

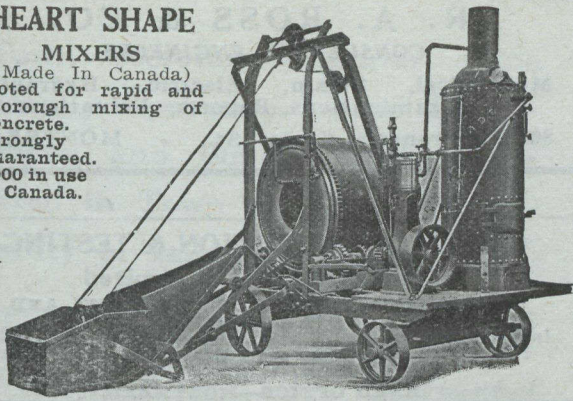
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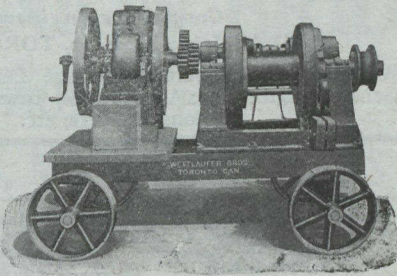
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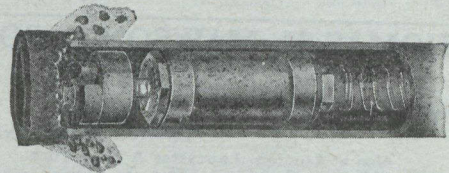
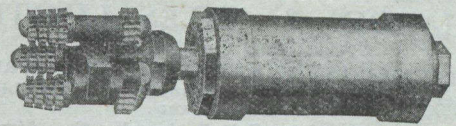
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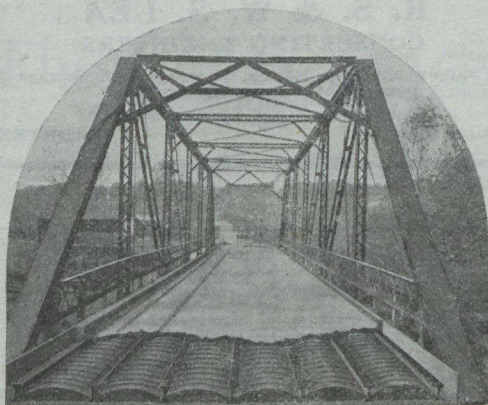
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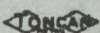
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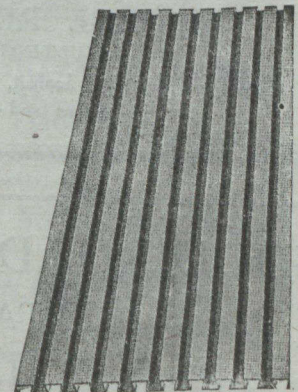
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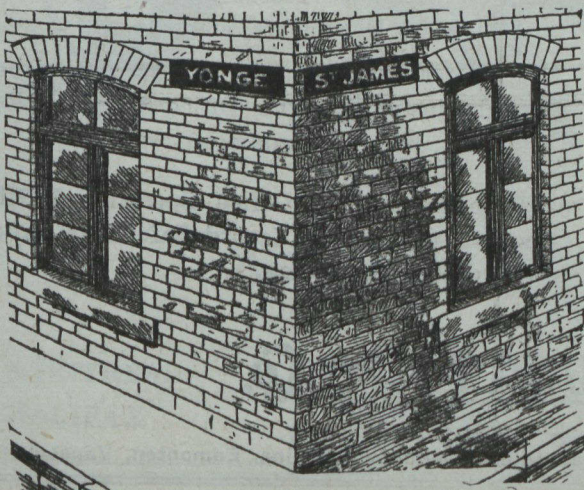
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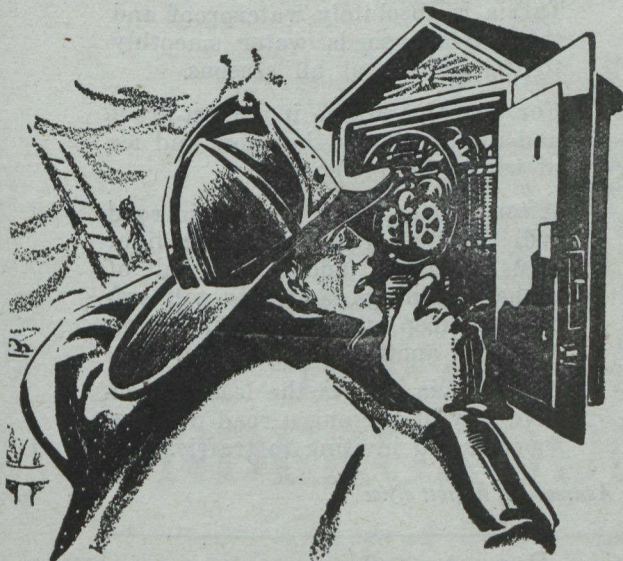
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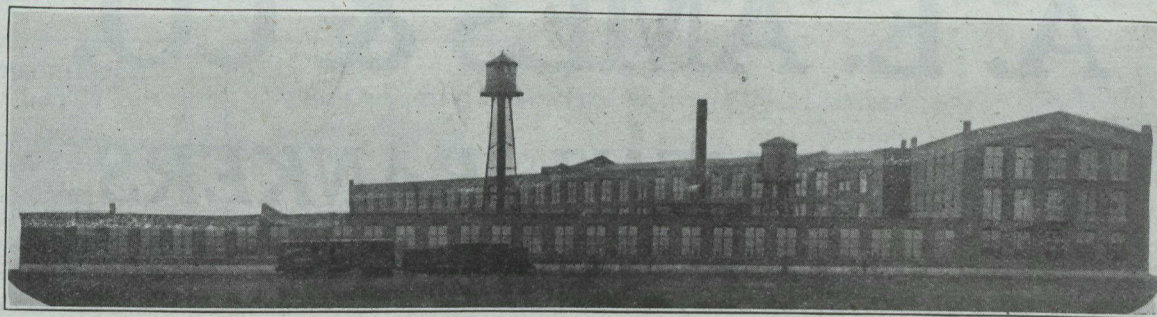
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VOL. XIII

APRIL, 1917

NO. 4

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SIXTEEN OUNCES—ONE POUND.

The Canadian Fisherman, which is the official organ of the Canadian Fisheries' Association, in a recent editorial, takes up that much discussed problem of how to secure honest weight, particularly in canned goods. Our contemporary is to be congratulated for its strong stand on the question, even to condemning the Department of Fisheries in suggesting that "a pound tin (of fish) shall contain not less than fourteen ounces of meat." If all our national associations had organs as fearless in "playing the game" as is the Canadian Fisherman, they would be better respected, for then the public would feel that such associations had not been organized for self protection and interest only but for public protection against the sharks of the producing and distributing industries as well.

The article, in part, reads as follows:

"Sixteen Ounces—One Pound."

He were taught the above in school, and it still holds good. However, in this modern age, the old law of avoirdupois becomes strangely controverted. The innocent consumer goes into a store and buys a pound of tea. The grocer hands over a package containing tea which weighs one pound — weight of package included. Instead of receiving a pound of tea, the consumer receives about 14 or 15 ounces. The same holds good with various other kinds of package and canned goods, though there are some lines which put up their articles nett weight exclusive of package.

In various lines of canned goods, one finds in purchasing a so-called 1 lb. tin, that it is certified to contain less than 14 ounces of meat, fruit, etc. We presume the deficiency is for the purpose of defraying the cost of the package and to make the price appear reasonable.

A well known Canadian packer of canned fish calls our attention to certain provisions of the proposed "Fish and Shellfish Cannery Inspection Act." Section (e), Paragraph 27, states:

"Descriptive matters on the label shall be free from

any statement, design or devise regarding the fish, etc., which is false or misleading in any particular." Sections (b) and (c) of the same paragraph state "that a true and correct description of the contents of the can and the nett weights of the fish shall be plainly printed in a conspicuous place on the label."

All of this is in order and very proper, but the Department of Fisheries, in a communication to canners accompanying the draft of the Act, states: "The Department is in possession of information to the effect that it is highly advisable to explicitly provide for the uniform net weight of the meat to be contained in each can, rather than leave the weight to the discretion of each individual canner. It is proposed, therefore, that the following provisions be made:

1 pound can shall contain not less than fourteen ounces of meat.

¾ pound can shall contain not less than ten and one-half ounces of meat.

½ pound can shall contain not less than seven ounces of meat.

Unusual weights shall contain an amount of meat in proportion to the weight of the can used."

From the standpoint of a consumer, and having the best interests of the Canadian fish canning industry at heart, we cannot endorse this deception. A one pound can should contain one pound of meat exclusive of the weight of the can, and at the rate of sixteen ounces to the pound — the other weights in a similar ratio.

Short weights, however honestly they may be made under duly legalized provisions, are to be deprecated. The public is beginning to wake up to these things, and the High Cost of Living has set machinery in motion which is rousing the consumer to demand value and weight for money paid. Full weight packing may raise the cost for the goods, but the public will always pay for full weight, and same should be marked on the can.

Legislation, countenancing short weights, establishes bad precedents. If it continues, the consumer will be purchasing cloth at 32 inches to the yard; coal at 1,950 lbs. to the ton, and so on. The day will come when everything will have to be standardized in weight and measure. Let the Fish Canning Industry of Canada standardize everything now and keep to the old avoirdupois rule of 16 ounces to one pound — exclusive of the package.

THE CANADIAN SOCIETY OF CIVIL ENGINEERS.

We congratulate both the Canadian Society of Civil Engineers and Mr. J. S. Dennis in the election of the latter to the presidency. The new president is not only one of the big engineers of Canada, but one of the real live wires in the building up of the country, and if he would but impregnate the Society with some of his ideas good results might accrue. In the selection of Mr. Fraser S. Keith, B.Sc., to succeed Professor C. H. McLeod, (who has served the Society as secretary treasurer for twenty-five years), to give the whole of his time to the work, the first step has been taken in a more progressive campaign. We hope that part of the propaganda will be the better protection of its own members against the inroads of engineers from the south of the line who have for some time past been gradually taking away much of the business from our Canadian engineers—members of the Society. This is seen, especially in many of our municipal councils, particularly in the West, who seem to have made quite a practice of engaging engineers from the United States to carry out special work. Evidently there is some reason for this, for we can

take it that the Councils are not particularly partial to the American consulting engineer or expert. We have been given to understand that every piece of special engineering work that has been completed for the municipalities by Americans, could have been done equally well, or better, by Canadian engineers. But how are the Councils, which are not made up of technical men, to know the Canadian specialist? We would suggest that this is a task that the new regime of the Society of Civil Engineers should undertake. But first we would make another suggestion, that admittance to the Society be along broader and more practical lines, so that a better chance would be given to municipal and roads engineers who have not passed through the universities and have not any very special showy work to their credit, but who nevertheless have done, and are doing, good solid work. The fact that these local engineers, on whom the Councils depend for advice, being members of the Society would give them a better line on the consulting engineers of Canada with beneficial results to the society and the communities.

"PENSIONS" OF RETURNED SOLDIERS.

"The Khaki League is finding its greatest work in filling up the gap which exists when the returned soldier is finally discharged. Everything stops for him at once; pay, allowance, Patriotic Fund, medical treatment, all cease, and he is left with too often a meagre pension and a capacity for self-support below the normal pre-war condition."

In the above words, Mr. A. R. Doble gives the reason for the splendid work of the Khaki League. But what an awful indictment of Canada's spirit of gratefulness to those who have given of their best. Wounded, but discharged with a pension of \$11 per month, although not sufficiently strong to take a job, and wife compelled to go out working to earn enough to keep wounded husband and self alive, is an illustrative case of very many that citizens are meeting every day in our urban centres. And yet the authorities wonder why recruits don't come along. The Federal Government has appointed an 'Hospitals Commission,' and a "Pensions Board" to look after returned soldiers. The former, with its limited power, is doing excellent work, and no doubt the "Pensions Board" is under the impression it is achieving something, but that something is certainly not securing adequate pensions for "returned soldiers," who in every case up to the present have been wounded, gassed, or shell-shocked. And too many have been discharged before they were able to take up even the lightest duties. This is a serious matter, and it resolves itself into a simple problem of proportion—if the Pensions Board cannot take care now of the comparative few returned soldiers in anything like a way commensurate to their sacrifices, how is it going to take care of the whole of the army when it comes home. The answer is obvious, unless some more real spirit is put into its work. We have in Montreal, Toronto, Winnipeg, and in other cities the humiliating situation of wounded men having to go from door to door selling calendars and

cushion tops at 25c. apiece, so that they might live—the miserable pensions not being anything like sufficient. If this kind of work is continued it will mean that these fine fellows must stoop to accept charity or become a charge on the local authorities. This was not the understanding under which the men joined the ranks, neither is it the wish of the citizens of Canada that soldiers should be compelled to become parasites, but which, in plain English, is exactly what they are, because for the moment they are not fitted for any kind of work. Either returned wounded soldiers should be kept on the strength, with full pay, until they actually get a job, or the pensions should be sufficient to make them independent of having to hawk calendars or receive charity. This is the least this country can do to its wounded men.

In England, under the present efficient Government, the war pensions, while in charge of a new department called the Ministry of Pensions, are in reality distributed through the county and local authorities, who, being in closer touch with the people, are in a better position than any central authority to deal more sympathetically and practically with each case. This delegation of national work to the local authorities, is not confined to war pensions administration. The famous Old-Age Pensions are granted through the local authorities, who have also carried out successfully the Recruiting and the recent War Loan campaigns. Vacant lot and Preparedness propagandas have been undertaken by the municipal councils, and now they are taking up National Service, and even the collecting of Entertainment Taxes. In short, the Imperial Government has taken full advantage of the municipal machinery of England to put into practice those wonderful reformative schemes by which it has been enabled to put the Old Country on such a sound

(Continued on page 119).

THE ADMINISTRATION OF THE PATRIOTIC FUND.

Under the title of "A Canadian City in War Time," the Survey (New York), is publishing a series of articles by its editor, Mr. Paul Kellogg, dealing with the administration of the Patriotic Fund in Montreal. The first article, which appeared March 12, is a splendid tribute to the efficiency of the volunteer staff of some 700 women, under Miss Helen Reid, who in the administering of the Montreal branch of the Patriotic Fund, cover such a large ground of usefulness and help to the 10,000 families of those "somewhere in France." Mr. Kellogg considers that these ladies have reached "the high water mark, not only of record keeping, but of case work," and quotes the opinion of another American social worker.

"The thing that engrossed me most was that such a big job involving such an enormous expenditure of money could be done by volunteers. I have too keen an appreciation of the shortcomings of trained social workers, for my own shortcomings are such, to fail to say that the Montreal office represents a bit of volunteer efficiency that no social worker can afford to ignore. It will never be possible to pay for all the social service needed, and this is especially true when war conditions prevail, and it should be an encouragement to us to know that under intelligent direction volunteers can do the work that the Patriotic Fund staff is doing in Montreal."

When the Patriotic Fund executive called to its aid **voluntary** workers in every city and town and village so that all the money contributed could be given to those for whom it was intended, many

women came forward and were naturally accepted, but who were not fitted by either temperament or education to act as visitors to soldiers' wives who had been rightly taught to consider themselves as patriots, but who these estimable ladies looked upon as recipients of charity—given by themselves. Happily this pauperising spirit is being eliminated by the simple process of "resignations." Mr. Kellogg is evidently cognizant of this weakness and its remedy, for he says:—

"Such a volunteer staff was not created overnight. Stories are told of Lady Bountifuls, naive, ingenuous, gullible, who pauperized the families to whom they brought relief. But that natural selection has been at work is shown by the fact that perhaps as many volunteers have dropped out in the two years and a half as make up the force that 'sticks.' About three hundred have gone overseas to be with sons or husbands, but some have drifted from more difficult task of reconstructing human life to the bandage-rolling and comforts-packing for which the more conventional patriotic societies offer so many opportunities. But not a few of the most serious and efficient among the visitors were those who at the outset had no conception of family problems outside their home circles. Living apart they had known nothing of evil, and in their first untoward case or two, blamed themselves, and, as one experienced woman expressed it, "took the whole sorrow of humanity into their own generous hearts." As time has gone on several of the visitors have been advanced toward heads, the newcomer is, "broken in" gradually, and the risk of letting inexperienced folk tamper with their fellows is no less real, but far less frequent. "I have just discarded six visitors," said one ward head in coming to headquarters recently, to express that difficult triumph in all volunteer work—the elimination of the unfit."

THE LATE MR. F. S. SPENCE.

In the passing of ex-Controller F. S. Spence, the city of Toronto lost one of its best public men, and municipal Canada one of its strongest and most steadfast friends. Always ready to help from his rich mental storehouse, those who desired it, his real value and loss will never be fully known, for though his public work has been recognized from the first, Frank Spence has helped many men and women privately, and these in particular will mourn his loss. Mr. Spence's public life was twofold in its character,—temperance and municipal. Soon after coming to Canada as a youth, from County Donegal, Ireland, he entered the lists as a temperance advocate, and the forcefulness and earnestness of his addresses soon made his name known from one end of the Dominion to the other, and this he followed up by his presence, for no missionary of temperance sacrificed so much time and thought to the cause than did the late Mr. Spence.

During the course of forty years he visited every community in Canada preaching his gospel, not always to friendly audiences. The result of his work, together with that of others, is seen to-day in the "dry" areas of this country, and the demand for national prohibition. Such an achievement would make any man proud of himself, but Frank Spence was always modest.

Mr. Spence entered the municipal field twenty-five years ago as a member of Toronto City Council, and since that time, whether in the council or not, he has always been a strong exponent of good local government. Since the Union of Canadian Municipalities was founded some fifteen years back he has hardly missed a meeting or a convention, and his presence will be sorely missed at future conventions. He was also secretary of the Ontario Municipal Association, and here again his colleagues will miss his valuable aid, for he it was who enabled the society to get through such a tremendous amount of detail, without interfering with the smooth running of the conventions. Another public work on which the late Mr. Spence stamped his individuality was the Harbour Commission of Toronto, for no other man could have popularized such a propaganda of Harbour building which he initiated and carried out when serving on the Commission.

While these achievements will place Francis Spence in that growing galaxy of nation builders, the pedestal on which those who knew him best would place him, was that outlined in his very truth and honesty.

"PENSIONS" OF RETURNED SOLDIERS.

(Concluded from page 118).

war footing. And the English municipal Councils have responded splendidly. We would suggest that if the Federal Government was to invite the Municipal Councils of Canada to co-operate in an administrative sense, in some of the war problems and propagandas, such as War Pensions, instead of appointing so many separate Commissions and local committees, with all the attendant expense, more success would accrue, and certainly less dissatisfaction.

An Unique Experiment in Survey Work on Streets and Sidewalks

Mr. Paul Mercier, the City Engineer of Montreal some time back engaged the services of Mr. Chas. Mullen, road expert of Boston, and now of Messrs. Milton Hersey, to make a survey of the streets of Montreal — particularly of the materials that were being used in laying down new work. Such a survey has never before been attempted on this continent and how it will work out remains to be seen, but the first report, which takes up 37 pages, has recently been submitted to Mr. Mercier, who has allowed its publication.

Below are some extracts taken from the report, which will be of interest to other municipalities.

COMPREHENSIVE PAVING PLAN.

Every city should have a definite paving policy, and should definitely know its reasons for the adoption of each detail thereof. This paving policy should embrace a careful study of the directions and needs of the city's traffic, and should lay out and maintain in perfect condition certain heavy-traffic-ways to take the burden. It should include an approximate, if not an exact knowledge of the materials locally available for the purpose of constructing and maintaining pavements, and the prices of such materials and the pavements resulting therefrom, not only in costs per square yard, but in the finer details of such costs. It should know as definitely as possible which is the pavement, or which are the pavements, that it can lay to the greatest advantage, all things considered.

Wherever possible, one uniform type of pavement surface should be laid throughout. The value of uniformity in such utilitarian matters as street paving is too well known to stand in need of demonstration. The extended study we have made of street paving economy in general has taught us that the most desirable and by far the most economical street pavement service is a well constructed stone-filled sheet asphalt upon a suitable foundation, usually of Portland cement concrete. This holds true for most cities — though there may be exceptions — but there are many reasons which give this type of construction greater advantages in Montreal than in many cities. Few places have available better supplies of the proper sands and stones, for instance.

In all municipalities, there are some few places where this standard form does not meet the situation. It is too slippery under certain weather conditions for use on steep heavy traffic grades; and there are a few other places where it may not be advisable or economical, though such other places are very few indeed. In nearly all cases where the stone-filled sheet asphalt surfacing can not be employed to advantage, the modern, well dressed, small granite block, made from new or old stock, is the proper solution. This establishes what may be termed a secondary standard form of construction. Third and fourth types should be looked upon with suspicion and used to but a very limited extent. The facts are almost certainly against them.

The city can, we think, save large sums of money, during the next few years, through a thorough understanding and comprehensive handling of its old paving block situation. Many cities are already doing so. Improvements should be made in co-ordination with each other, so that the surplus block from one street can be used upon another street; and there should be a centrally located place, — or possibly more than one, — where surplus blocks, no immediate use for which can be found, may be temporarily stored for recutting during the winter season. All recut blocks should be laid on a mortar bed and with cement grout joints to form a monolithic construction, in most cases on concrete foundations, but occasionally on suitable old macadam road bases.

Sand for Asphalt.

In some localities, the use of sands for asphalt paving that are not suitable or economical may be pardonable, but in Montreal, there is no legitimate excuse for the city whatever. Our partial survey of the available supplies within shipping distance of the city has indicated that the fine sands, required for combination with the more plentiful coarse and medium sands to approximate the model grading for a high grade asphalt pavement, may be had both in abundance and at reasonable cost. The supply is, in fact, almost too large to permit of control by any local

combination of sand merchants; provided that the city is alert in its dealings. It is almost self-evident that in previous years this subject has had little or no attention on the part of the city authorities.

Excavating and Grading.

Grading costs should be kept entirely separate from paving costs, and, for comparative purposes, only considered in connection therewith in a relative way. Except as different forms of construction require different depths of grading, the cost figures for grading are of but little value for the comparison of pavement costs. The grading costs should be carefully sub-divided into the logical items, and careful check kept upon them in that way. Usually, an item for ploughing or picking, one for loading, one for hauling, one for rolling, one for overhead and sundries, and a debit or credit for the disposal of the material, are the proper sub-divisions, but others, if required, should suggest themselves to an accountant following up the work. A lump sum figure or a lump sum unit figure is of but slight value for comparative purposes to determine whether or not the work has been well handled.

Concrete Foundations.

We are certain, even without making definite tests, that by a better selection of the sand and stone used as to sizes, for the purposes of reducing the voids in the aggregate, the same quality and strength of concrete can be produced with less cement and therefore at considerably less cost. An amount of cement that will more than fill the voids of one aggregate and therefore make strong concrete may not nearly fill the voids of another aggregate and therefore make poor concrete, and the additional amount required in the latter instance to make as good concrete as in the former cases is the measure of the waste. The right amount of cement to use with a given aggregate should also be scientifically determined to avoid using additional cement for which there is no sufficient gain in strength.

Much greater care should be taken in the setting of manhole and handhole boxes and other street surface obstructions. It seems to have been quite the custom in the past to set these obstructions to something near the right grade, and then adjust the pavement surface to meet the obstruction. The result is a large number of ungainly lumps on the city streets that are unpleasant to ride over. Flat sections near the gutters are another defect noticeable on the pavements throughout the city, due largely to the poor lines of the concrete foundations being followed out in the surface work. Wherever possible, templates should be used for concrete foundations; but otherwise, grade stakes are absolutely necessary, and should be set close together. Where the straight line crown is used, not so many grade stakes are required, as straight-edges and strings can then be employed to better advantage.

No concrete construction gang should be allowed to operate without a competent young engineer or bright handy man, able and willing to take infinite pains with the small details, to look after the mixtures, lines, stakes, manholes, and so forth, and to act as a general assistant to the foreman of the gang, but responsible with him for the results, especially those of a technical nature.

Hauling Mixtures.

For short hauls and on patch work, horse drawn bottom dump trucks carrying three tons or more are far more economical than automobile trucks. This is particularly true of small patch work where a load can not be dumped in one place, but must be carried from patch to patch, and a few shovels full thrown off at each location. The plants should be so arranged that both wagons and trucks can pull under the mixers to receive their loads, and then pull out with them; as there is considerable delay in the operation of backing that may well be avoided. The waiting at the plant while the load is being mixed should also be avoided, especially in the case of the auto truck.

All trucks for hauling hot asphalt mixtures should have steel inner linings, asbestos interlinings and wood outer linings, to keep the heat in the load, and should be equipped with suitable light steel and asbestos covers for the same purpose. The use of a small amount of residuum oil on the steel inner linings is not objectionable, but the quantity should be the least that will keep the load from sticking in the body.

BUILDING IN CANADA ON THE INCREASE.

According to statistics compiled by the Financial Post a great advance will take place in building this year. During June and February permits for buildings to the amount of \$2,835,970 were given out in 38 cities, an increase of over a million dollars, divided as follows:

Eastern Cities.			
	January and February, 1917.	1916.	Changes.
Maritimes—			
Halifax..	\$ 48,590	\$ 41,460	+\$ 7,130
Sydney..	4,715	4,210	+ 505
St. John..	86,300	5,300	+ 31,000
Quebec—			
Montreal	562,460	240,075	+ 412,385
Westmount.	6,515	10,180	— 3,665
Lachine..	235,872	467,230	— 231,358
Three Rivers	114,700	78,050	— 36,650
Ontario—			
Brantford..	7,815	50	+ 7,765
Chatham	4,225	13,200	— 8,975
Fort William	250	935	— 685
Galt..	Nil	850	— 850
Guelph	4,200	290	+ 3,910
Hamilton	94,435	83,895	+ 10,540
Kitchener..	3,050	5,300	— 2,250
Kingston	4,340	4,185	+ 155
London..	32,740	37,995	— 5,255
North Bay..	150	450	— 300
Ottawa..	81,150	78,375	+ 2,775
Peterborough	25,050	125	+ 24,925
Port Arthur	22,401	2,807	+ 19,594
Sudbury	10,500	3,950	+ 6,550
St. Catharines	18,008	27,303	— 9,295
Stratford	13,085	4,575	+ 8,510
St. Thomas	7,200	3,870	+ 3,330
Welland..	10,715	4,993	+ 5,722
Woodstock..	860	2,265	— 1,405
Windsor	80,850	111,750	— 30,900
Toronto..	968,397	391,099	+ 577,298
Total 29 E. cities..	\$2,538,573	\$1,624,767	+\$913,806
Western Cities.			
Manitoba—			
Winnipeg	\$ 80,800	\$ 28,050	+\$ 52,750
Alberta—			
Edmonton	4,00	16,300	— 12,300
Lethbridge..	5,302	17,820	— 12,518
British Columbia—			
Vancouver..	125,825	88,284	+ 37,541
Kamloops	125	Nil	+ 125
Victoria..	4,720	2,435	+ 2,285
New Westminster.. . . .	7,820	4,730	+ 3,090
Saskatchewan—			
Regina..	15,205	4,550	+ 10,655
Moose Jaw..	53,600	425	+ 53,175
Total 9 W. cities.. .	\$ 297,397	\$ 162,594	+\$ 134,803
Total 38 cities .. .	\$2,835,970	\$1,787,361	+\$1,048,609

LONDON, ONT.

The City Clerk, of London, Ont., has been informed by the city solicitor, that the city's short-term loan arrangements are illegal. The action calling forth the city solicitor's statement was that of the city council in using debentures totalling \$105,000 for the hydro-electric department and \$65,000 for the waterworks system — \$170,000 in all — as collateral on which to borrow short-term money to be utilized for purposes other than those set forth in the bonds. The city council has about \$2,000,000 worth of bonds that have not been sold, but all of which have been put up as security for loans, none of which extend over a greater period than three years. Three-quarters of a million of these short-term loans are subject to six months call.

R. O. WYNNE-ROBERTS.

Mr. R. O. Wynne-Roberts, C.E., Consulting Engineer of Toronto, who has affiliated himself with Mr. Frank Barber, Engineer for the County of York, has been appointed Consulting Engineer to the Water and Light Commissioners of Sault Ste. Marie, to report on several water schemes for that city. The first installment will be about 5,000,000 gallons per day.

THE HIGHWAYS OF CANADA.

GEORGE REAKES, C.E.

With matters pointing to a great development of Canada after the present war is over, new towns and settlements will spring into existence and roads will be built and improvements in existing roads will have to be made, and the governments of the different provinces will be devoting large sums of money for this purpose — the question will arise to the class of highway to be built. In the early part of the 19th century two systems of road making were introduced in England, first by Teelford, the second by Macadam, and from these systems modern engineers have drawn the principals upon which all present-day broken stone roads are made. In the making of present-day roads sufficient care is not often given to the base of the road as well as the foundation. The base of the road should be thoroughly well drained with side ditches and cross drains, well rolled till hard and compact, and brought to grade as if it was the finished surface; after this is done the foundation can be laid. Teelford in his methods advocates the use of large stone by hand — which greatly adds to the cost of the road — also leaving a large percentage of roads, and giving free excess of water and thus defeating one of the main objects of the road covering.

The writer laid a mile of road with the Teleford foundation of large stone hand place; but, after rolling same filled in all rows with stone screenings well watered and broomed in. Macadam foundations consisted of 1½ inch stone laid evenly to a depth of 10 or 12 inches. In making a stretch of two miles of water bound Macadam road 18 inch wide stone for the foundation consisted of stone 5 inches in size laid in two layers, each layer being rolled, watered, stone screenings being used to fill roads, broomed and water and rolled in, the next course being 2½ stone, also in two layers and treated in the same way, and the final course of 1 inch stone to a depth of 1¼ inches when rolled, well watered and stone screenings spread on. The surplus screenings being left on for 14 days, when road was again watered and rolled and all surplus screenings broomed off.

The essentials in making a successful construction of macadam roads are:

The removal of natural soil to such a depth as may be necessary according to the soil and thickness of the intended road.

Thorough sub surface drainage.

Through rolling and watering.

The use of best material and reduction of voids.

Complete exclusion of clay, loam, from stone.

The use of clean sharp sand gravel or on stone screenings in sufficient quantity to fill in voids.

Rolling, watering same road crowned so that water will run off readily.

Carrying out the work under proper engineering supervision, good organization and in systematic manner.

The question of maintenance of the road will arise and allowance should be made for this, as no matter how well a road is built it will wear — with the swift moving automobile and heavy motor trucks, and the destroying action of the elements all have to be considered.

A MODEL CITY AND ITS ROADS.

The City of Westmount with an area of 976.58 acres, a population of 18,260 and a rate of taxation of 9½ mills on an assessed value of \$44,260,850, has built up-to-date and kept in excellent repair, the following roads, sidewalks, sewers, etc.

Roads.	Total Miles.
Macadamized Roads	3.925
Tar and Asphalt Macadam (Mixing Method)	2.119
Tar and Asphalt Macadam (Pouring Method)	2.559
Tar Macadam (Painting Method)	9.178
Asphalt Surface Pavement	7.904
Bitulithic Surface Pavement300
Rocmac Surface430
Concrete Paving800
	27.215
Sewers	29.360
Concrete Walks	49.826
Concrete Curbs and Gutters	12.905
Block Crossings	1.529
Lanes Paved with Concrete	2.016

ONTARIO GOOD ROADS ASSOCIATION.

The Ontario Good Roads Association held its fifteenth Annual Convention in the early part of last month at Toronto when the following officers were elected for the coming year: Honorary presidents, J. A. Sanderson, Oxford Station, and S. L. Squire, Waterford; president C. R. Wheelock, Orangeville; first vice-president, J. J. Parsons, Caledonia; second vice-president, W. H. Pugsley, Toronto; secretary-treasurer, George S. Henry, M.P.P., Toronto.

One of the principal papers was contributed by Mr. W. Huber, of the Ontario Department of Public Highways on "Reducing Construction Costs by Increasing Efficiency." The lecturer pointed out that the chief factors governing efficiency were: Traffic conditions, freight rates condition of roads, and labor market.

In summing up, Mr. Huber said that the efficiency of road construction depended upon the systematic planning of the work, the careful supervision, the selection of the best and most responsible men, the fair treatment of the workers, and the adoption of a suitable system of records.

The following are among the resolutions adopted:

1. That the province be asked to pay for 40 per cent of all roads erected under the Provincial Highways Act.
2. That Legislature be asked to undertake the construction of a provincial roadway from Windsor to Quebec, and that it be proceeded with as soon as possible.
3. That the province be requested to pay 40 per cent of the maintenance cost of highways.

A resolution embodying the suggestion that the Federal, Provincial and municipal authorities co-operate in finding employment for returned soldiers by the construction of highways was also made.

POSSIBILITIES OF A MUNICIPAL LIBRARY.

General Manager Thompson, of Westmount, in his annual report to the Council referred to the possibilities for expansion of the Municipal Library as follows:

"There are wonderful possibilities for good work emanating from the library could we further develop our art department. As it is we are able to lend a few pictures to the schools, and our instrumental music circulates splendidly, but could we afford to print and send our lists, to have art lectures, as is done nowadays in all modern library fields, we could spread the knowledge of the great works of Architecture, Sculpture and paintings, which is a part of the inheritance of every new generation, and we should be an even greater benefit to this municipality."

MUNICIPAL COUNCILS CLOSE TO THE PEOPLE.

There is no body of government officials, in Dominion Government, Provincial Government and in Local Government that come so closely in touch and so closely in contact with the people of their communities as do the reeves, the councillors, mayors, aldermen of our different local governments. Those are the people — they hold office from year to year, they are placed before the people for their approval, and before them for their mandate to conduct the affairs of their different societies, and they must, from their short term of office, from their very close association and connection with the people who elect them, take a great deal of interest and must be in close contact with the different people in their communities. — Mayor Costello of Calgary.

A CIVIC INVESTMENT.

City planning is simply the exercising of such foresight as will promote the orderly and slightly development of a city and its environs along rational lines with due regard for health, amenity and convenience and for its commercial and industrial advancement, says Nelson P. Lewis.

It may not be possible to express the advantages of a good city or town plan in terms of money. John Burns, who may be called the father of city planning legislation, has said that investment in a good plan, whether it be for new parts of a city or for the correction of old parts, if regarded for a period of a year, may appear expensive; if considered for a period of five years it will be profitable; when considered for a period of fifty years it will be an investment which in subsequent days will make the community regret that it did not adopt it sooner.

The man of moderate means is coming to realize how much more life means to him and his family when the community in which he lives joins together for the health, happiness, mental, social and spiritual development of all. —Civic Progress.

"GOOD ROAD" BOOM IN THE UNITED STATES.

An indication of present tendencies in the United States toward State bond issues for good roads is shown in the following list of issues recently voted or now being agitated:

Pennsylvania	\$50,000,000
Illinois	60,000,000
Colorado	50,000,000
New Jersey	7,000,000
Louisiana	20,000,000
California	15,000,000

To the above may be added \$75,000,000 appropriated by the Federal Government which will be duplicated by the various states, making an additional \$150,000,000 or a total of \$352,000,000. These figures indicate present-day tendencies in road construction. It seems entirely reasonable to suppose that within the next five years there will be available for road building purposes \$500,000,000.

The Pennsylvania State Highway Department has decided to ask the legislature for appropriations of \$21,000,000 covering the next two years. This action was taken after a conference participated in by the officers of the Pennsylvania Motor Federation, the State Grange and the State Highway Department. If this request is granted it is proposed to spend \$4,000,000 yearly for highway construction, \$3,000,000 for highway maintenance and \$1,250,000 for state aid in road construction. \$250,000 will be used for turn-pike purchases, \$500,000 to aid borough roads and \$1,500,000 as bonuses to townships as cash tax basis. As an aid to raising revenue, motorists are in favor of a direct tax on realty, and the Grangers of a tax on corporations.

A bill will be introduced in the New Jersey legislature providing for a State Highway Commission consisting of eight men, to replace the present commissioner. These men will serve without compensation and will appoint the State Highway Engineer, who will have complete charge of administering the department. The present plan is to ignore the Egan Bill, which provided for a \$7,000,000 bond issue and to pass another bill providing for the levy of a special tax for road purposes. The bill proposes to raise \$3,000,000 a year for license fees and fines will be spent on repairs and reconstruction. This means that about \$25,000,000 will be spent on New Jersey roads in the next five years if the proposed measure goes through. The work will be done by the State Highway Department and not by individual counties as at present.

The Department of Health and Sanitation of Philadelphia has appropriated \$20,000 which will be spent for the construction of concrete alleys.

The Fayette Tribune, Fayetteville, W. Va., recently contained the following item: "Wirt County Circuit Court had to be dismissed last week because roads were so bad witnesses could not attend."

The \$800,000 worth of road bonds voted for Okmulgee County, Okla., have been sold and it is expected that a consulting engineer will soon be appointed, the type of roads to be built determined, specifications and estimates made, and contracts let.

Thurston County, Wash., is the first county in that state to receive Federal Aid in hard-surfacing its county roads. The county will receive \$28,000 and is now completing surveys for 4 miles of concrete pavement 20 feet wide.

A bill has been introduced in the Wyoming legislature providing for a State Highway Department. The primary object in introducing this bill is to place Wyoming in a position to benefit under the distribution of funds for roads, authorized by the Federal Aid Act.

COST OF FOOD HAS RISEN 75 PER CENT.

According to figures compiled by the department of labor, Ottawa, the cost of food in Canada has increased about 75 per cent since the war commenced. It has risen about 87 per cent in Great Britain, the same report states. In January, 1916, the cost of a list of twenty-nine staple foods, weighed according to family consumption, averaged \$7.73 for sixty cities in Canada, as compared with \$10.27 in January last.

Municipal Affairs in Alberta

REGINALD G. J. SMITH.

Matters municipal in the towns, cities and villages of Alberta have been comparatively quiet this last month, due, no doubt, to the mere fact that the new councils are considering the estimates of current expenditures and revenue and estimates too on capital expenditures. For the first couple of months every year the newly elected councils are spending the time grasping the reins of office, and when they are accustomed to the ordinary routine of administration, then plain sailing is experienced and they launch out into definite policies for the year.

Public Utilities of Edmonton.

Edmonton has spent a few weeks on its civic utilities. Edmonton the capital city of the province had until one year ago, five utilities, but leased one, the power plant, to a private concern, and at the present time operates four of them, with the possibility that during the present year negotiations may be opened for the sale or lease of another of the utilities. During 1917 the city will pay about \$23,000 more to the employees of the four utilities than it did last year, but aside from the increase in wages the estimates for the maintenance and operation of the street railway, electric light and power department, waterworks and telephone services will remain practically the same for 1917 as in 1916. The city council has dealt with the estimates and authorized expenditures totalling \$1,660,320, against a revenue of \$1,596,584, leaving a net deficit of \$63,736 on the year's operation of the combined franchises. The only money losing utility is expected to be the street railway, on which a total deficit of \$128,762 is anticipated. The profits on the other three utilities, however, will bring this loss down to something less than half. During 1916 the city council decided to adopt the policy of accumulated surpluses to offset accumulated deficits. It means that the profits of one utility will go to bolster up a losing proposition in another utility, and this policy, while maintained to be a good one by the council at that time, did not find favor with a large number of influential citizens, the business men of the community, who thought that each utility should stand on its own ground. This question though is not settled as a definite and permanent procedure by any means, for there is no possible doubt that later on steps will be taken to re-open the matter and have the mayor and council lay all their cards on the table to see the reason for such an action.

Reverting to the utilities again. The increases in wages are accounted for chiefly by the raises in pay schedule to bring all employees up to the \$100 a month basis which means for the street railway alone a matter of \$12,000 more on the pay roll. The only other increases passed in the estimates are to the superintendent of the telephone department and to the acting superintendent of the water works department. The telephone department until taken over by the present superintendent was a losing game. The deficits were in four figures every month, but the man now in charge, Mr. J. E. Lowry, who was superintendent of construction under the old regime, had telephone ideas and he put them into practice with the result that three months or less after he took entire charge, he reduced expenses and brought about a much desired change, a surplus instead of a deficit. Mr. Lowry is looked upon as one of the brightest and most energetic head of a department in the service of the City of Edmonton. He has increased the phone service, there being more telephones in use in Edmonton to-day than there were in the boom days, and his methods of account collecting show that when the year is over, the outstanding accounts are very small in number and amount.

Electric Light.

The electric light and power department has an estimated expenditure for the year of \$446,072, with revenue estimated at \$472,000. For the waterworks department the figures are \$342,450 for expenditure and \$360,500 for revenue. This is another department which has turned from deficits to surpluses, even though it is seriously handicapped by the total amount of non-revenue producing mains, the water mains passing something like 15,000 individual lots in the city without a cent of revenue. In the street railway utility there will be a surplus on actual operation, but the capital charges, interest depreciation

sinking fund, etc., will make a total expenditure of \$635,978 with revenue of \$507,216. This will leave a net deficit of \$128,762 on the year's operation. The telephone department estimates an expenditure of \$235,820, including over \$4,000 increases in wages; the revenue will be \$258,868.

Natural Gas.

Another matter of considerable interest, not only to the city of Edmonton, but to the province in general, is the progress being made on the natural gas drilling some 85 miles east of Edmonton. The Northern Alberta Natural Gas Development Company has a franchise with the city to supply natural gas and under the terms of the franchise Edmonton is to have gas this year. The company has now over 20,000,000 cubic feet per day, and continuous drilling has been undertaken for the past eighteen months. There are five wells down and a start was made about the first of the month on the sixth well. Over \$300,000 have been expended in drilling and the company hopes to have a sufficient flow to enable it to commence pipe laying this summer. The financial interests are planning a visit to the field from New York, and if they find conditions satisfactory, the officers of the company are confident of great activity in main laying this year.

Hydro-Electric Proposition.

Work is also under way on the \$7,500,000 hydro-electric power proposition for Edmonton. This entails an expenditure of about \$6,000,000 for the power plant and \$1,500,000 for a railway to connect the city with the power house site through rich agricultural country. Since the first of the year a gang of men have been at the site, about 90 miles west of Edmonton on the North Saskatchewan river, preparing the dam site and doing preliminary work, while two surveys have been made for the railway. The company has from five to seven years in which to complete its hydro development, so work is not being rushed while world conditions are as they are.

Charter amendments for the various cities of the province are now before the legislative assembly of Alberta but the Municipal Law Committee has only considered the suggested changes for the city of Calgary so far. Calgary under its present charter has the right to sell property in arrears giving thirteen months for redemption, paying ten per cent to the man who makes the purchase. The amendment asked for is to issue tax certificates. A purchaser buys a tax certificate, pays the back taxes, holds the property for three years, giving the original owner that length of time to redeem and gets ten per cent for his money. Citizens of Calgary are appearing before the committee of the House objecting and one of the arguments against the proposed amendment is summed up in these words: "If the land is good enough to pay at eight or ten per cent as a citizen, it is a good thing for the city to carry it."

Lethbridge.

Lethbridge, too, is applying for a charter amendment for power to issue tax certificates. In this case property in arrears for eighteen months is liable. The city makes a guarantee that if for any reason the certificate is void it will repay the holder the sum paid thereon with interest at the rate of six per cent per annum from the date of its issuance. The certificate will bear interest not to exceed ten per cent per annum. Certificates of delinquency shall be prima facie evidence that (a) the property described was subject to taxation at the time the same was assessed; (b) the property was assessed as required by law; (c) the taxes or assessments were not paid at any time before the issuance of the certificate. Then any time after the expiration of three years the purchases can give notice if not sooner redeemed, of intention to apply for an order for the sale of the land.

Evidently Alberta cities are not the only ones receiving trouble over taxes, for Mayor W. T. Henry, of Edmonton, has spent a few weeks at the coast and on his return said that Vancouver was experiencing trouble over general taxes where there is a suggestion to change from single tax to income tax. The B. C. legislature is now being asked for permission to make this change on the understanding that the taxes will be divided between the government and the city of Vancouver.

Ideal Citizenship

COMMISSIONER C. J. YORATH.

So well have the principles of citizenship been inculcated into the minds of the citizens of the Empire that a voluntary army of between four and five million men has been raised to fight for the highest principles of justice, of liberty and of democracy. Our relatives, our brothers, our sons, our friends have gone forward of their own free will and accord, prepared to make the supreme sacrifice, for all that we hold most dear. Their blood has saturated the battlefields of Belgium, of France, of Macedonia, of Africa, of Mesopotamia. For what? So that the ideals of citizenship may be maintained upon a foundation of truth, of justice and of peace.

The world can never be the same for the present citizens of the British Empire. Those men who have fought and will come back to us can never forget the horrors of the battlefield, the lost friends who have been killed at their sides, and the atrocities of the enemy. The awful horrors of war will forever be a vivid recollection with them.

Monuments will not be required in our time as reminders lest we forget the sacrifices made and hardships endured by our brave sons for all that is best in life. In future the loss of an arm, the loss of a leg, the loss of an eye, the loss of sight, the loss of speech, the loss of hearing and all the other human defects which have been incurred as a result of this war will be daily reminders of the highest ideals of citizenship.

How will it affect those who have not been able to fight for those great ideals on the battlefields of France and Flanders. We can never be the same men as we might have been if this war had never happened — there will always be with us to the grave a great gnawing regret at the bottom of our hearts that we were unable to share and take our part of all those hardships and sacrifices of those brave men who have been out there not for one month, nor six months, nor twelve months, nor two years, but even longer, walking hand in hand with death every minute of the day, and enduring all the hardships associated with the battlefield in summer and in winter.

Our Part in Building up Empire.

What then will be our part as true citizens in the future development of the Empire. In the first place we should pay the whole cost of the war. That surely will be a small share or part compared with the part of those who have offered all and were prepared to give up their lives if necessary. It is strange how history repeats itself, and we can learn many a lesson of true citizenship from the Empires of Greece and Rome — how they became great Empires by true citizenship, and how they fell into decay when their ideals of citizenship fell to a very low plane.

It is over 2,000 years ago when Demosthenes appealed to the Athenians in their war against Philip of Macedonia, and it is extraordinary how applicable are the words of that great orator to the conditions of to-day. He said in one of his appeals: "I say you must contribute money, serve in person with alacrity, accuse no one, till you have gained your object, then judging from facts honor the deserving, punish offenders, let there be no pretences or default on your part, for you cannot harshly scrutinize the conduct of others unless you have done what is right yourselves."

Our next duty is to see that we take an active part in the welfare and development of the country so that in the future men may look back upon these times and say: That the price of blood and treasure justified the result inasmuch as the nations of the world will live in peace and harmony, and truth and justice will be the guiding star of every citizen.

True Wealth is Life.

"There is no wealth like life, life including all its powers of love, of joy and admiration. That country is the richest which nourishes the greatest number of noble and happy human beings, that man is richest who having perfected the functions of his own life to the utmost, has also the widest helpful influence both personal and by means of his possessions over the lives of others."

What then is our part in this building up of Province, of Dominion, and of Empire. It may be argued by some that it is so small that it is almost nugatory, but I submit that it is perhaps the most important of all — it is the building of the foundation.

Before the outbreak of war the debt of the local authorities exceeded that of the Dominion and the Provincial Governments combined, the enormous waste through loss by fire exceeded the interest of the national debt, and the infantile mortality was one of the highest in the world.

You will realize from this that upon the judicious and economical development of the units to a large extent depends the financial stability of the country and according to the way in which regulations are enforced, whether the enormous waste occasioned by fire will be reduced, and above all, the responsibility of taking care of the real wealth of the nation—childlife lies with the local authorities—rural and urban.

Responsible for True Development.

I have said you are responsible for the foundation of the country's wealth and economic development. What would you think of a man or business company who started to build a foundation for his house or manufactory without first thinking out and laying down his plans for the complete carrying out of his schemes. You could only come to one conclusion and that is that he might muddle on and through to the end, but the ultimate completion of this work would be a miserable waste, a monument of inefficiency, a monument of lack of foresight.

The same result will be obtained in the building of our villages, our towns, our cities, our province, our Dominion, our Empire, unless we see that our foundation is upon the solid rock and planned for future developments.

There has been much agitation of recent years amongst a few for a proper Town Planning Act, but because the principles and intentions of such an Act are not properly understood the agitation has not become general and therefore not a popular vote catching piece of legislation.

The Advantages of a Town Planning Act.

The common conception of a Town Planning Act is that it will provide for the construction of elaborate boulevards and the carrying out of ideals of faddists. A more erroneous conception could not be formed. A Town Planning Act is to provide for the development of the community by units so that eventually the units will make up a completed whole. There can be no question of doubt that if such an Act had been in vogue for the last ten years, the enormous waste of public monies during boom days would have been prevented and the municipal debt of the province to make a conservative estimate would to-day be at least 50 per cent of what it is.

A Town Planning Act would provide proper building regulations which would improve the sanitary and health conditions of our villages, towns and cities, thereby tending to reduce the high infantile mortality of to-day. It would enable the drainage and water systems of the smaller communities being constructed so that they could always be developed as the community grew — without having to be reconstructed — as so often happens. It would reduce the enormous waste due to fires by the enforcement of proper building regulations. It would prevent overcrowding and the resultant evil—slums. It would ensure our villages, towns and cities being laid out on the most economical basis, and above all, would prevent the atrocious sameness of the prairie towns with their uninviting, in artistic and terribly depressing appearance. If there is any town in Western Canada on a main railway line desirous of making a name for itself and becoming the oasis of beauty in the wilderness of ugly prairie towns, then all it has to do is to break away from the every day and commonplace method of doing things and lay out its town on garden city lines.

A Town Planning Act would enable expert advice being obtained by the smaller communities upon matters of civic development which at present cannot be obtained on account of expense and it would conduce to some uniformity of civic administration.

It is expected by most people in the West that after the war considerable development will take place and having regard to this undoubted fact now is the time that a Town Planning Act should be passed so that its machinery may be in smooth running order when the expected development of our rural and urban areas takes place.

This is the first of a series of articles from the pen of Mr. Yorath on this subject.

High Cost of Living

Our contemporary, the Canadian Journal of Commerce, has taken up the problem of the high cost of living, by taking issue with an article by Mrs. Rose Henderson, which appeared in the March issue of this Journal. Under date of March 20, the Journal of Commerce says:

"Mrs. Rose Henderson, who by reason of her work in connection with the Juvenile Court of Montreal, of which she is probation officer, claims that she has special opportunities to investigate for herself the effect of the increased cost of food on the poorer classes of Canada's commercial metropolis, makes the following indictment against the capitalist in an article entitled the "High Cost of Food," published in the current number of the Canadian Municipal Journal.

After taking excerpts from the original article The Journal of Commerce goes on to say:

Mr. J. A. Beaudry, treasurer of the Dominion Board of the Retail Merchants' Association of Canada, when asked for his opinion of Mrs. Henderson's indictment, said:

"It is quite true that a dollar no longer buys as much as it did five years ago, but that is not the fault of those engaged in supplying food to our great cities. The increased cost of food is caused largely by the increased cost of labor. The farmer must pay more for help, and therefore must raise the price of his products. As the merchant, in his turn must pay more for his merchandise, as well as higher wages to his salesmen, and deliverymen, he must necessarily raise his prices, and so on.

"As a matter of fact, the merchant makes better profits when prices are moderate than when they are high. For instance, when butter costs the merchant twenty cents a pound he sells it for twenty-four cents, and makes twenty per cent on his capital. This twenty per cent, is not all profit, as the merchant must pay a salesman to sell the butter, and pay rent for a shop. Now when butter costs the merchant fifty cents a pound, he has to sell it at fifty-four cents, making only 8 per cent gross profit, out of which he must probably pay his assistants increased wages.

"I know of no COMBINES," said Mr. Beaudry, "who are raising the prices of foodstuffs, and I wish Mrs. Henderson would name those she knows. There is nothing in the food situation of this country which justifies hysterical thinking and acting except the wanton waste which is going on in all our homes.

"A commission recently investigated the cost of living in the United States, and Mr. D. F. Houston, U. S. Secretary of Agriculture, issued the following statement at Washington:

"GAME BIRDS."

Tested Fighters, But Not For Show.

"I bet you \$5 that's a turkey, not a chicken," said a visitor at a recent agricultural show.

The bird in dispute was a chicken fattened and dressed by "disabled" soldiers at one of the convalescent institutions of the Military Hospitals Commission. All sorts of occupations are provided at these places, and do much to hasten the men's recovery as well as to make them more capable of earning a good living when they come out.

"Why don't you show some of your live birds?" asked another visitor — "Haven't you got any good game birds?"

"Yes," said one of the staff, "We have some very fine specimens; first class fighters, too, as they proved in France and Flanders. But they don't crow or flap their wings about it, and they don't want to be put on exhibition. All they want is a chance to get back among their fellow-citizens and earn a decent living. That's what we are helping them to do. Have you got a few jobs to offer them when they come out?"

Have you?

ROAD MAINTENANCE.

The common opinion seems to be that once a road is built, it is good for all time. No greater mistake in that regard could possibly be made, because the road is at all times subject to traffic wear, and the destructive effects of the elements. The maintenance of a road begins the day

"The experts of the Department of Agriculture report to me that the dietary studies made by them point to an annual food waste of about \$700,000,000."

"These experts asserted that the food waste in the household resulted in large measure from bad preparation, bad cooking, over-abundant supply, and failure to save and utilize the food not consumed. What is true of the waste in the homes of the United States is only too true of our Canadian homes. We might, with profit, follow the example of the warring nations, who, up to now, have met the problems of conservation by diet regulation, and prevention of waste.

"The inefficiency of the housewife is more often the cause of under nourishment than the high cost of food.

"Mrs. Henderson says in speaking of the 130,000 bags of potatoes that were left to rot and freeze on railways sidings near Montreal last autumn: 'The dealers refused to release them, for as they figured, they could afford to let these thousands of bags of potatoes rot, and thus enhancing the price of potatoes, make "big money".'

"The facts of the case are these: Last autumn, owing to shortage of cars, the railways shipped the potatoes from New Brunswick and Prince Edward Island some weeks later than usual. Then, owing to freight congestion, the trainloads of tubers, packed in unheated cars, were allowed to remain on sidings for several more weeks, with the result that the potatoes were frozen when they reached Montreal. The Montreal merchants, seeing the condition of the cargo, and knowing that they could not sell frozen potatoes, refused to take them, and the potatoes again stood on the railway sidings, while the farmers and the railway company settled the question as to who was to pay for the damage; the railway company finally accepting the responsibility.

Of course, the congestion of freight and the shortage of cars were both due to the scarcity of labor, due to the fact that so many railway men have left for the front.

Investigation of the cherry story would probably prove that the cherries were allowed to rot on the trees because it was impossible to get labor at a price that would make it profitable to pick and handle the fruit.

We wish that Mrs. Henderson would name some of the "crooks" who cannot be scared by the law.

In the meantime what is required is an inland trade commission — not composed of politicians, but of practical men — to investigate our trade conditions in a proper manner, and if necessary, stamp out combines and other unhealthy movements, if they exist.

construction ends, and to be most effective should be continued during the life of the road. The maintenance becomes a fixed charge on the road, and must be taken into account and provided for, and for that reason constitutes an essential part of the ultimate cost.—W. E. Yorston, C.E.,

LETHBRIDGE BOARD OF TRADE.

The annual report of the Lethbridge Board of Trade contains so much commonsense in small compass that it deserves special mention among the mass of documents of the kind with which we are flooded at this season of the year. It includes a demand that the work of distributing information concerning labor supply and opportunities shall be undertaken "by a Dominion-wide organization," an approval of Daylight Saving on a national scale but not otherwise, some extremely shrewd observations on the farm mortgage credit problems, and the following exquisite and truthful remark upon the banking situation: "If all the bankers in Southern Alberta knew so much of agriculture that they could farm well, we would be apt to find that all our bankers had turned farmers, for most of our farmers have made more money these last two years than any bank manager has." If every community of the same size and wealth as Lethbridge had as live a Board of Trade as this of which G. R. Marnoch is president, the country would be a good deal better run than it is.—Financial Times.

Good Roads Congress

The programme for the fourth annual Canadian and International Good Roads Congress, to be held at the Horticultural Building, Lansdowne Park, Ottawa, from April 10th to 14th inclusive, will cover a wider and more practical range than at any of the three preceding successful congresses held under the auspices of the Dominion Good Roads Association.

The speakers and lecturers will represent more provinces and states than was the case in any of the previous programmes, and this will ensure a comprehensive consideration of road methods and materials from the important standpoints of climatic, geologic, traffic and other local factors. The policy has been adopted of making the paper and discussions as practical and non-technical as possible. The morning sessions will be devoted almost entirely to the consideration of rural road problems, with an avoidance of technical terms, while the afternoon sessions, though dealing largely with urban street methods, and involving technical descriptions to a certain extent, will be understandable by all the lay delegates.

The exhibition of road-making machinery will be the most complete yet assembled in Canada, ranging from the humble pick and shoveled to the largest and most modern machines. Emphasis will be placed upon the labor saving possibilities of the newer inventions, in view of the necessity of conserving man-power at the present time and because of labor and war conditions.

His Excellency the Governor General will perform the opening ceremony, and the Dominion Government will be represented by Sir eGorge Fester, Acting Premier. The Governments of Quebec and Ontario will both be represented in force by cabinet ministers and officials. Hon. J. A. Tessier, Minister of Roads for Quebec, and Hon. Walter Mitchell, Provincial Treasurer, have both accepted invitations, and Mr. B. Michaud, Deputy Minister of Roads, and Road Engineers Henri, Fafard and Fraser, will also take part in the proceedings. From Ontario are expected Hon. F. G. Macdiarmid, Minister of Public Works, and Hon. George S. Henry, the new Minister of Agriculture. Mr. W. A. McLean, Deputy Minister of Highways, ex-president of the American Road Builders' Association, and past president of the Dominion Good Roads Association, will supplement his address with an exhibition of slides showing French road scenes. These will be doubly interesting, not only as illustrating France's road system, but also as showing localities over which fighting has occurred. Illnesses have prevented Mr. McLean's attendance at the last two congresses, and he will receive a warm welcome at the coming gathering.

The provincial road bodies will also have official delegates in attendance. These will include Mr. S. L. Squire, Honorary President of the Ontario Good Roads Association; Mr. C. R. Wheelock, the new president of the same organization; Mr. Fred G. Pearson, President of the Nova Scotia Good Roads Association.

Mr. Paul D. Sargent, chief engineer of the Maine Highways Commission, will treat of modern methods of constructing and maintaining gravel and macadam road, on which subject he is an authority. Col. W. D. Sohler, chairman of the Massachusetts Highways Commission, will deal with road surfaces from the viewpoint of traffic requirements, to which he has given much study. Mr. W. G. Yorston, road commissioner for Nova Scotia, will deliver an address; Mr. D. T. Black, city engineer of Welland, Ont., will give a paper on brick pavements; Geo. Hogarth, Chief Engineer, Ontario Highways Dept., will read a paper on "Drainage and Foundations"; W. S. Huber, Engineer Ontario Highways Dept., on "Modern Road Machinery"; W. H. Connell, of Philadelphia, on "Granite Pavements." W. McL. Hunter, of the City Engineering Dept., Ottawa, will also lecture.

Prof. Blanchard, of Columbia University, New York, will describe the best and most economical methods of surface maintenance, with road oils; Mr. T. Harry Jones, City Engineer of Brantford, Ont., will read a paper on concrete pavements for city and country roads; Mr. Thos. Adams, adviser to the Dominion Conservation Commission, will speak on roads in their relation to town planning; and Mr. R. B. Morley, Secretary of the Ontario Safety League, will tell of the work accomplished by that body. An important paper will be that by Mr. L. H. Reineck, of the Geo-

logic Survey, Dominion Department of Mines, who will take up the location of deposits of road materials throughout the country.

In all some eighteen papers will be found on the programme, while about sixty engineers and road builders of standing have been invited to lead in the ensuing discussions. Archbishop Gauthier and Bishop Roper, of Ottawa, have both been invited to attend the opening session.

The Congress will be more than usually important this year because of the labor conditions caused by the war and by the possible return of the Canadian soldiers in the near future. The President of the Congress, Mr. J. Duchastel, C.E., City Engineer of Outremont, says: "When the war is at an end the condition in Canada will be a very serious one. We will have our returned soldiers to look after as well as a large influx of immigrants. Very little employment will be available in industrial centres because our factories which are now producing munitions of war will have to seek other fields for their product and there will necessarily be some delay while they are re-transferring their machinery to the production of the articles that will be required.

"There will also be little employment available on the railways because this work has been so extensively carried on in the past few years that there are not likely to be any big extensions for the next few years. Therefore, the only employment on a large scale that men will find will be road construction which should be undertaken not only by the Provincial Governments, but by the Federal Government, for the country needs good roads if it is to develop properly. Well constructed highways, properly maintained, are a benefit to all classes of the community and the rural districts will probably benefit, more from them than any other section, for good roads should always be built with the idea of acting as feeders to the railway lines or to the large commercial centres, thus allowing the farmers to haul their produce to these places at a minimum cost.

"The Congress in Ottawa this year is held with the main idea of appealing to the rural district. We want to have plain heart to heart talks with the farmers to show them the benefits of good roads from their point of view, and to disabuse their minds of the idea that good roads are built mainly for the convenience of the motorist. This idea has been dispelled in those districts where good roads have been built, and the agriculturist has proved to be the greatest beneficiary from them. I believe the Ottawa congress is going to be a great aid in educating the rural population in this direction and the splendid list of speakers already announced will ensure that the information given will be of practical value to all public bodies that are concerned with the problems of road maintenance."

The special features of the Congress week are as follows:

Tuesday evening, April 10th, meeting of the Dominion Good Roads Association, with President J. Duchastel in the chair, to consider the proposed Dominion charter.

Wednesday evening, April 11th, annual dinner of the association, at the Chateau Laurier.

Thursday evening, April 12th, annual meeting of the Canadian Automobile Association at the Chateau Laurier.

Friday evening, April 13th, annual meeting of the Ottawa Valley Motor Car Association.

Saturday, April 14th, annual meeting, receiving of reports, consideration of resolution and election of officers of the Dominion Good Roads Association.

THIS JOURNAL IS PUBLISHING A SPECIAL "PREPAREDNESS NUMBER" IN THE COURSE OF A FEW WEEKS FOR THE INDUSTRIAL DEVELOPMENT OF MUNICIPAL CANADA.

Fourth Canadian and International Good Roads Congress

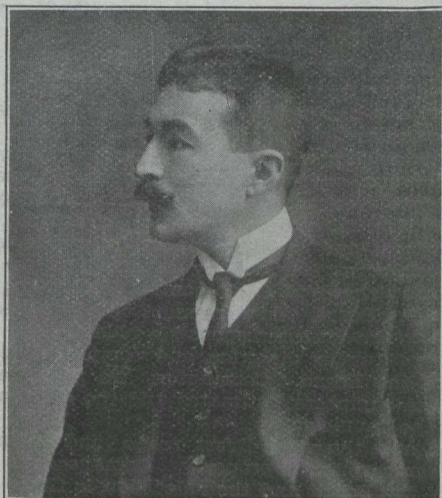
At the time of the Journal going to press the programme for the **Fourth Canadian and International Good Roads Congress**, which will be held in the Horticulture Building, Ottawa, April 10-14, had not been completed, but the following subjects with the respective speakers are settled upon.

- Modern Methods of Maintaining Earth, Clay and Sand Roads.**
Paul D. Sargent, Chief Engineer, State Highway Commission of Maine.
- Drainage and Foundations.**
Geo. Hogarth, Chief Engineer, Ontario Public Highways Department.
- The Highway Laws of Ontario.**
W. A. McLean, Deputy Minister of Highways, Ontario.
- Bituminous Roads and Pavements.**
Col. Wm. D. Sohler, Chairman, Massachusetts Highway Commission.
- Cement Concrete Roads and Pavements.**
T. Harry Jones, City Engineer, Brantford.
- The Construction and Maintenance of Gravel and Macadam Roads.**
James H. MacDonald, Ex-State Highway Commissioner of Connecticut.
- Highway Birdges and Culverts.**
W. G. Yorston, Ass't Road Commissioner, Province of Nova Scotia.
- Safety on the Public Highways.**
R. B. Morley, General Manager, Ontario Safety League.
- Brick Roads and Pavements.**
D. T. Black, Town Engineer, Welland.
- Road Oils.**
Arthur H. Blanchard, Professor of Highway Engineering, Columbia University, New York.
- Wood Block Pavements.**
A. F. MacCallum, Commissioner of Works, Ottawa.
- Modern Road Machinery, its Selection, Use and Care.**
W. S. Huber, Ass't Engineer, Ontario Public Highways Department.
- Road Organization.**
Geo. S. Henry, M.P.P., Ontario.
- Granite Block Pavements.**
W. H. Connell, Chief of Department of Public Works, Philadelphia.
- Methods Employed for Making Road Material Surveys.**
L. Reinecke, Geological Survey, Department of Mines, Ottawa.
- The Highway in Relation to Land Development.**
Thos. Adams, Town Planning Adviser, Commission of Conservation, Ottawa.
- Special Railroad Rates.**
As many of the delegates last year failed to take advan-

tage of the cheap railroad ratio which the executive arranged for we publish below the special instructions, which it will be noted must be taken advantage of at the time of purchasing tickets at the home depot.

Instructions to Delegates.

- 1.—The lines constituting the Eastern Canadian Passenger Association have agreed to grant reduced fares on the Certificate plan for persons attending the **Fourth Canadian and International Good Roads Congress**.
- 2.—Purchase first-class full fare one-way tickets (fare for which must not be less than fifty cents) to Ottawa, (or to nearest junction point if through ticket cannot be obtained), and secure Standard Convention Certificate to that effect on standard Certificate form which must be presented to the Congress Secretary at Ottawa immediately upon arrival.
- 3.—Secretary of Meeting must fill in on Certificates all particulars as required certifying on each standard Certificate, over his personal signature, that the person named on the Certificate attended the meeting, and stating thereon that the required number of persons have paid fare coming to the meeting, and hold properly receipted certificates of the standard form, or round trip tickets.
- 4.—Tickets issued on Certificate plan are good going April 6, 7, 8, 9, 10, 11, 12, and validated certificates will be honored for return up to April 18th, inclusive.
- 5.—On surrender of standard certificate properly filled in and executed, to ticket agent at place where meeting is held (or at nearest Junction if tickets for the going journey were purchased to it) not later than three (3) days (not counting Sunday) after agreed date of adjournment of meeting continuous passage tickets (not good to stop-over) for the return trip will be issued at fares set forth below, on the condition of certificates, and by the same route as used on the going trip.
- 6.—(a Fares from points in Canada east of Port Arthur, Ont., will be as follows:—
If Certified Attendance is: Fare for return trip will be:
99 or less— Two-thirds regular first-class fare plus 25 cents.
100 to 299— One-third regular first-class fare plus 25 cents.
300 or more— Upon payment of 25 cents to the Special Agent at time certificate is validated, no further charge to be made by ticket agent when ticket for return journey is obtained.
- 7.—A Special Agent of the Transportation lines will be in attendance at the Meeting for the purpose of validating certificates at which time he will collect the 25 cents referred to above.



B. MICHAUD,
Deputy Minister for Roads, Quebec.
Past President Dominion Good Roads Association.

The Official Report

of the

Proceedings of the Good Roads Congress will be published in a Special Number of this Journal to be issued June 1st

Municipal Affairs in British Columbia

JACK LOUDET.

War Relief Act.

The opening session of the Provincial Parliament finds the usual large number of proposed amendments to the Municipal Act down for consideration. The most important of these are the result of legislation hastily enacted with no opportunity given the Union of British Columbia Municipalities to consider its effect.

The War Relief Act, hastily conceived and hastily enacted has been very widely condemned.

The benefits which it was supposed to confer have been found to be a negligible quantity while the harm it has done is a serious matter to many municipalities. It is now proposed to alter the act so as to throw on the property owner himself the onus of proving that he is entitled to the benefits of the act and to refuse the benefits to men joining for home service only.

It has been held that a man joining the militia and later getting his discharge is protected by the act until the close of the war. If the act is not carefully amended the financial position of many municipalities may be seriously affected.

Errors are bound to occur unless the municipality takes every possible step to prove that a man is not entitled to the protection of the act and the cost of taking such steps would be many times the amount of the taxes, more especially in the localities where the land is held largely by non-residents.

New Speaker Ex-Reeve.

The new speaker of the house, Mr. Weart, is a former reeve of Burnaby and a man who has taken a keen interest in municipal affairs. It is perhaps unfortunate that he will not be in a position to take part in debates on proposed municipal legislation. Efforts have been made for years to get a department of municipal affairs and as minister of such a department Mr. Weart would have been of great value.

South Vancouver Sold Its Treasury Notes.

South Vancouver has practically completed the sale of \$450,000 treasury certificates secured by arrears of taxes. A difference of opinion seemed to develop in the council as to the nett price to the municipality and as to the respective values of the offers submitted but eventually the award was made to a Toledo firm.

A rather amusing situation has arisen in regard to the proposal of a timber company to construct a logging rail-

road in North Vancouver. The district of Burnaby which receives water from the Seymour River protested that the railway would endanger their water supply. The projected railway is to go up the Capilano Valley, a long way from the Seymour Valley, the protest having been based on a newspaper report which mention the Seymour in error. Protests of this kind would have more value if they were based on carefully compiled information and this tendency to protest against any development without considering its probable effect is unfortunate.

Less than 14 per cent of the watershed area is effected by the proposed logging operations and the company seems prepared to submit to any reasonable regulations to prevent pollution of the water supply.

Conference of Delegates from Greater Vancouver.

A conference of delegates from the municipalities of Greater Vancouver will take place shortly in Victoria and the question of a commission to look after the watershed of Greater Vancouver will be taken up with the government. Such a commission would be of great value in attending to all questions of pollution and the apportioning of the water available among the several municipalities.

The proposed delegation to Ottawa to take up the matter of harbor development has been postponed until the return of the Premier from Great Britain. In the meantime money is being freely wasted in a dispute between the government and the Harbor Board — the latter actually, if not nominally a government institution.

The lawyers, of course, are quite satisfied even if the municipalities surrounding Burrard Inlet are not. The Gitsilano Reserve, outside the harbor is being expropriated by the board and the government is disputing the finding of the arbitrators.

A serious situation has arisen in the Okanagan Valley where one of the irrigation companies is unable to repair the flumes and ditches which are now in bad shape. The municipality is financially unable to do much in the matter and the government has been appealed to to take immediate action in order to enable crops to be grown this year.

The City of Victoria is petitioning the government to introduce a Daylight Savings Bill to provide for setting the clock forward one hour from March 14th to September 15th in each year.

The Good Roads Act of Manitoba

The Act establishes a Good Roads Board, composed of three members. The Chairman is called the Highway Commissioner and gives all his time to the work. Attached to the board are a chief engineer and such engineers, inspectors, clerks, etc., as may be necessary. The duties of the Board and all its employees are to carry out the provisions of the Good Roads Act, to compile statistics and collect information relative to the mileage character and condition of the highways; investigate and determine upon the best methods of construction establish standards for construction and maintenance taking into consideration the natural conditions, availability of material and ability of municipalities to build and maintain roads; to advise and give information to municipal officers and at all times lend aid in promoting road improvements throughout the Province.

The Act applies to two classes of roads:

(a) Roads which, while of value to the municipality, are likely to be of importance over a wider territory and may be classed as great main provincial highways.

(b) Roads of purely local benefit, constituting part of a well defined system of municipal highways, especially such roads as are most useful in marketing produce.

Any municipality desiring aid under this Act applies to the Board by resolution, enclosing a statement of the last revised assessment, a plan of the roads desired, the kind of road wanted, whether the cost is to be provided out of current funds or by sale of debentures and an approximate estimate of the cost.

The Board then sends an engineer to make a full report and may then approve the system, which is afterwards approved by order-in-council.

The amount of aid given by the government is:

- (a) In the case of main provincial highways, gravelled and with permanent bridges and culverts, 66 2-3 per cent.
- (b) In the case of municipal roads, gravelled, 50 per cent.
- (c) In case of earth roads, 33 1-3 per cent.

Permanent bridges and culverts, 50 per cent; temporary bridges, 33 1-3 per cent. The same aid may be given to bridges which are not on any good road system.

The municipality may pay its share of the cost out of current revenue, or by special levy, or may raise it by the sale of debentures, which may be guaranteed by the government. The debentures must not exceed 6 per cent of the assessment and must be approved by vote of the electors. Work must be done by contract, unless otherwise authorized by the Board. No contract is binding until confirmed by the Board. Tenders must be advertised and contracts let to the lowest responsible bidder. All work must be performed under direction and completed to the satisfaction of the Board. Contractors are paid from time to time on the engineers' estimates and the government share paid to the municipality.

Powers are given to divert roads, and to make water courses across private property. Damages are to be estimated by the Board and their decision is final.

Provisions are made for maintenance of roads built under this Act. If the municipality fails to maintain them, the Municipal Commissioner is authorized to do so and levy on the municipality for the cost. — Col. C. Ivens, before Convention of Rural Municipalities of Alberta.

Municipal Accounting

E. T. SAMPSON,

Sec.-Treasurer of Outremont, P.Q., and Member of the Society of Municipal Treasurers and Accountants (Eng.)

(SECOND INSTALLMENT.)

Stocks and Stores Accounts.

Many valuable Text Books have already been written on this subject (Garcke and Fell, and many others), so I need not here take up much time in describing this well trodden theme. Suffice is to say that a storekeeper should be appointed, in all those municipalities which by their size and requirements are compelled for reasons of economy to buy and accumulate stocks and materials for the purpose of supplying more than one job or service (I think this is the case with most of our municipalities), who will be responsible for the receiving, recording and distributing of all stores of this corporation.

The keeping of the three following books in connection with stores accounts, is, I think essential:

1. Goods inwards book.
2. Goods outwards book.
3. Stores ledger.

Also various forms of delivery slips, requisition slips, etc.

These books will best be kept in columnar form, rulings of which will be governed by the classification of stores, etc., considered necessary.

If classification is extensive, the cost of keeping up these a/c's will be correspondingly increased. It will be for each municipality to decide to what extent the benefits are commensurate.

The use of symbols in extensive classifications will greatly reduce the clerical work involved in these accounts. Useful data for basing comparisons between workmen upon the consumption of materials can easily be obtained if the storekeeper is a smart man.

The duties of the storekeeper, clerks, etc., connected with this department should be very clearly defined. No storekeeper, as already stated, should be allowed to assign any duties to any of the other employees.

The following objects should be well kept in mind:

1. Materials purchased at lowest price.
2. Safe storage, free from wastes and pilfering.
3. Accurate and rapid periodical statements of stores, etc., to various works.
4. Accurate and rapid preparation of statement of stores on hand.

Inventory of Stocks and Stores.

The preparation of the inventory should be entrusted to the engineer, or to one of his chief assistants. Any large difference between that amount or quantity and the statement per storekeeper should be investigated.

LOAN CHARGES.

Sinking Fund Charges.

In determining these charges references should be made to the loan period and life of asset, if life of asset, say cement sidewalks, does not coincide with the loan period care must be taken that sinking fund instalment is sufficient to redeem the asset at end of its period of usefulness, so that same may be renewed without further borrowing. In any case amount of sinking fund instalment must never be less than amount prescribed in loan by-law governing same.

Instalment of Principal (Serial Bonds).

Repayments on this principle, which is strongly advocated by Toronto's Finance Commissioner, Mr. Thos. Bradshaw, is highly commendable for the following reasons:

1. It obviates the necessity of maintaining a sinking fund, from which losses occur by:
 - a. Cost of administration of funds.
 - b. Earning power of accumulated funds is never equal to the rate of interest paid by the municipality on its own securities.
 - c. Incompetent management may fail to accumulate out of revenue the correct amount of annual instalment — may claim poor investments — may fail to credit sinking fund with correct amount earned on its accumulations.

2. The question of interest paid being much less than by the sinking fund method is with the foregoing reasons, decided by the extent of the financial accommodation required. It is obvious that the more the loan is reduced the less will be the interest charges payable.

Apportionment of Loan Charges.

The apportionment of loan charges among the several

services of the revenue account as well as of the amounts thereof to be provided out of special taxes imposed on particular streets or districts of the municipality can only be correctly effected by the DOUBLE ACCOUNT SYSTEM to which I will refer when discussing forms of balance sheets.

Suspense Accounts.

Suspense accounts will be required for the following services, etc., distribution of which will be made annually or oftener if required. It will be found in actual practice that for the purpose of interim reports on expenditure, etc., most of these services can be reduced to an approximate percentage of the expenditure of the department, or special cost account under review. The assistance of the engineer or works foreman will be necessary to arrive at an equitable apportionment of same, viz.:

1. Stable account.
2. Use of plant.
3. Insurance for accident risks of all sorts, or share of accident fund when municipality elects to accumulate fund against this liability.
4. Salaries (engineer and administration).
5. Miscellaneous expenditure which it is considered equitable to spread over more than one year.

The foregoing remarks apply to capital as well as well as revenue accounts. Apportionments will be arbitrary, no fixed rule can well be made and each account will require particular attention. Again special caution is here required to observe all ordinance contained in charter, general law. Special powers might be expedient in certain cases.

Reserve Accounts.

Reserves should be set up and charged against revenue in respect of:

1. Anticipated charges for services, etc., already rendered.
2. Anticipated bad debts.
3. Disputed accounts.
4. Contingent liabilities, law suits pending, etc.

Income.

As the largest and most important sources of revenue are the taxes, we will first discuss that special department of the municipality.

Incidence of Taxation.

Throughout the Dominion I believe that the incidence of taxation is the ownership of land and buildings situated thereon (buildings may be partially exempt in a few municipalities).

The Valuation Roll.

Art. 5696, R. P. 2, 1909. "The assessors shall each year, at the time and in the manner ordered by the council, assess the taxable property of the municipality, according to its real value. The Council may, by resolution relieve the assessors from the duty of making a valuation roll of the taxable property oftener than every three years; and, in such case, the Council shall revise the roll every year or cause it to be revised by the assessors as it deems expedient, giving the same notices and delays as for the making of the yearly valuation roll.

The assessors shall also make the valuation of the annual value of such property, and enter it in a roll in a separate column.

They shall also enter in the roll the names of all tenants and the amount of annual rent paid by each of them."

The actual writing up of the valuation roll is generally undertaken by the treasurer's department and great attention and special thought should be exercised in its preparation.

A joint valuation roll and collection ledger should be adopted on account of the great saving of work and the facilities in handling same throughout the year.

With proper safeguards, the loose leaf principle will ensure further facilities and savings. I here submit the pro forma ruling of the Valuation Rolls and Collection Ledgers of the City of Outremont. (See form attached in last installment).

(To be Continued.)

A Special Preparedness Number of this Journal will be published in the course of the next three weeks,

Municipal Affairs in Manitoba

H. E. MORTON.

The importance of aiming at good economic results in civic administration and a strong plea for co-operation between cities, rural centres and the province, were points made by Thomas Adams, Town Planning adviser to the Commission of Conservation, when addressing a large company of representative citizens in Winnipeg last month.

Mr. Adams, whose views carried considerable weight with those present, shown in the fact that the Civic Improvement League have already several of his suggestions under consideration, said that in reviewing the municipal outlook in Canada, they had to consider two divisions, each of which required careful inspection, both being inter-related, and both of which they had to consider especially at a time when they were shouting about the high cost of living.

What was most necessary, said Mr. Adams, was that the provinces and the municipalities should come into closer touch, and the sooner they both commenced to realize this the better, if they were to get the best and proper results from civic administration, which after all was provincial legislation. At the present time, he said, manufacturers were going outside the big cities and buying up farm lands, considering this a better proposition than locating within city limits, or on land that was likely to be brought within city limits, owing to the big rental values and consequently high taxation.

That was a state of affairs, said Mr. Adams, that a big city like Winnipeg could not afford to look upon with complacency, as it meant the big vacant city lot remaining vacant for perhaps years to some and the losing of big industries such as all cities were desirous of securing.

Comparing Winnipeg to Leicester, England, the latter city with a population compared with Winnipeg's 200,000, Leicester, he said, had an assessable value of \$113,000,000 compared with Winnipeg's \$298,000,000, with again a taxation of \$10 a head of population instead of as in Winnipeg \$26. There was no denying the fact said Mr. Adams that Canadian cities were adopting the American system of speculative growing instead of growing in a more natural manner.

Suburbs Should Be Market Gardens.

Land at the very doors of the consumer with good roads and easy facilities for getting produce into the cities should be natural market gardens and the natural place for producers to locate. Many Canadian cities had, however, during recent years driven the producer away and sacrificed this valuable asset to vested interests and to speculative, enhanced and mythical prices.

Dealing with opinions expressed as to conditions following the war, both optimistic and pessimistic, Mr. Adams held that one extreme was as bad as the other. The middle course was the best to pursue. It was, he said, best to consider things as they were, put their houses in order on the basis of things as they now existed, and be prepared for any eventuality.

Winnipeg's Civic Pension Scheme.

The question of pensions to retiring civic officials — for years a contentious problem and one which crops up annually at the municipal elections is now occupying much attention, the city council having under consideration a new scheme prepared by Professor M. A. Mackenzie, of Toronto University, an expert of such matters.

The new pension scheme, if adopted, will cost the city \$85,355.15 per annum, not including the police force, instead of as at present, \$18,755.81, and provides for the fund being credited with the sum of \$525,000, this being the initial cost to the city in respect to present employees.

It is proposed that every person who is an employee, or who enters the service of the city after a certain date, shall contribute to the fund a uniform percentage of his salary check once in each quarter. This schedule, based according to age at entry into the fund, is as follows:

Below the age of 27, three per cent throughout future service; between the ages of 27 and 33, three and one half per cent; 33 to 38, four per cent; 38 to 42, four and one half per cent; 42 to 45, five per cent, and present employees above the age of forty-five years, five per cent, no person entering the service after 45 years of age to be eligible. Those who leave the service of the city will have contributions returned with three per cent interest, as will the heirs of those who die as pensioners before receiving the whole of such return by way of pensions.

Referendum Not Essential.

The provincial legislature, in the event of the scheme being adopted by the council, may be asked to give power to the city to issue debentures to the amount of \$525,000, in which event it would not be necessary to place the project before the people by way of a referendum. To make the fund permanently solvent, the opening balance sheet to fully cover the value of pensions to present members of staff, would be \$1,577,000, provided as follows: Value of contributions by present members of staff, \$526,000; value by city in respect of such present members, \$526,000, and at credit of pension fund, \$525,000.

Several pensions now being paid by the city exceed \$4,000 per annum, this amount being recently granted to the retiring assessment surveyor. The maximum pension under the new scheme will be \$2,500, and the minimum, \$500.

City Losing By Jitney Operation.

According to figures quoted by its license inspector, Winnipeg is losing approximately \$32,850 a year by allowing jitneys to operate on its streets. Of the 558 jitneys licensed, and for each of which \$20 license fee has been paid, 300 are working at the present time, and can be considered as the average number working throughout the year. Taking the earnings of each car at the low figure of \$6 per day and 300 cars, this, the inspector considers, would represent a sum of \$647,000, after allowing for the license fees paid to the city. Computed on a five per cent basis such as is paid to the city of Winnipeg Electric Street Railway Company, this means that the city is losing about \$32,850 annually.

Daylight Saving May Be Dropped.

The daylight saving measure which was in operation in Winnipeg last summer, is likely to be repealed this year. Under the by-law now in force daylight saving would automatically go into effect on April 22, but a resolution will be submitted at next meeting of the city council calling for its repeal, on the ground that it is unworkable if not universal. Railway men, working according to standard time, are in strong opposition to its continuance, and the Trades and Labor Council and the Street Railway-men's union have both petitioned the council asking for the by-law to be repealed.

Tax Levy For 1917 May Be Higher.

Winnipeg's tax levy for the next fiscal year — as and from May 1, will, it is stated, be 16½ mills — possibly 17. With a reduced assessment of \$20,000,000, brought about by the conservative and careful policy of the council, the demands on many may, however, be the same or even less than on former occasions.

At present the rate is 15.70 mills. Increases in civic salaries for the coming year, brought about by constant demands on the ground of the higher cost of living, are expected to eat up \$40,000. Municipal hospitals, now accounting for .56 mills are expected to show a larger demand, and half a mill will of necessity have to be added to the Municipal Patriotic Fund call, which now takes 1.254. While in several departments future appropriations will show an increase on those of the present year, the board of control will benefit by the street economy practised during the present fiscal year in all departments. This has been rendered all the more possible by a system of monthly statements from all departments showing appropriation and expenditure for the particular month and to date. The \$180,000 credit balance with which it is expected the city will emerge at the end of the present fiscal year, will to a large extent have been made possible by this system which has shown splendid results.

Steel chimneys at the Winnipeg incinerators have not come up to expectations, one erected at the Elmwood plant just outside the city having lasted scarcely more than three years. The city council is now calling for tenders for 150 foot brick or concrete chimney, tenders for which close on April 15.

The Dominion Civic Improvement League is to hold its convention in Winnipeg May 28th and 29th. Meetings are to be held in the Industrial Bureau.

DR. J. M. HARPER ON "THE CONSOLIDATION OF THE EMPIRE."

(A Review).

An opportune article, from the pen of Dr. J. M. Harper, of Quebec, recently appeared in the Quebec Chronicle. The pleading of the article, which is under the title of "The Consolidation of the Empire," is a practical one, and suggests that a closer consolidation of the Empire may readily enough be brought about in and through a "Possible Parliamentary Assimilation," in terms of which the various Overseas Dominions may share with the motherland in the administrative rule of the Empire as a whole. And one cannot but marvel at the coincidence of a renewal of the friction on the part of the Irish leaders, while the deliberations of the temporary Imperial War Cabinets are in solemn progress, and the appearance of Dr. Harper's article, as something which cannot but draw public attention to the question of Imperial Federation that has to be settled sooner or later in some way or another. Certain members of the lately constituted Lloyd-George Cabinet, including the Prime Minister himself, have been telling us that some kind of a practical and fundamental change in our Imperial organization is in sight as a post-war necessity. One Canadian Minister, in commenting in the article says:

"The points that Dr. Harper deals with are interesting ones," that Minister of the Crown says, "and the publication of the article embodying them will no doubt stimulate thought upon a subject which, always of interest, assumes greater importance under the present conditions which the Empire finds itself placed, and the problems it will have to meet after the conclusion of the war."

The visit to London of Sir Robert Borden, as a co-adviser with the enlarged War Cabinet of the day, seems to have formed the direct incentive in Dr. Harper's mind to re-air the subject which has ever been of great interest to the British subject whenever it has been mooted. The reason why it has been, so often laid aside, with no practical results emanating from the discussions over it, is easy of location, as Dr. Harper tells us.

"The years have been allowed to wear the project out to a mere skin-and-bone of a theory. But that skin-and-bone of a theory is taking on flesh again. The war has brought it out into the open once more to the point of its being a practicability. The oyalty of the Overseas Dominions and their instant spontaneous rallying to the Empire's needs have awakened the motherland's gratitude. The problem is being re-enunciated in letters of blood and emphasized by the heroism of battalions hailing from all parts of the Empire — Canadians, Australians, New Zealanders, East and West Indian Islanders, South Africans, and Newfoundlanders. The problem is even now being examined in its more salient details by our British statesmen in every section of the Empire. The motherland is ready to take up the question in line with the wishes of the Overseas Dominions. More than one prominent statesman claims that the anomaly of a tribute paid in lives and treasure with no administrative voice in the Empire's counsels cannot be allowed to continue. There must be a change, they say, when once the return of peace gives the peoples of the Empire time and opportunity to set matters right, conciliatory on the part of the contracting parties."

And two other quotations from Dr. Harper's lucid article brings the reader into the very heart of the subject he discusses, namely, as to why the settlement of the momentous question has been so long delayed, and what ought to be the preliminaries taken to have it solved at last.

"The heterogeneity of rule in the Empire has been the basic deterrent in the way of Imperial Federation. That heterogeneity has ever stood in the way of the acceptance of the advice of an Imperial Conference now and again, made up of representatives from all sections of the Empire. To assimilate into a possible whole there has to be a wholesome possibility of assimilation in all its parts, in order to bring about an equal system of representation in any executive exponential of parliamentary rule. The King is over all the Empire's realms; but it is still as difficult as ever to see how a supreme parliamentary control can be arranged for, in and through the direct casting of the ballots of the people all over." And it is that problem of representation which Dr. Harper's article tries to solve in its subsequent paragraphs.

"The setting of the Empire's house in order," as Dr. Harper says, "has to be precluded by the motherland setting her own immediate household in order. The status of Ireland has to be agreed upon; and that involves the

fixing of a co-relative provincial status for Ulster and Wales and Scotland. The heterogeneity of rule of the Overseas Dominions forbids them taking any part in the fixing of such a status. And, if the House of Lords is to be so reconstructed in terms of a democratic demand so as to admit of representatives from all parts of the Empire being given a seat on its floor, that re-forming has to be brought about by the motherland herself, as a preliminary to a possible Imperial Federation. There can be no opening of the doors of the House of Commons to the Overseas Dominions, since that is a body composed of members directly elected by the constituencies of the motherland in proportionate ratio."

And Dr. Harper proceeds to show that the second chamber of parliament in the motherland, called by whatever name may be given to it, is where a lasting and practical Imperial Federation may be given its first parliamentary status. And the story of his argument is something which ought to be read and spoken of by everybody who has the future welfare of our Empire at heart. The Quebec Chronicle deserves credit for having the enterprise of producing the article in full, with the reference made in it to the visit of our Canadian Prime Minister and his three colleagues to London, to share in the deliberations of the amplified War Cabinet of the day.

DAYLIGHT-SAVING IN EUROPE.

A decree has been promulgated directing all Italian clocks to be advanced one hour from April 1 to September 30.

All clocks in France were put forward one hour at midnight on March 24, according to the summer time bill which has been passed by Parliament.

THE VACANT LOT PROBLEM.

In these days of rush and absorption in the business affairs people as a rule are prone to neglect the little things which go toward making a beautiful city. Lack of civic spirit which does not reach beyond one's own sidewalk does not argue well for any town. I am a firm believer in the conservation of neighborhood pride; in fact, when you get right down to the root of the matter, there cannot be a prosperous city unless each home and business has local pride in its surroundings. Civic patriotism depends on this pride. An individual who strives to improve home conditions is bound to be a good citizen, and the combination of such good citizens makes the ideal city. The first consideration in a campaign for beautifying and improving vacant lots is the personnel of those who will have direction of the movement. This work can be most successfully done through an organized body such as Civic League. The size of the organization is not so important as is the fact that the work of direction should be in the hands of competent people. Those who have a clear vision of what should be done, who are gifted with patience, who are willing and sensible enough to subordinate personal opinion or the general good, who are cheerful, good natured and have a sense of humor, and, above all, people who have a very large amount of tact and know when to say the right thing, and how to approach the people in whom it is necessary to awaken civic pride. — J. Lafrance in Civic Progress.

UTILITIES OF BRANTFORD, ONT.

According to the annual report of the municipal utilities the City of Brantford has a surplus of \$11,999. Particulars are as follows:

	Investment.	Earnings.	Expenses.
Waterworks	\$ 832,704	\$ 82,869.20	\$ 27,440.27
Hydro	281,670	80,042.51	46,734.70
Street Railway	436,549	97,737.98	68,369.35
	<hr/>	<hr/>	<hr/>
	\$1,550,923	\$260,649.69	\$142,544.32
	Interest		
	and sink-	Depre-	Surplus or
	ing fund.	ciation.	deficit.
Waterworks	\$43,768.95	\$ 7,051.50	\$ 4,608.48
Hydro	17,221.00	7,500.00	8,586.81
Street Railway	24,564.00	6,000.00	*1,195.37
	<hr/>	<hr/>	<hr/>
	\$85,553.95	\$ 20,551.50	\$11,999.92

*Deficit.

The Democracy of British Institutions

HARVEY N. SHEPHERD,
Civil Service Commission, Boston.

Great Britain is a land of anomalies. It is a monarchy, with a King not bound by a written constitution, and his possible powers and prerogatives vast and vague. In fact, he conforms to the will of his ministers; and they are responsible not to him but to Parliament; and, while they receive their appointments from him, he would not venture to appoint a person not acceptable to Parliament. In the kingdom also the aristocracy forms one chamber of Parliament, until lately equal in nearly all its powers with the other chamber, which is elected by the people. The first chamber, the House of Lords, is the Kingdom; just as the Privy Council is the final judge in all questions of law arising in the colonies and dependencies of the United Kingdom. Both these bodies are very large, and in both men trained in the law are in the minority. It is the right of all the members of the House of Lords to take part in every judicial decision, as it is of all the members of the Privy Council. In fact, the only persons, who actually do take part in either body, are lawyers appointed for this express purpose. A member of the House of Lords may refuse to submit to the jurisdiction of the established courts, and claim his right to trial for an offense by the House itself. In fact, he never does claim this right, and it would go hard with him if he did. Such anomalies would drive to frenzy a philosopher, who was at work upon a logical frame of government; and yet Great Britain not only is well administered, but also it is in fact one of the most democratic of countries; and in actual practice it is one of the most logical, since it applies the same frame of government to the country as a whole, and to all its parts, and with the same kind of popular responsibility.

The country is divided into counties, the large cities being counties by themselves. Each of these counties is governed by a single body called the council, composed of elected councilmen, and of aldermen, chosen by the council; and in the large cities the county powers are vested in the city councils. The county, outside the large cities, is divided into boroughs and urban and rural districts, each of which is governed by its own council, formed on the same plan as a county council, save that in the district councils there are no aldermen.

The county council is the highway authority, being responsible for all the main roads within its area; and it maintains them either directly or through the district councils; it keeps up county bridges; and may construct or aid light railways. It must secure adequate elementary education in the county, and in addition may supply or aid higher education. It is the public health authority; and it administers the laws relating to goods and drugs, diseases of animals, weights and measures, and river pollution; and for these purposes may appoint a medical officer.

The county councils, like Parliament, the great council of the nation, have both legislative and executive functions, the latter falling upon the committees, into which the councils are divided, which committees appoint the officers who exercise executive control. The many matters of general interest, which with us are regulated by the direct action of the legislature, or by boards created by it, in Great Britain are regulated by these county councils. They have aroused much popular interest, they show enterprise and energy, and they maintain the best traditions of British administration.

Just as the national ministry, or cabinet, must represent the will of parliament and therefore of the people, since it is subject to dissolution at any time, when an issue of sufficient importance warrants the action, so the executive authority of the counties, the cities, the boroughs, and the districts, is always within the control of their councils and therefore of their people.

The underlying principle of British municipal government is democracy, the same democracy which creates and inspires the House of Commons, the mother of parliaments. Its foundations, laid by the Municipal Corporation Act of 1835, the great landmark in the development of modern city organization, are so broad and so simple that its essential features have sufficed without change for nearly a century. While in a few minor details the system is a little different in Scotland from what it is in England the main features are everywhere the same. All authority is lodged in a council of from nine to one hundred members, elected by wards for three years, one third each year, upon the first day of November. There are, apart from the council-

lors, no elective officers. Everybody else is elected and appointed by the council itself. The city can transact business only through its council; and it distributes the business among committees selected from its own number, which committees it constitutes and organizes as it sees fit. It is a system of extraordinary adaptability to the most diverse needs; if a council undertakes a new enterprise, no change in organization is required; all that has to be done is to form a new committee. It is a system which enables a city to move easily in new directions and adjust itself to new work, without any structural alteration.

Inasmuch as every committee is a committee of the same body and makes report to this body, harmony and efficiency in the administration of the several departments are attained to a degree, which frequently is lacking with us. Take, for example, police and health administration; the work of these two departments scarcely can be termed similar in any important respect, and yet efficiency demands that their work shall be done in harmony. The rules made by one depend for their usefulness on the inspections made by the other. So with the water and fire departments. While in Great Britain the control of all these departments is lodged in one and the same body, with us there usually are distinct and independent authorities. It is evident the British method is more likely to be harmonious and efficient. If there is need of a new schoolhouse in Chester, for example, the council directs that it be built; but in Boston three commissioners, appointed by the mayor, and five members of the school board, elected by the people, must determine the site, and the commissioners must request a board of three street commissioners, also appointed by the mayor, to take the land, and the city council then must find the money to pay for the land and build the schoolhouse, and the mayor must approve the action of the council. What useless complication that five distinct and separate authorities must concur in so simple a matter as securing a lot of land for a schoolhouse!

The first duty of the council is to elect a mayor, as he is named in England, Wales, and Ireland, or a provost, as he is named in Scotland, either from its own ranks, or any person qualified to be such, for one year in England, Wales, and Ireland and for three years in Scotland. It then proceeds to choose as many aldermen as equal one-third the number of councilmen. They are chosen for six years, and one-half retire triennially. The range of choice is as wide as that for the selection of the mayor; for the council may take the aldermen from its ranks, or go outside and enlist the service of any one who is qualified for election to the council. The council though does not thereby become a body of two chambers; it remains a single body in which councilmen, aldermen, and mayor always sit together. Their votes have precisely equal weight, and the mayor and the aldermen have no powers of any sort, which do not pertain to the ordinary councilmen. They differ in the methods by which they are elected to office, in length of term, and in the prestige which attaches to their positions, but they do not differ in power.

The mayor represents the city at all public ceremonies, and he is the presiding officer of the council, and, as a member of the council he serves on committees, and is chairman of some of them. The committees are appointed not by the mayor, as in the United States, but by the council. No individual in Great Britain appoints committees. Neither in the House of Commons nor in the House of Lords, nor in any county council, nor in any municipal council, do they give so important a function as the appointment of committees to any single officer. This power always is vested in the body itself. The mayor takes an active part in administration; but there is no concentration of appointments and executive control in his hands, and he has no veto power, and no special privilege of initiating measures. In the relations then between the council and the mayor, there is not the sharp distinction which is found with us, inasmuch as the mayor is its servant in the performance of his functions. There are a few exceptions, where the mayor is regarded as an agent of the nation, and not simply as the head of the city, but these are not of great importance. Our method of placing the mayor as a check upon the council, and the council

(Continued on next page).

GOOD ROADS AND AUTOMOBILES.

As an indication of the growing popularity of the automobiles, because of better roads, the following comparative statistics for 1915 and 1916 make interesting reading. The number of pleasure cars increased from 81,562 to 110,024, and the number of commercial cars from 1,585 to 6,341. At the same time, the number of automobile dealers grew from 1,116 to 3,480, the increase in Ontario alone being from 850 to 2,260.

Provinces:	Pleasure Cars		Commercial	
	1916.	1915.	1915.	1915.
Ontario.	52,077	36,661	2,804	Inc.
Quebec.	12,655	9,584	900	528
Nova Scotia	2,907	1,660	24	17
New Brunswick	2,977	1,973	Inc.	Inc.
Prince Edward Island	68	46	Inc.	Inc.
Saskatchewan	12,012	9,106	Inc.	Inc.
Alberta.	11,939	10,225	Inc.	Inc.
Manitoba	9,239	5,635	277	200
Yukon.	43	...	5
British Columbia	6,140	6,629	2,336	835
Total	110,024	81,562	6,341	1,585

THE DUAL ROADS.

A writer in the American Rider and Driver, referring to what has been done to provide a safe road for horses in Ohio, near Columbus, says:

"The insistent demand of the farmers for a change could not be ignored, and now east and west of Columbus the strip of asphalt for motor cars is the centre of the National Road, and the belt of fine gravel on each side is for the horse. The improvement is marching westward to Springfield, forty-two miles, and ultimately will reach Cincinnati and Indianapolis.

"The National Road was built by the Federal Government, and it is now maintained by the taxpayers of the territory through which it runs. Other States are following the example of Ohio. Discussion of the subject should not be dropped. Keep the hammer busy and the rights of owners of horses will not again be threatened or violated."

GOOD ROADS CREATE LAND VALUES.

This is the way the good roads movement affects land values:

"The selling price of tillable lands served by the roads is increased from one to three times the total cost of the improvements.

"The gross annual saving in hauling costs due to the good roads amounts to \$627,000 for a traffic of about 3½ million ton miles, while the net saving, after deducting the cost of interest and principal for road work, average 11.6 cents per ton mile for hauling.

"Ten more children in every 100 are enabled to secure an education as a result of better roads."

These facts are the result of a research undertaken by the U. S. Department of Agriculture. Four counties in Virginia, and one each in New York, Alabama, Florida and Mississippi were studied during a period of five years.

This report simply furnishes one more argument why the entire cost of a road improvement should be paid for by a tax on land values. — The Ground Hog (Cleveland, Ohio.)

THE DEMOCRACY OF BRITISH INSTITUTIONS.

(Continued from previous page).

as a check upon the mayor, seems strange to a European. The British system is much the more democratic.

Another advantage of the British system is there are no delays in passing measures, such as are caused by deadlocks between our mayors and two chamber councils, possibly of different political complexion, for the British mayor cannot block legislation and cannot veto it. We have adopted this British system in the control of our railroads, in the form of an Interstate Commerce Commission, where the same men make rules, which really are laws, enforce those rules, and hear appeals; a marked example of the effectiveness of the system. Another application of the principle is found in our cities which have adopted the commission form of government, the essential feature of which consists in delegating all powers to one board, who both make the laws and execute them. So popular has the system proven that several hundred of our most progressive cities have adopted it within a few years' time; and its remarkable spread is proof of our shattered trust in the old method of checks and balances.

The structure of a British city resembles that of a business corporation, in which the directors, chosen by the stockholders, appoint a president, a treasurer, a clerk, a superintendent, and other general officers, and leave to them the active administration of the corporation. The stockholders are the voters of the city, the directors are the councilmen, the president is the mayor, and the general officers are the heads of departments, the centre of authority always being an elected council and all boards and officials its servants. It would seem to an Englishman as absurd to make the mayor a distinct and independent authority, and to empower him to veto the actions of the council, as it would to us to make the president of a business corporation independent of its directors.

The simplicity of the structure is undoubtedly one of the reasons why it has been so stable; and in this respect the contrast with our own experience is striking. The form of city government in the United States during the last fifty years has been kaleidoscopic; and an account of the several changes would occupy more space than would be required for all the changes in all the forms of city government in the whole of Western Europe during the same period. Throughout the latter half of the nineteenth century there were few of our cities which could not be likened, as was Dante's beloved Florence of six hundred years ago, to the sick man who could find no rest upon his couch, but kept tossing from side to side in a fruitless effort to ease his pains. From one political party they turned to another, from one mayor who had proved capable but dishonest to another who would promptly demonstrate his honest incompetence, from committees to commissioners, from unpaid boards to paid officials, and from one makeshift to another, as regularly as the years went by.

The clerk is the most important official in a British city and receives the highest salary, sometimes \$15,000 a year. He is its legal adviser, and therefore a trained lawyer, who has entered his calling for life, and he usually goes from one city to another, just as does the German burgo-

master. Glasgow within a few years advertised for candidates for its clerkship from all Great Britain.

The council is an honorable body, to which the best men of the community aspire. Duty well discharged usually means re-election; and many members continue in the service for twenty years or more. There is a stability and a continuity about the administration, and with it all a steady progressiveness. It meets in small towns once a month and in the cities once a week. All its members, including the mayor and the aldermen, serve without compensation. They usually are successful business men, who are proud to serve the city, and they are kept in office so long as they will stay.

The method of election of the councilmen is simple and democratic. There is no party nomination, and no platform, only the man himself. He is nominated by two voters, and is endorsed by eight more. This is the only formality required to get upon the ballot. The ballot is printed on plain white paper, and contain only the name, residence and occupation of each candidate. If the number of candidates in nomination does not exceed the number to be chosen, the election officer declares such nominees elected. The election is by wards, because in this way the attention of the voter is concentrated upon one office only, and because he is more likely to know the candidate. This is considered by many to be one reason for the integrity and efficiency of the councilmen, as it is evident the voters can use more care in the choice of one official than in the choice of many.

We sometimes hear that voting in Great Britain is only by the taxpayers, while the voting here is by everyone. Mr. Chamberlain, a few years after he was mayor of Birmingham, made a comparison in the Forum between Boston and Birmingham, and he showed that, while Birmingham had a smaller population by several thousand than Boston at that time, the number of voters in Birmingham was fourteen thousand more than in Boston. The condition of voting is simply a lodging condition; that is you have to pay \$1.69 a month for the rent of some room, some office, or something of the sort. If you do that, you can vote; and the number of people who would be excluded here by that condition would be very small.

The British municipality is governed by a body of representative citizens, in whom sole power and undivided responsibility is vested, with the light of direct scrutiny upon their acts at all times. For three generations they have given their cities and towns beneficent rule.

MUNICIPAL CONSULTING ENGINEERS.

O. J. Godfrey, F.C.A., past president of the Dominion Association of Chartered Accountants, has contributed an article to a western municipal journal, in which he makes a direct and unjustified attack upon the engineering profession. To sum up his charges, he alleges:—

- (1) That municipal consulting engineers purposely underestimate the cost of improvements so as to obtain the voters' consent to the projects;
- (2) That the over-expenditure would not occur if the engineers did not get a percentage on the over-expenditures;
- (3) That he knows of no case where the actual cost of waterworks or electric light came within the original estimate made by the consulting engineers.

Of course, Mr. Godfrey's charges were not quite so bluntly worded, but when stripped of their excess verbiage, they are in fact exactly as above stated. As a remedy he suggests that a board of engineers be organized by the province (his argument deals principally with conditions in his home province of Saskatchewan), the board's services to be placed at the disposal of all towns and cities in the province. The provincial officials are subsequently to fix the amounts to be paid by the municipalities to the province for any services rendered by the board.

Mr. Godfrey's three charges are hardly likely to be taken seriously by any municipal official who has the slightest knowledge of the ethics and standards of the engineering or any other profession. To engineers themselves the charges are mildly amusing. They are on a par with some other ideas prevalent among some very narrow-minded laymen, such as that surgeons operate unnecessarily for the fees derived; that lawyers drag cases through pre-arranged red tape in order to increase the legal costs; and that dental surgeons drill holes in perfectly good teeth in order to create something to fill.

Any number of cases can be cited where the costs of finished engineering work have been within preliminary estimates. And frequently it is not the engineer's fault when estimates are exceeded. Additions to the original work contemplated, failure of councils to provide the necessary funds when needed, depreciation due to mismanaged sales of debentures, change in sites, increase in prices of materials while council is "getting together" on the proposition, and many other factors beyond the engineer's control often result in excess expenditures.

Any engineer who would indulge in sharp practice such as alleged by Mr. Godfrey, would be disciplined unmercifully by his fellow-engineers. It is not likely that Mr. Godfrey can quote chapter and verse in substantiating his sweeping but vague charges, but if he can, the Canadian Society of Civil Engineers would no doubt be glad to take prompt action upon any real facts that he is able to produce.

Failing the ill, no remedy is needed. But even if such evils did exist, Mr. Godfrey's proposed remedy is unsound. Socialistic action such as suggested by Mr. Godfrey generally results in monopoly, despotism, inefficiency and loss of personal enterprise. This sort of community municipal engineering service has been tried before, not a thousand miles from where these lines are penned, with results that apparently do not outshine individual effort, taking the whole facts of the cases into consideration, and carefully weighing them in the balance. — Canadian Engineer.

A. McKIM LIMITED ADVERTISING AGENCY NEW EXECUTIVE.

The new Executive of A. McKim, Limited, Advertising Agency of Montreal, Toronto, Winnipeg and London, Eng., has been announced.

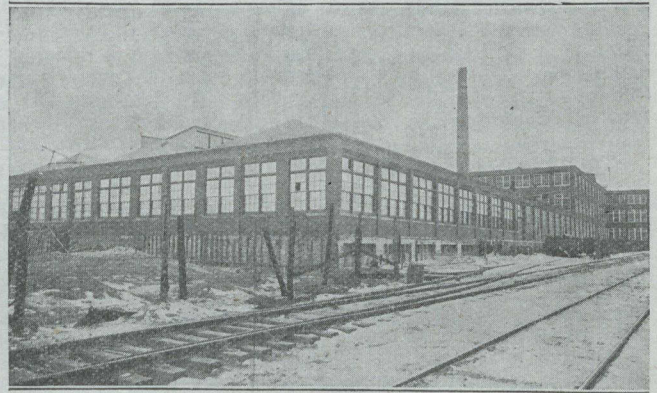
During the last few years, the late Mr. Anson McKim had gathered around him an executive staff capable of relieving him of all but a general oversight of the rapidly growing business of the advertising agency which he founded nearly thirty years ago, and which now comprises four offices in different cities and over 140 employees.

Since his death, these experienced men have been carrying on the work in the same efficient way that has characterized "McKim's" for so many years. The personnel of the executive as now organized is J. N. McKim, President and Treasurer; Mrs. Anson McKim, Vice-President; W. B. Somerset, General Manager; H. E. Stephenson, Secretary; C. T. Pearce, Manager at Toronto; Thos. Bell, Manager at Winnipeg; W. Keeble, Manager at London, England.

STANDARD UNDERGROUND CABLE CO. INCREASE ITS PLANT.

In preparation for the prosperous times which the company anticipates will prevail after the close of the war, the Standard Underground Cable Co. of Canada, Limited, is making an addition to its factory at Hamilton, Ont., which when completed and equipped with the necessary machinery will represent an investment of \$50,000.

The illustration shows in the foreground this addition with a portion of the former factory in the background to the right, the new part extending about to the point where the car is to be seen standing on the switch. The new structure consists of one story with basement built of brick and concrete and is 125 by 120 feet in dimensions, which



gives a total increase in floor space of 30,000 square feet. It is most modern in type and equipped to secure the lighting, heating and ventilation necessary to the best working conditions. Ample fire protection apparatus is also provided for, which includes a complete automatic sprinkler system. The architects are Prack and Perrine, of Hamilton.

The new building will be devoted exclusively to the uses of the wire drawing department, and in addition to housing the former equipment will contain material additions of new machinery of the latest design capable of drawing wires ranging in size from No. 40 B. & S. G., which is about the thickness of a hair, to the largest size of trolley wire; also machines for grooving trolley wire and for rolling flats and squares such as are used in the manufacture of magnet wire. There will also be two new "Bright-annealing" furnaces for annealing or softening the wire after it has been drawn. This addition will not only give room for a considerable increase in the output of the wire drawing department, but the space released will allow for expansions in the stranding and cabling departments.

All of the machinery in the new plant will be electrically operated by 3 phase alternating current motors of 550 volts, 25 cycles, the current being furnished by the Hamilton Hydro Electric Department and carried from the overhead transmission lines of the department to the transformers on the company's property by underground cables. Power is now taken for other uses in the plant from the Dominion Power & Transmission Co.

This increase in the manufacturing capacity of a plant erected just six years ago and still modern and highly efficient, considered in connection with the unexcelled rail and water shipping facilities afforded by its being located on two great railway trunk lines and on the shore of Lake Ontario, puts the Standard Company in an unexcelled position to meet promptly the electric wire and cable requirements of its customers, both domestic and foreign.

AN ART GALLERY IDEA.

As so many poor people will not go to see the famous pictures in the Art Gallery, the York City Council (England), is taking the pictures to the people. Already a selection of the pictures in the Art Gallery has been loaned to several of the council schools for a period for instructional and educational purposes. The pictures will be sent to other schools in due course.

Now the curator has been directed to try the experiment of engaging a room in some working-class locality and exhibiting some of the pictures so that the people living in these districts may have the opportunity and pleasure of viewing the pictures near their own homes, whereas, under ordinary circumstances, they would scarcely ever see them. —Municipal Journal.

The Industrial Survey as a Corrective

By CHARLES W. LANSING.

An industrial survey in its proper sense is a compilation of private information relative to the industrial condition of a city, properly analyzed to show the unfavorable conditions that exist as well as the favorable conditions.

Accurate knowledge of unfavorable conditions is of the greatest importance, because it is through remedying or improving such conditions that the city may hope to gain greater industrial strength.

Such a survey also constitutes a guide to those who will have charge of the industrial development work of the city, enabling them to save time and money that might otherwise be wasted through misdirected effort.

The compilation of the information which will serve these two purposes requires investigation along many varied lines, as follows:

1. Detailed reports on extent and source of all raw materials and semi-finished products available locally and in near territory, such as is used or might be used in processes of manufacture.
2. Study of present local utilization of wastes or by-products produced locally, and recommendations as to further use in manufacture.
3. Study of industrial and manufacturing enterprises already established, to ascertain possibilities for expansion and to learn financial conditions bearing on the possibility of additional financial support.
4. Study of freight and express service and freight rates, to ascertain unfavorable conditions that might be remedied.
5. Study of the local market to ascertain consumption of various kinds of manufactured products. This study should cover the city and suburban territory and also the extended market area in 100-, 200-, 300- and 500-mile zones, and should include information as to the quickness of delivery to such markets and an average comparison with other cities.
6. Report as to the source of supply of various forms of raw material and semi-finished material used in manufacture and the cost of same laid down to the local manufacturer; also a comparison with other cities on such costs and resources.
7. Detailed investigation of the power question. As to steam power, this study should cover character and B. T. U. values of coal from nearest fields and cost based on such value as compared with costs in other cities. As to electric power, the investigation should show comparisons with other cities and point the way to remedying any unfair or disadvantageous conditions that exist. The study should also cover industrial gas.
8. Careful study of the labor situation, not simply to learn the scale or the extent of resources in available labor of various classes, but a further and closer study of labor conditions, including character of housing, methods of handling labor employed by various manufacturers, the attitude of labor toward employers, whether living conditions cause dissatisfaction, labor union troubles and their causes, with recommendations regarding these and other matters which might lead to more favorable conditions.
9. Civic suggestions regarding conditions which might be improved to the advantage of manufacturing interests and to promote industrial growth.
10. The "why" of past failures of manufacturing enterprises, to show any disadvantages that may exist tending to make manufacture in those lines in this particular locality unprofitable.
11. Study of available factory buildings and factory sites, with such information regarding them as might be used to advantage.
12. Statement of the past civic and industrial growth and progress of the city, to show fully whether the city has been keeping pace with other cities, and if not, the reasons for unsatisfactory progress.
13. Incidental to the gleaning of other information, a table should be compiled, with the various manufacturing enterprises arranged in proper groupings, to show the total wage-earner's payroll, the value of annual production and the value of invested capital.
14. Study of the jobbing and wholesale business of the city, to indicate unfavorable or unsatisfactory conditions and possibilities for improving them.

15. Preparation of a list of articles or products, the manufacture of which for one reason or another could be profitably undertaken in the city.

16. Preparation of graphic charts and maps to show:

(a) Relation of city to sources of raw material and semi-finished material.

(b) Shipping transfer points connecting local railroad lines with other lines.

(c) Freight rate maps and charts to show advantages and disadvantages as compared with other cities.

(d) Express map to show quickness of delivery to various points.

(e) Market map to show population and cities in 100- to 500-mile zones.

(f) Agricultural map to show extent of local supply of various raw materials and indicate importance of city as a trading centre.

(g) Local industrial map to show location of railroad lines and freight houses, terminals, street car lines, factory sites and other important features in relation to present industries and available factory locations.

It can be seen that the compilation and analysis of all this information involve a considerable amount of labor and research by persons competent to make such studies and trained in this particular character of work.

When completed, an industrial survey of this kind will be like a composite picture. It will represent not the statements and opinions of one man, but of many men. It will reflect a consensus of the ideas and the knowledge of local manufacturers and business men, and as such will form an invaluable compendium of information for the guidance of those charged with furthering the city's industrial welfare.—The American City.

THE TORONTO-HAMILTON HIGHWAY.

"The use of the Highway has greatly exceeded what was estimated by the commission. A count was taken in October and at the western end near Hamilton the number of horse-drawn commercial vehicles was greater than the entire traffic counted in 1914. Our highest count was almost five times the highest count made at the same point on the Highway in 1914. In addition to the natural increase in traffic, the road is carrying a great deal of the traffic that formerly used parallel routes." — Toronto-Hamilton Highway Commission.

PAVEMENT SURFACE.

The surface of a given section of pavement should be uniform in thickness, though in some instances the concrete foundations may require to be heavier to better take care of unstable spots in the subgrade. There are two good reasons why surfaces should be uniform thickness: economy, and wearing quality. Greater thickness than that required at any given point is waste, and unevenness in thickness causes the formation of depressions under traffic, which is an important factor in causing the early failure of pavement surfaces. We are of the opinion, that one-and-one-half inches is sufficient on some light traffic residential streets, that two inches will suffice for most other places, and that two-and-one-half inches is the greatest thickness of any bituminous surface that can be employed to advantage even under the heaviest and most trying of traffic.

We will say, without fear of contradiction, that the more carefully a given surface mixture is raked and rolled, and the smoother the resulting surface, the longer will be the life of the pavement. Every roll in a surface is an incipient hole that may be expected to become gradually worse as the pavement is exposed to traffic, especially traffic of fast moving heavy loads. The liberal use of a straightedge on all parts of a pavement surface during construction is a very good investment; and the straight-edge should be fourteen or sixteen feet long.

We believe that, wherever possible, asphalt surface should be laid to abut both curb stone and car rail. We do not think there is any desirability, convenience or economy, in ribbons of block surface at either place. Special care should be taken where the pavement abuts car rail construction, of course.—Shas. Mullen.

IMPORTANT DECISION ON THE BITULITHIC PAVEMENT.

BOSTON, Mass., March 23.

To the Editor, Municipal Journal:

A suit entitled Warren Brothers Company vs. W. C. Evans, for the threatened infringement of the Warren basic patent, under which the Bitulithic pavement is laid, was recently before the Circuit Court of Appeals for the Fourth Circuit sitting in Philadelphia, wherein both the validity of the patent was attacked, and its threatened infringement denied.

Judge Buffington, in delivering the opinion of the Court stated: "This patent has been considered by the various Federal Courts and its validity established" and also that "The present case turns on the question of infringement."

The specifications under which the contract in suit was awarded, which it was claimed would necessarily require the construction of a pavement infringing the claims of the Warren basic patent, provided for the use of "Bitumen"; "Limestone dust or Portland Cement"; "Stone, ¾-in. hard crushed"; and "Sand, coarse to fine."

The Court held that under these specifications the contractor was called upon to use stone of one grade only, viz., three-quarter inch stone, "which was not the run of the crusher," and that this was not the composition called for by the specifications and claims of the Warren patent.

After considering the several claims of the patent sued upon, all of which require the use of a graded mineral aggregate, and after referring to the several cases of Warren Brothers Company vs. Owosso, 166 Fed. Rep. 309, Warren Brothers Company vs. New York, 187 Fed. Rep. 831, and Warren Brothers Company vs. Grand Rapids, 216 Fed. Rep. 231, in all of which cases the validity of the patent in suit was sustained and injunctions issued to restrain its threatened infringement where the pavement had not already been laid before suit was commenced, the court pointed out that in the New York case the mineral aggregate "was the resultant run of the crusher, which would necessarily have smaller grades of stone." The court summarized its conclusion by saying: "It will thus be seen that in all these cases there was a series of graded stones, namely the present case there is but a single grade of stone, namely, that which will pass through a three-quarter inch mesh and that which is caught on a one-half inch mesh."

As neither "run of the crusher" nor different sizes of stone were required to be used, the court said there could be no infringement in this case, and the suit was accordingly dismissed.

This decision raises the following questions:

1. The practicability of actually furnishing a stone in large commercial quantities of the uniform size which the court construes to be required by the specifications referred to, to-wit: Stone all of which "passes through a ¾-in. mesh and that which is caught on a ½-in. mesh." Certainly no such finely screened, uniformly sized product has ever been furnished by any crushing plant operating along commercial lines. Furthermore, stone about 1-in. size, that is, passing a 1½-in. screen and retained on ordinary dust jackets in the crusher plant, is the size of stone most generally in demand for most purposes such as building construction, sidewalks, etc. The use exclusively of the intermediate portion ("which will pass a ¾-in. mesh and that which is caught on a ½-in. as defined by the court to be "three-quarter inch stone") of this ordinary crusher product in the quantities required for the wearing surface of a street pavement would evidently very greatly increase the cost of stone, and doubtless most stone producers would not agree to furnish stone of this limited size.

More particularly, approximately 50% of the ordinary stone crusher product is of one inch and finer sizes. Of this total of 50% finer than one inch, approximately 50%, that is 25% of the entire crusher product, is coarser than ¾-in. size. Of this 25%, only 40% or a total of 10% of the product of the crusher is of the uniform size which the Court in this case decides is described by the specifications in suit, to-wit: that which "will pass a ¾-in. mesh and that which is retained on a ½-in. mesh." In other words, to comply with such specifications a contractor can use only 10% of the product of his crusher or from the crusher from which he purchases his supply, and other disposition must be made of the other 90%. For instance, given a paving contract to be laid at the rate of 1,000 square yards, requiring 75 cubic yards of crushed stone per day, and a crusher plant having a rated capacity of 150 cubic yards per day, that crusher would only furnish 15 cubic yards per day or one-fifth of the daily requirements of stone for

TOURISTS FOR CANADA.

According to figures compiled by Canadian Pacific Railway officials, 10 per cent of the money spent by tourists in Europe would amount to \$500,000,000, a sum equal to the value of the Canadian wheat crop in 1916. This money spent annually in the West would develop a record era of prosperity, officials assert. Officers of the various boards of trade in Western Canada will co-operate with the railway officials to bring this additional revenue to the West. Plans to induce American tourists to visit the various tourist resorts in Canada are now nearing completion. Board of trade members will distribute literature, which is now being prepared, relating to their respective cities at all Canadian pleasure resorts.

All tourists travelling through Western Canada will be taken over lines which go through the most attractive districts. An effort will be made to impress upon the tourists the advantages Western Canada offers to settlers. The officials hope to induce tourists to urge their friends at home to visit Western Canada and see for themselves the opportunities that await settlers. C. E. McPherson, assistant traffic manager of western lines of the Canadian Pacific Railway, has returned from a trip to California, where 10,000 American tourists are spending the winter and early spring. Many of these tourists will return to their homes in Chicago, New York, Detroit, Boston and other eastern cities over the Canadian Pacific through Western Canada, Mr. McPherson asserted.

Passenger officials are receiving many inquiries from American tourists regarding traffic accommodations to Alaska, where extra efforts are being made this year to attract tourists who before the war visited Europe.

These visitors will pass through the grain districts of Western Canada and the Canadian Pacific Rockies.

The unusually interesting attractions at Skagway, Alaska, 1,000 miles from Vancouver, and the health-producing climate at Atlin, one of the greatest summer health resorts in the world, are making a strong appeal to tourists.

such a paving contract. In other words, it would take five such crushing plants to keep the paving plant in operation, and the person supplying the stone would have to find another market for 90% of the product of his crushers. Aside from this, the production of such a stone would require additional intermediate separating screen and bin facilities, which are not commercially used, and which could be installed only at great expense and inconvenience. In other words, the Court has excluded from the scope of the patent in suit the use of a stone which has never been practically produced, and cannot be produced without such increased expense and inconvenience that at least most owners of crushing plants would not undertake to do so, and then, under that extreme construction of the specifications says that Warren's basic patent, No. 727,505, would not be infringed.

2. It is a self-evident fact that neither as high degree of stability nor freedom from voids can be produced by a mineral aggregate consisting of such a uniform sized stone and sand as is produced by the construction generally adopted, in which various sizes of crushed stone or gravel, sand and pulverized stone are used in such definite proportions as will produce the highest degree of stability, freedom from voids and utility.

3. Even though such a construction, using uniform sized stone (passing ¾-in. and retained on ½-in. screen) and sand be held to come outside of the Warren Basic Patent No. 727,505, it is very clearly directly in the teeth of the Warren Patent No. 695,421, the single, very clear claim of which is as follows:

"A wearing layer of a street sheet pavement composed of a dense mineral body consisting only of relatively large elements, one-half inch and upward in diameter, and relatively small elements, one-tenth of an inch in diameter and less, having predetermined proportions and intimately and uniformly associated throughout the body to eliminate voids, provide stability and a wearing surface and a uniting weatherproof, bituminous vehicle intimately associated with all the mineral elements serving to combine and unite them, fill the voids remaining unfilled and to form with the mineral body a solid, stable, homogeneous, tenacious, elastic, bituminous wearing layer."

As far as we know this patent, No. 695,421, has never been infringed in any actual construction. Very truly yours,
WARREN BROTHERS COMPANY,
By E. C. Warren, President.

Municipal Finance

JAMES MURRAY.

THE BOND HOUSES AND THE WAR LOAN.

That the Canadian Bond Houses are imbued with the true progressive national spirit has been well illustrated in their invaluable work in preparing the ground for the Dominion War Loans. The profits to be made in brokerage are so small that even with full allotment hardly enough will be made to pay for the tremendous amount of advertising, without counting the services of the staffs — which cost money. In the last war loan some of the bond houses lost heavily because they were allotted but a small proportion of the script applied for and they have had to take the same chance with the loan just closed.

Some of the circulars and letters sent out by the bond houses were veritable lessons in domestic and national finance, and no man with a \$100 could resist them. It would be hard to recall such an amount of concrete advice and patriotic suggestions about the War Loan that the average man received each morning with his morning's mail, which made him give his cheque and which made him wish he had more money at his disposal so that he could more fully do his bit. The popularity of the War Loan was really made possible by the bond houses, which the Minister of Finance must recognize if he would retain this great selling force to aid him in disposing of his next War Loan.

ANNUAL REPORT OF THE CITY OF WESTMOUNT.

The annual financial report of the City of Westmount for the year 1916, which has just been published is on a par with the policy of the Council adopted some years ago of presenting the annual statement in a way so as to be easily followed and understood by the citizens. We would commend to other municipalities not only the system but the method of preparing and showing the balances, for really many municipal statements are veritable puzzles — absolutely impossible for the layman to follow.

Though the cost of labor and materials has increased considerably the financial statement shows a revenue surplus of \$3,038. It was the policy of the late council — and no doubt it is of the present council — to, in the words of General Manager Thompson, "build up from surplus of revenue a general reserve fund to meet the emergencies that may arise and to create an adequate depreciation fund that will provide for the replacement of all equipment and plant and if possible for the renewal of roads, funds for which have been borrowed upon long term bonds. The amount of this general reserve fund that has been built up during the lifetime of the present Council now is \$68,738.66."

"The sinking funds have also been much improved during the four years. The shortage as established upon the basis adopted by previous Councils has been reduced to \$4,455.15. It is quite certain that this will be eliminated during the ensuing year by surplus earnings on the investments made by the Sinking Fund Commission and the collection of the special levy according to the by-law to provide for sinking fund shortage. It is also believed that provision can be made upon an actuarial basis for all bonds issued and the collection of the said special levy may be stopped long before the expiration of the thirty years, the length of time it was to run according to the provisions of the by-law."

As is now well known throughout this continent Westmount owned its own Destructor and Electric Lighting plants — the electricity being generated from heat supplied by the destructor, and because of the low rates charged experiments in electric cooking and heating are being tried out. Even with the reduced rates (16 2-3 per cent this year) the year's operations showed, after providing for depreciation and interest in sinking fund, a net profit of \$15,635.

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\$700 LOT FOR \$6.50 CASH.

Under the above heading the Financial Post reports that the town of Beverly, Alberta, has been holding a tax sale, at which property which sold in the boom days for \$700 went for \$6.50 cash, to quote just one lot. The average price of 120 lots sold in one day, was \$6.80, while at the adjourned sale the average price paid was \$20 per lot. The property was sold with clear title, the purchaser being liable for the 1916 taxes only.

Surely it cannot be in the interest of the community that tax sales showing such miserable results should be held at all. Granting that in the boom days the prices of property went sky high, and that the prices fetched at the forced sale were exceptional, there is no doubt that the whole of the property within the municipality will be effected to such an extent that legitimate investments — as against speculation and gambling — are bound to suffer, which in turn will influence the credit of the community. In the case of Beverly one cannot see the necessity for such a sale. Its finances are in good order with a surplus credit at the bank. It is said that the tax sale "was for the purpose of clearing up arrears in property since the town was incorporated about four years ago." This is hardly a sufficient reason to jeopardize the credit of the town.

EDMONTON'S TAX SALE.

Now that the supreme court en banc of Alberta has given a decision in favor of the City of Edmonton and against the applicant for an injunction restraining the city from holding the tax sale, the two daily newspapers of Edmonton has been publishing about nineteen pages of property for sale, giving notice that the sale will be held on April 12. Had the injunction not held the civic authorities up for a few weeks, the sale would have been held in the month of March as stated in the Journal. However, this obstacle has been cleared and property holders in Edmonton and elsewhere who own land in the city, have had an excellent opportunity to find out where they stand as regards their property in arrears of taxes. There is no denying the fact that money is plentiful, for this is evidenced by the fact that with the sale over a month away, the city tax collector is receiving anywhere from \$200 to \$2,000 per day paying off arrears and redeeming the land from the sale. American interests are looking to this city for "property snaps" and many enquiries have come to the city officials for information and lists of the property to be sold. Looking over the lists one can easily see that land will be sacrificed if not redeemed before the sale takes place. Acreage at \$18 per acre inside the city limits with taxes down very low, is decidedly a snap, although there will be some good bidding for the property in mind if it ever goes to sale. Under the Volunteers and Reservist Act, which is a modified form of moratorium, something like 2,500 or more parcels of land have been exempted.

Edmonton's city assessor has furnished the civic authorities with a completed statement of the tax levy for 1916 and what is more interesting, the amount of taxes in arrears for not only last year but previous years.

The assessments in 1916 were \$146,572,555, with \$132,474,845 as the net assessment after \$14,097,710 had been taken care of by way of exemptions. The municipal assessment was \$130,916,285, and the school assessment \$132,634,985, made up of \$118,337,425 for public school, and \$14,297,560 for separate school.

The tax rate was 21 mills and worked out as follows: General taxes, \$2,758,785.73; special frontage tax, \$524,462.30; arrears of water rates these being chargeable against the property, \$365.60, a total of \$3,283,613.63.

Collections during the year totalled \$1,874,745.76, and of this total \$1,358,392.50 was received from current year's taxes and the remainder from arrears. The arrears of taxes to January 1, 1917, were: 1916 arrears \$1,665,322.42; 1915 arrears, \$1,527,094.26; 1914 arrears, \$1,421,245.23, and the 1913 arrears \$636,595.12, making a total of \$5,250,257.03. Now that the city has made a move, these arrears will soon be cleared up, for the tax sale next month will wipe out all prior to 1913 and in many cases 1913 as well, and each succeeding year the city charter gives the right, in fact, makes it compulsory, to hold tax sales each year and clear up all arrears as they accumulate.

The debenture debt of the city of Edmonton at January 1, 1917, stood at: General debentures, \$13,725,006.72; special debentures, \$4,072,915.99; utilities, \$9,713,151.53, making at total of \$27,511,074.24.—Reg. Smith.

SOME EMPIRE WAR LOANS.

Australia has successfully closed its fourth internal war loan. The first loan was for \$25,000,000, when \$66,000,000 were subscribed. The second was for \$50,000,000 when \$108,000,000 were subscribed. The third brought \$111,000,000 and the fourth \$120,000,000. New Zealand has floated internal war loans to the amount of over \$60,000,000. The war has cost South Africa \$75,000,000 to date, and an internal loan approximating \$40,000,000 has been placed. Other financing has been done, but without recourse to a public issue.

TORONTO'S FINANCING.

The City of Toronto, according to Commissioner Bradshaw, has decided to retire its outstanding obligations in London with funds secured from the United States. Legislation will be sought at the present session of the Ontario Legislature to permit of the transfer of the debt to the extent of \$32,000,000. As well as such a transfer being very profitable for Toronto, it is even patriotic, for the release of thirty-two million dollars is very helpful in the Old Country just now.

The city's borrowings, apart from this, will be somewhere in the neighborhood of \$7,000,000 to \$8,000,000 composed of the flotation of expiring short term notes and loans for patriotic purposes.

THE CITIES AND THE WAR LOAN.

The municipalities that have contributed to the recent War Loan include:

Winnipeg City	500,000
Brandon	300,000
Victoria City	250,000
Fort William City	100,000
Saskatoon	100,000
Westmount	60,000
City of Halifax	60,000
Oak Bay, B.C.	50,000
Moose Jaw City	50,000
Port Arthur City	50,000
Brandon	20,000
Brantford	20,000

FINANCIAL SUGGESTIONS TO MUNICIPALITIES OF QUEBEC.

Just before going to press we received a booklet published by A. E. Ames & Co., giving "Financial Suggestions to the Municipalities of the Province of Quebec." The work which was prepared by Mr. J. B. How, manager of the firm's Montreal office, is full of valuable information and will be a boon to the civic officials and aldermen, of the Province, particularly as it is published in the two languages—French and English. Mr. How, in his preface, practically gives the text on which the work is built. He quotes Mr. A. E. Ames, who as vice-president of the Bond Dealers' Association, in addressing the Convention of the Union of Canadian Municipalities, stated that the municipalities were in effect "Manufacturers of Bonds" while the bond dealers were the "Distributors"—in other words there is in reality a close community of interests between the Municipalities and Bond Dealers, which should be bound still closer by mutual conference. Mr. How has attempted this in his work the object of which is "to promote a more uniform and more satisfactory system of sound Municipal Finance in the Province of Quebec." It is certainly time that many municipalities of finance took stock of their financial standing, which, while collectively is good, are in too many individual cases way poor, largely brought about by almost criminal carelessness in finance on the part of some officials, thus leaving the way open for "peddlars"—a class of men who should be kicked out of the province—to exploit certain municipalities to the highest bidder. Mr. How would eliminate such a state of affairs by educating the officials in the elements of municipal finance, and we believe his book will have that effect. Any one interested can have a free copy of the book in either French or English by applying to this Journal, or from the publishers.

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BOND DEALERS ASSOCIATION.

In a recent issue of the *Financial Times*, Mr. N. B. Stark, of N. B. Stark & Co., gives a very interesting outline of the "Bond Dealers Association of Canada," from which we give the following extracts.

Beginning in a small way as a branch of the Toronto Board of Trade, it (Bond Dealers' Association) soon justified itself and it was not long afterwards until on the 16th of June, 1916, amalgamating with a similar organization which had existed for some little time in Montreal, it launched out into more aggressive form under the caption "The Bond Dealers Association of Canada."

Canada being as yet really a pioneer country, the business of dealing in bonds is only in its infancy, and yet in volume of business transacted, the bond business is undoubtedly one of the country's most important industries, if it may be so termed.

The members of the Association are engaged in highly competitive business, both in buying as well as in selling, and it is the intention that this feature shall be maintained, as appears from the following extract from the constitution of the Association:—

Not For Price-Fixing.

"It is expressly declared that this Association is not formed for the purpose of affecting the price of securities, nor shall the association discuss or take action upon questions which would in any way interfere with the free and untrammelled competition amongst its members in the business of buying and selling and dealing in securities."

Briefly stated, the objects of the organization are as follows:—

- (a) To promote the general welfare and influence of bond dealers, financial institutions and investors.
- (b) To secure united protective action and to co-operate with municipalities and other corporations in regard to legislation and methods of sound financing.
- (c) To afford opportunity for discussion and exchange of views on subjects which affect the investing public.

Improving Municipal Finance.

Within the short compass of this article, it is not possible to enlarge on all the activities of the association, but one branch is particularly worthy of note. This is in relation to municipal finance. The British North America Act, constituting the Dominion of Canada out of a number of separate Provinces, concedes to each province the right of legislating in matters of purely provincial, as opposed to Federal interest. In the exercise of this power, each province regulates its own municipalities. As a result of this system, we find for instance the city of Halifax with borrowing powers differing materially in their essential features from those of, say, Vancouver, also the so-called Local Improvement Bond, popular and recognized in Ontario, not understood in Quebec, and many other inconsistencies of greater or less seriousness. It is part of the programme of the Association, through its Legislation Committee, to strive for uniformity throughout Canada in matters so important as these, eliminating here and there existing weaknesses and substituting improvements, which will not only simplify the handling of Canadian Municipal securities, but will give to them higher values, thereby benefitting the ratepayer.

Notable Progress.

Already the Association has made notable progress in stifling the attempts of many Canadian municipalities to borrow without making adequate provision for Sinking Funds with which to repay their debts.

Hitherto progress in this direction was practically impossible by the individual bond dealer, but now all this is changed through having behind these attempts at reform the combined energy, thought, wealth and influence of the members of the Association, a body which does annually probably \$200,000,000 of business.

Improvement in corporate finance is also contemplated, by way of strengthening the position of Industrial bonds and preventing a recurrence of evils which have been too prevalent in the past.

Work For War Loans.

The remarkable success of the Dominion War Loans of November, 1915, and September, 1916, is attributable in no small part to the work of the members of this Association. Tribute must be paid to the Banks and the many large financial and industrial concerns which subscribed so generously to the loans, but the broad work of distribution into the hands of the "ultimate consumer," viz.: the small investor, was the work of the bond dealers. For weeks before the loans were launched, the bond dealers with-

drew their staffs from their regular work, and devoted their time and energies to the organization of their campaign; in addition, they counselled their clients not to consider other forms of investment, but to retain their money for the "War Loan." This was indeed a patriotic service and one which is probably not generally recognized. The Minister of Finance allowed, it is true, a small commission. This, however, did not cover expenses. Looked at in another way, the Bond Dealers placed their organization at the disposal of the Government, practically free of charge; not only this, they freely urged the investment in Government loans, in which there could be no profit, of money which in many instances they could readily have diverted into channels yielding substantial profits, but all this was done with the greatest show of good will and with even greater enthusiasm and energy they have thrown themselves into the distribution of the loan now being offered. The increase of from 25,000 subscribers to the first loan to 35,000 for the second speaks volumes for the way in which the Bond Dealers did their work and it is confidently hoped that the present loan will in a similar way secure not less than 50,000 subscribers.

Ideal Investment.

At this time, a word in regard to the War Loans is opportune. It is generally agreed that the "ideal" investment embodies three distinct features. Briefly, there are: (1) Security; (2) Adequate return; (3) Market ability.

Argument on the first point is superfluous. The fact that the credit of the Dominion of Canada, as evidenced by the price of its bonds, stands relatively higher in the New York market than even that of Great Britain and France combined, is full of eloquent testimony on this point.

An income of very close to 5½ per cent on a bond of this quality would surely seem adequate. It is within the memory of the present generation that Dominion Government Bonds have sold to yield 3½ per cent, and at a time when the security was a long way short of what it is to-day. Under this heading comes also the question of enhancement in value. It is not unreasonable to expect the loan now being offered to achieve a value of from 105 to 110 with the return of normal conditions and the probable consequent lowering of interest rates through largely reduced borrowing.

High Marketability.

The factor of marketability is attained in either one or two ways — through an actual sale or through a loan if the funds are only temporarily required. A very ready market has always existed for these bonds and at a considerable profit over the issue price and until just recently. As collateral the War Loans are all that can be desired. The offer which one of the leading banks has just made to loan up to 90 per cent is good evidence to this effect. Putting the point another way, these bonds are as good as Government bills in their security and their liquid quality and have the material added advantage of bearing a high rate of interest.

In the light of these facts, it should be unnecessary to urge investors to "get the habit and buy a War Bond." That the patriotic duty is, of course, paramount is evident when we consider that \$1,000 lasts Canada just 1½ minutes at our present rate of war expenditure. But the assistance to the country is hardly more important than the advantage to the individual. A greater measure of thrift than we Canadians have been accustomed to is highly desirable, if not absolutely necessary, for our future well-being. Thrift should be practised and its fruits cannot be better employed than in a War Bond. The exhilaration of cutting off coupons will be so pronounced that nothing short of more bonds and consequently more coupons will satisfy. So will grow our material welfare and our margin of protection against possible adversity. So at least is the combined judgment of the members of the Bond Dealers' Association, who are putting behind this new loan the greatest selling campaign they have ever undertaken.

The municipal bond sales in Canada during January and February, according to The Monetary Times' bond record, were as follows:—

	1913.	1914.	1915.	1916.	1917.
January . .	\$1,337,500	\$1,953,137	\$1,784,947	\$1,909,441	\$1,969,256
February . .	1,038,806	5,995,336	3,047,011	1,419,900	458,874

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WENTWORTH COUNTY, ONT.

An issue of \$72,000 5 per cent 20-instalment bonds is to be made for patriotic purposes. They will be sold at par to local investors.

BRUCE TOWNSHIP, ONT.

Messrs G. A. Stimson and Company, Toronto, were awarded \$3,600 5½ per cent 11-year telephone bonds at 100.03.

OSGOODE TOWNSHIP, ONT.

An issue of \$5,419 5 per cent instalment bonds were awarded to Messrs. G. A. Stimson and Company, Toronto, at 97.21.

RENFREW, ONT.

An issue of \$9,628 5 per cent bonds was awarded Messrs. A. H. Martens and Company, Toronto. Price \$9,007.

SASKATCHEWAN.

The following bonds have been awarded: Messrs. W. L. Mackinnon and Company, Toronto, town of Herbert, \$2,800 6½ per cent 7 and 10-instalments; Cameron S.D., \$1,500 7 per cent 10-instalments; Tompkins S.D., \$5,500 6 per cent 15-instalments; Clover Leaf S.D., \$1,200 7 per cent 10-instalments; Millersfield S.D., \$1,000 7 per cent 10-instalments; Linden Rural Telephone Company, \$10,000 7 per cent 15-instalments; Odessa Rural Telephone Company, \$1,400 7 per cent 15-instalments.

RENFREW COUNTY, ONT.

An issue of \$100,000 5½ per cent 10-years, was awarded to Aemilius Jarvis and Company. Price, \$100,078.

OWEN SOUND, ONT.

An issue of \$15,593 5 and 5½ per cent 20-years, was awarded to G. A. Stimson and Company. Price, \$14,924.

BONDED MUNICIPAL DEBT OF B.C.

According to Mr. R. Baird, inspector of municipalities, the total bonded municipal debt of British Columbia cities was \$73,676,039 in 1916 and of the districts \$21,623,064.

Alberta School District.

Cloverleaf, \$1,200, and Millerfield, \$1,000, both 10-year, 7 p.c., to W. L. McKinnon & Co., at 104.10. Rural school issues, \$5,700, 10-year, 7 per cent, to W. Ross Alger & Co. at 103.38.

MANITOBA.

H. O'Hara & Co., of Toronto, have been awarded the following Manitoba school district issues: Wildwood Consolidated S.D., No. 135, \$16,000, 6 per cent, 20-instalments; Falsendorf S.D., \$1,400, 7 per cent, 10-instalments; Ebb and Flow S.D., \$800, 7 per cent, 15-instalments; Bluebell S.D., \$1,500, 7 per cent, 15-instalments, and Asquith S.D., \$1,500, 7 per cent, 10-instalments.

\$34,562,000 SUBSCRIBED BY ONE BOND FIRM.

With an aggregate subscription of \$34,562,000, or close to a fourth of the amount called for by the prospectus, the firm of Wood, Gundy and Co., of Toronto, has turned in the largest amount of subscriptions to the third War Loan. \$22,000,000 was subscribed through the firm to the second loan and \$7,000,000 to the first loan.

The figures as to the number of actual subscriptions are even more striking than those relative to the total amount. The total number of actual subscriptions received by Wood, Gundy and Co. exceeds 2,500, and was approximately double the number for the second loan. Of these well over 90 per cent were applications for amounts less than \$25,000. An analysis of the subscriptions is tabulated below:

Number of subscriptions.	Amounts in each case.
10	\$1,000,000 and over
5	500,000 and over
29	100,000 and over
42	50,000 and over
61	25,000 and over
2,363	less than \$25,000

Of the total subscriptions received \$33,250,000, or over 96 per cent, represented new money.

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UNDIVIDED PROFITS	\$1,414,423	
TOTAL ASSETS	- - -	\$365,215,541

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Agents and Correspondents Throughout the World.

ESTABLISHED - 1875

Imperial Bank of Canada

CAPITAL PAID UP \$7,000,000 RESERVE FUND
 \$7,000,000

PELEG HOWLAND, PRESIDENT
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HEAD OFFICE: TORONTO

Dealers in Government and Municipal Securities. Dealers in Domestic and Foreign Exchange. Careful attention given to accounts of Merchants. Manufacturers and Farmers.

119 Branches in Dominion of Canada.

The Merchants Bank

OF CANADA

HEAD OFFICE - - - - MONTREAL

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

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A GENERAL BANKING BUSINESS TRANSACTED

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

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