the half million dollars' worth of local improvement debentures would be sold on the same understanding, which would mean a further large saving.

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Cobalt	Palgrave	Brandon	Red Deer
Cottam	Port Arthur	Portage la Prairie	Wetaskiwin
Cochrane	Port Colborne	Winnipeg (2)	
Elk Lake	Port Robinson		
Essex	Preston		British Col'ba
Fergus	Ridgeway	Saskatchewan	Athelmar
Fonthill	Saulte Ste.	Balgonie	Arrowhead
Fort William	Marie (3)	Broadview	Chase
Galt	Sth. Porcupine	Fort Qu'Appelle	Cranbrook
Hamilton	Sth. Woodslee	Hague	Fernie
Harrow	St. Catharines (3)	Kandahar	Golden
Humberstone	St. Thomas (2)	Mooseaw	Kamloops
Ingersoll	St. Davids	Nth. Battleford	Nelson
Jordan	Sparta	Prince Albert	Natal
Vineland	Thessalon	Regina	Revelstoke
Kenora	Timmins	Rosthern	Vancouver (4)
Listowel	Toronto (17)	Saskatoon	Victoria (2)
London	Welland (2)	Wilkie	
Marshville	Woodstock	Wynyard	

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**ASSESSMENT IN REGINA.**

The new form of assessment decided upon at Regina has attracted wide spread attention and many enquiries have been received from Canadian cities for details of the scheme. A. W. Pool, finance commissioner for the City of Regina, when asked for a statement as to the scheme, outlined it in the following words:

I have noticed some comment in the press, local and otherwise, to the effect that the new departure in assessment here is by way of an experiment, under which the ratepayers are being allowed to make the assessment for this year. This is entirely a misconception, as the change in system is not an experiment in any way, but merely an adaption of the system already in vogue in a number of the larger American cities and which has been proven a success over a period of years. Neither is it correct that the departure allows the ratepayers to make their own assessment, the opinions of the ratepayers or a certain number of them being taken only as a guide and check for the Assessor and Assessment Department in arriving at the assessment.

The underlying theory of the departures that the assessment figures should have the widest possible publicity, both in the initial and final stages of preparation, and that this is a desirable practice is, I think, endorsed by practically all excessment experts. Regina has, amongst Western Cities, a name for conservatism in the administration of its finances and city business generally, and the new departure in assessment is, in my opinion, in line with its conservative policy. It is generally conceded that the Western Cities are now passing through the same stage of growth that the Cities of the Western States of the U. S. A. passed through fifteen or twenty years ago, consisting of periodic booms and depressions, the booms being generally speaking, caused by real estate speculation. Regina, in common with the other Cities of the Western Provinces, suffered from inflation of its realty assessment as a consequence of the 1912 boom in real estate; and while the inflation was not very great, it was generally recognized as being undesirable, and it was felt that a period of depression, such as the present, was an opportune time to re-adjust and place the assessment on a sound basis of actual realty values in normal times, and having so placed it, to endeavor to retain that basis of valuation; and, as a preliminary, a considerable number of the ratepayers, selected as having knowledge of realty values, were circularized and invited to express an opinion as to the value of a certain properties indicated in various portions of the City. The response to the invitations was fairly general and the majority of the opinions appear to have been based on careful consideration and expert knowledge and are satisfactory from the point of view of the Assessment Department.

The next step was the appointment of a strong Assessment Board of five members, four of whom are private citizens and not connected in any way with the Civic administration. This Board will, from the data supplied by the ratepayers and that in possession of the Assessment Department, make an initial assessment which will be thrown open to public criticism and suggestion, and which will be then revised and a final assessment made. If it is found that the system is generally satisfactory the method of giving effect to it in 1916 and following years will be to send to each ratepayer, with his Tax Notice for the current year, a map showing unit values of the then assessment throughout the whole City and inviting any criticism or suggestions, thus giving all concerned full information as to values and an opportunity to place on record any suggestions which they may care to make. It is hoped in this way to obtain an annual assessment giving general satisfaction to the ratepayers and at the same time to give the greatest possible publicity to the assessment figures.

It is felt that from the investors' and bond holders' point of view the assessment is the basis of the security which the City has to offer for its bonded indebtedness, and that any system, therefore, which meets with general approval and produces an assessment undoubtedly based on actual realty values will be entirely satisfactory and will assist in maintaining the reputation for conservatism and sound financing which, as I have already mentioned it is believed that Regina possesses, and it is with this in view that the change in the assessment system has been made.

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# FINANCIAL NOTES

## \$110,000 SCHOOL DEBENTURES BEING PLACED ON MARKET.

Shortly the Saskatoon School Board will offer for sale \$110,000 thirty-year six per cent debentures. This issue was authorized a short time ago and at a special meeting of the school board recently the secretary was instructed to proceed to have debentures lithographed and placed with the agents of the board for sale.

## OTTAWA TO HAVE RATIFIED RECENT BOND ISSUE.

The Board of Control has decided to ask for special legislation to ratify the million and a half dollars' worth of debentures recently sold to Messrs. Wood, Gundy and Co., of Toronto, by the city. Having the debentures ratified in this way will mean the expenditure of an extra \$500 to the city, but it was decided that it is better to expend the money so that no complaints may be made by the purchasers of the debentures in future. Alexander Bruce, K. C., solicitor for the financial firm, wrote the board calling attention to a number of technical omissions in the forms upon which the debentures were issued. He said that a number of the works completed under by-laws had not received the approbation of the Provincial Board of Health, and in a number of instances the Railway Board should have approved of the by-laws. City Solicitor Proctor recommended that the special legislation be applied for as the safest course for the city, and the board agreed to this procedure.

## NEW ASSESSMENTS.

The St. John, N.B., Board of Trade is looking into the assessments of other cities of Canada, and of the United States, with a view to suggesting a change in the present Assessment Act of the city, when a commission for that purpose has been appointed. The City Council had forwarded to the Legislature an amendment which contemplates the complete exemption of incomes of \$1,000, the partial exemption of \$2,000 incomes, a reduction of pool tax, and some other changes.

## PREFER LONG TERM BONDS.

In Regina no less than three requests for options to purchase short term city securities have been turned down by the council within the last week, the Aldermen being of the opinion that peddling securities during option period is prejudicial to the city's financial interests. They also decide that long-term bonds are better financing than two or three year treasury bills. In two instances the offers involved options for a million dollars, and all three offers were for securities payable in New York.

## EDMONTON, ALTA.

The city of Edmonton, Alta., has placed a loan for \$1,000,000, in five per cent one-year notes with New York bankers.

## WALKERVILLE, ONT.

Amelius Jarvis and Co., of Toronto, have bought the recent issue of Walkerville, Ont., calling for \$79,238.14 at 5 per cent.

## SANDWICH, ONT.

A. E. Ames, of Toronto, were the successful tenderers on an issue of \$55,000 ten-year debentures. The price being 100.871.

## MINNEDOSA, MAN.

C. H. Burgess and Co., of Toronto, were awarded the \$3,500 six per cent 20-instalment local debentures of Minnedosa, Man. The accepted bid being \$3,158 (90.228) and interest. There were three other bids.

## OAKVILLE, ONT.

Wood, Gundy and Co., of Toronto, recently purchased the \$10,000 6 per cent authorized by the Council of Oakville, cent 30-instalment fire-fall debentures Ont., during January.

## ST. THOMAS, ONT.

The city council of St. Thomas, Ont., has closed a loan of \$150,000 from Eyer and Co., New York City, at 5½ per cent for one year.

## TAX ARREARS.

On the recommendation of the Finance Committee of the Point Grey Council, British Columbia, proceedings will be commenced immediately for the recovery of arrears of taxes by action in the courts; also, that a tax sale be held at the earliest opportunity.

## \$8,900 IS WAR TAX STRATFORD MUST PAY.

The Ontario Government's plan to levy a special war tax of one mill on each dollar of the assessable property in the province means that Stratford will be called upon to contribute approximately \$8,900 annually.

## KAMLOOPS, B.C.

A by-law was introduced in the legislature to authorize the city of Kamloops, B.C., to raise \$80,000 for hydro-electric purposes.

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## ST. CATHARINES, ONT.

The city of St. Catharines is passing a by-law authorizing the issue of \$32,000 for the purpose of paying a floating indebtedness of the corporation caused by the difference in the amount realized from the sale of certain issues of debentures during 1914 and 1915 and par value of same.

## COLLINGWOOD, ONT.

C. H. Burgess and Co., of Toronto, were awarded \$7,000 Town of Collingwood 5 per cent debentures, maturing in 30 annual instalments and carrying County of Simcoe guarantee.

## OAK BAY, B.C.

The Dominion Securities Corporation has purchased \$141,000, 5½ per cent debentures of Oak Bay, B.C., maturing in 10 and 20 years; also, \$82,000, 6 per cent debentures of Kamloops, B.C., due in 10 and 15 years.

## NEW GLASGOW, N.S.

New Glasgow, N.S., contemplates issuing bonds for \$5,000 for school purposes.

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**PETERBORO, ONT.**

The board of works is considering the use of asphaltic oil on the streets. R. H. Parsons, City Engineer.

**MONTREAL, QUE.**

A report was presented to the board of control from Mr. Barlow, superintendent of roads, asking for slightly over \$200,000 for repairs to roadways and sidewalks of Montreal.

**WALKERTON, ONT.**

The contract for road oil for this year was awarded to the Imperial Oil Company, at 6 cents per gallon.

**RESIGNATION.**

F. McArthur has resigned his position as city engineer of Regina, Sask. L. A. Thornton is now both city commissioner and city engineer.

**A GENTLEMAN.**

The mark of a man of the world is absence of pretension. He does not make a speech, he takes a low business tone, avoids all brag, promises not at all, performs much.—Emerson.

**PAN AMERICAN ROAD CONGRESS.**

Preliminary plans were completed at a meeting in Montpelier, Vt., last Thursday the 18th inst. for what promises to be the largest gathering of good roads advocates ever held. This meeting will be held at the Panama-Pacific International Exposition, and will be known as the Pan-American Road Congress. It will be under the joint auspices of the American Road Builders' Association, and the American Highway Association. The tentative date selected is that of the week of September 6th.

The plans for the forthcoming congress will be handled by an executive committee of five. This committee is made up of Governor Charles W. Gates of Vermont, Chairman; W. W. Crosby, former State Highway Engineer of Maryland and E. L. Powers, Editor of "Good Roads," representing the American Road Builders' Association, and James H. MacDonald, former State Highway Commissioner of Connecticut, and J. E. Pennybacker, Chief, Division of Economics, U. S. Office of Public Roads, representing the American Highway Association.

**LARGE ORDER FOR LONDON FIRM.**

The city of Winnipeg is spending \$4,000,000.00 during the year 1915 on the construction of an aqueduct eighty miles long connecting Winnipeg with Shoal Lake. This project is known as the "Winnipeg Great Waterway." The aqueduct is constructed entirely of cement and is one of the largest undertakings in cement up to the present within the Dominion of Canada.

This aqueduct will be used to supply water to the City of Winnipeg and is constructed in the form of a large egg-shaped pipe averaging about twelve feet in diameter on the inside. This enormous concrete pipe will be carried a distance of eighty miles through marsh, hills and rocks, and is considered one of the greatest pieces of engineering yet attempted within the province of Manitoba.

The contract for the greater portion of the work has been let to a new firm known as the Winnipeg Aqueduct Company, Ltd., formed by the amalgamation of the Northern Construction Co., and Carter, Hall and Aldinger. The Winnipeg Aqueduct Company called for tenders for 6% yard batch concrete mixers. Practically every firm in Canada and the United States tendered for the order. The entire order, amounting to about \$8,000.00 was let to the London Concrete Machinery Company.

**TAXING IMPROVEMENTS.**

Mayor Church favors the taxing of improvements on a lower basis than land. This is so eminently sound and has been so long and so fully discussed that argument is unnecessary. There should be no difficulty about securing the necessary authority from the Ontario Government.—Toronto Globe.

**LEARN TO WORK INTENSELY.**

It is a good rule to endeavor, hour by hour, and week after week, to learn to work hard. It is not well to take four minutes to do what you can accomplish in three. It is well to learn to work intensely.—Charles W. Eliot.

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H.W.B.



**MUNICIPAL CONTROL FOR CITIES OF FIRST CLASS IN KANSAS.**

Senator E. F. Porter, of Crawford, Kans., recently introduced a bill in the state senate providing for municipal ownership of telephones in cities of the first class.

**SMALL DEATH RATE.**

The State of Washington shows a smaller death rate of any of the United States. Washington has a number of women food inspectors, who look closely after sanitation, and it is said of be the only State that has a woman on the State Board of Health. Incidentally, it is also a State where women vote.

Deaths of infants under one year per 1,000 births, by cities:

Lowell, Mass . . . . .	23.1
Fall River, Mass. . . . .	18.6
Detroit, Mich. . . . .	17.9
Seattle, Wash. . . . .	8.2
Los Angeles, Cal. . . . .	9.7
Dunedin, New Zealand . . . . .	3.8

(The three last-named cities are in states or countries where women have the ballot.)—New York Tribune.

The large amount of road work contemplated in Canada during the immediate future has induced the Imperial Oil Company to place on the market the full line of road oils, binders and asphalt manufactured in Mexico and refined in the States, known there as the "Standard" Products. For many years Standard road products have enjoyed a high reputation and, with their own steamers and splendid facilities through their many branch offices, The Imperial Oil Company will be able to place these goods successfully on the Canadian Market.

**VOTES FOR WOMEN.**

Recently a large number of delegates from the various women's organizations throughout the province, met at Regina, the result being the promotion of The Provincial Equal Franchise Board of Saskatchewan. Its name implies the aim and object of the organization. However, it was decided that no active campaign would be conducted during the war, notwithstanding the impression of the gathering that the present moment was propitious. Meantime, the central committee will arrange a systematic scheme of educational work, and also get into touch with speakers calculated to espouse the cause eloquently. The matter of the Board's constitution has been left with a sub-committee. It was generally anticipated that sooner or later the agitation for female suffrage would take active form. It has been brewing now for some considerable time.

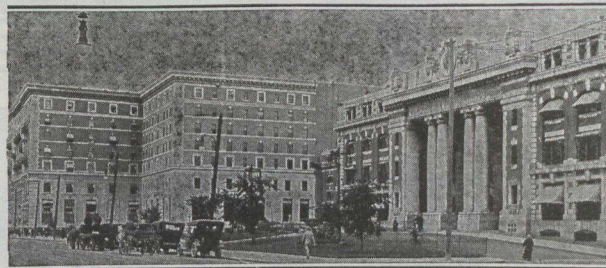
**PROVINCIAL ROADS.**

The financial situation is difficult and the Ontario Government is called upon to make many extraordinary expenditures, but it would be a pity if the good roads programme outlined a year or more ago were wholly postponed because of the war. Great progress was made by Government surveyors in all parts of the Province last year. Detailed descriptions of existing highways were obtained, together with full particulars as to local and through traffic and as to material locally available for construction purposes.

There are, and will be while the war lasts, many able-bodied unemployed in the cities. If the farmers need one thing more than another they need better roads over which to haul their produce to market or the railway station. If construction work can be financed on a number of Provincial highways during the coming spring, summer and autumn direct benefits will accrue to both urban and rural communities. The Government is giving this problem its most earnest consideration, and doubtless the good roads programme will be proceeded with as rapidly as revenue and money market conditions permit.—Toronto News.

**LANDING THE BIG JOBS.**

There may be a way of landing the big jobs other than working up to them. But don't try it. There is more work in trying to find that way than there is in the straight climb.—Everett R. Roeder.



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**USING THE PUBLIC TELEPHONE IN LONDON.**

Notices, printed in heavy black type, can now be seen in London and suburban post offices, bearing on the use of the public telephone. Readers are informed that before using a public telephone station in a post office, one must apply to the counter first before trunk line calls are made. The notice also states that two persons may not enter a silence cabinet together or successively for the same fee. The "silence cabinet" is, of course, the telephone booth.

**TELEPHONE PATROL SYSTEM FOR MOUNTED POLICE.**

The Canadian patrol system, with telephones at each point where the police "make their posts" will be put into effect in Louisville, Ky., in the near future over a large section of the southern and western parts of the city, the sections which are patrolled by mounted policemen. This is in accordance with plans which have been worked out by the chief of police and approved by the board of public safety.

There will be 24 mounted police in this branch of the service and the system will be worked out so that once each half hour every man visits the telephone station, at a central station some one of the policemen will be on duty 40 minutes out of each hour.

The large amount of Macadam roads finished with a binder has opened up a broad field for the refineries of road oils and binders. The Asphalt & Supply Company who represent the well known Mexican interests of Lord Cowdray, in Canada, have just completed arrangements to place on the Canadian market "Fluxphalte," a new asphalt macadam binder, which has enjoyed a splendid reputation in Great Britain.

The Company have leased space on the wharves at Montreal, where they will erect storage tanks to hold 160,000 gallons of "Fluxphalte" and fuel oil. They have also placed on the market a special "Fluxphalte" spreader, which will be loaned and not sold outright.



Constructing Penetration Road with Standard Asphalt Macadam Binder "B" Ville St. Pierre, near Montreal, Que.

# STANDARD

## MEXICAN

# ASPHALT

## MACADAM

## BINDERS

The penetration method of road construction has found great favor because of its low initial cost, ease of construction and ability to withstand heavy and fast traffic. The maintenance cost of roads of this type is almost negligible; roads constructed with Standard asphalt macadam binder have successfully withstood the heaviest kind of traffic for over four years and have shown no signs of disintegration.

Municipalities contemplating road construction will find this Company unusually well equipped for making prompt deliveries of asphaltic road materials at any point in Canada.

For analyses, prices and any further information address our nearest office.

**THE IMPERIAL OIL COMPANY,**  
 Limited  
 BRANCHES IN ALL CITIES

