

# The Municipal World

Published Monthly in the Interests of Every Department of the Municipal Institutions of Ontario—  
the Best in the World.

Vol. 4. No. 9.

ST. THOMAS, ONTARIO, SEPTEMBER, 1894.

Whole No. 45.

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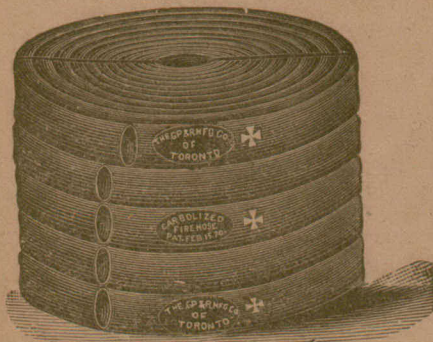
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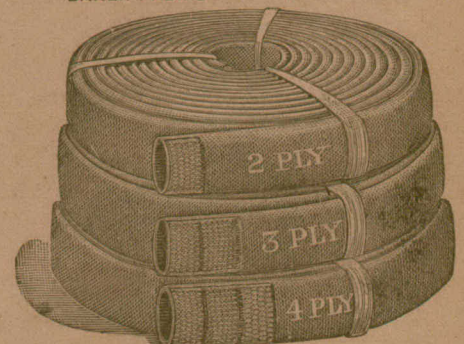


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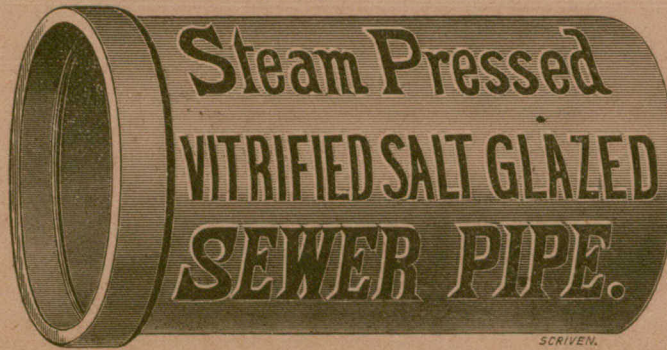
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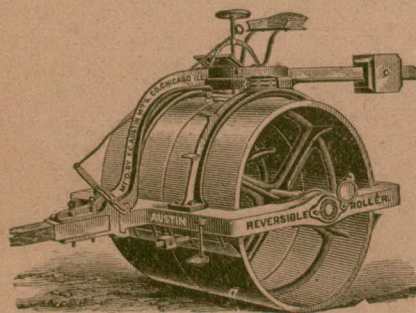
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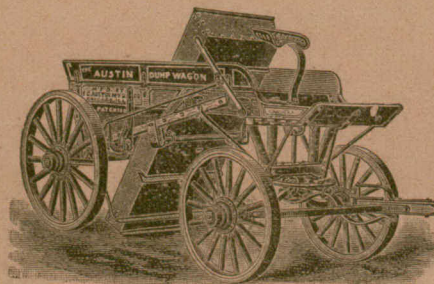
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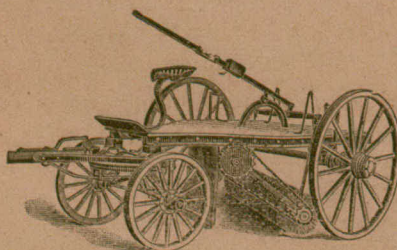
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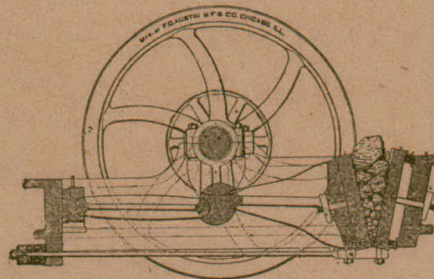
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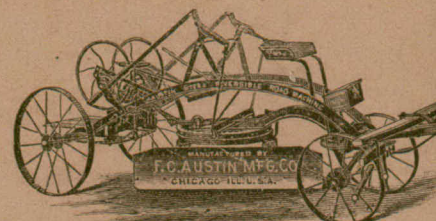
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# THE MUNICIPAL WORLD

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## For Collectors' Rolls

### Lytle's Rate Tables

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## CALENDAR FOR SEPTEMBER AND OCTOBER, 1894

### Legal, Educational, Municipal and Other Appointments.

#### SEPTEMBER.

3. County Model Schools open.  
Labor Day.
14. Last day for Judge to defer judgment in appeals from Court of Revision for Shuniah.—Assessment Act, section 68.
15. County selectors of Jurors meet.—Jurors Act, section 13.
20. Clerk of the Peace to give notice to Municipal Clerks of number of Jurymen required from the Municipality.

#### OCTOBER.

1. Last day for returning Assessment Roll to Clerk, in Cities, Towns and Incorporated Villages, where Assessment is taken between 1st July and 30th September.—Assessment Act, section 52.  
Last day for delivery by Clerks of Municipality to Collectors of Collector's Rolls, unless some other day be prescribed by by-law of the local municipality.—Assessment Act, section 120.  
Notice by Trustees of Cities, Towns, Incorporated Villages and Township Boards to Municipal Clerk to hold Trustee elections on same day as Municipal Elections, due.—P. S. Act, section 103 (1).  
Night Schools open (Session 1894-95).

#### Consolidated :

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The Ditches and Watercourses Act.

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# The Municipal World.

PUBLISHED MONTHLY

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COMMUNICATIONS. Contributions of value to the persons in whose interests this journal is published, are cordially invited. Those for next issue should reach the office of publication not later than the 20th of the month. Address all communications to

K. W. McKAY, EDITOR,

Box 1252, St. Thomas, Ont.

ST. THOMAS, SEPTEMBER 1, 1894.

The cardinal evils of municipal administration across the border seem to be incompetence and lack of personal responsibility, and the cause of these defects will probably be found in the system of appointing and remunerating the officials by which the work is carried out. In all cases where the fatal mistake has been made of distributing temporary municipal appointments as the rewards of political fidelity on the principle of the spoils of the victors, the result has invariably been the demoralization of the municipal service.

It is evident that it is not enough, as some of our legislators think, to place the management of affairs in the hands of the people themselves, in order to insure the proper conduct of local business. Local government is not an automatic machine, which, when once started, may be confidently expected to run forever, producing satisfactory work. It is liable to get out of order; it may be shunted on to wrong lines; and it is important to note the conditions which have hitherto maintained the efficiency of this great instrument in other countries. If we neglect them, if we are careless in insisting on them, there is no such inherent virtue in the principle of self-government as will preserve us from the abuses and defects which have crept into the American municipal system.

In a recent pamphlet, the superintendent of neglected and dependent children of Ontario, gives the results of the annual meeting of the National conference of charities and correction held at Nashville Tennessee in May last. "The question of committing children to poor houses or jails was considered and emphasis was laid upon the importance of keeping children away from the atmosphere of these institutions. It is a cruel and short-sighted policy that would consign innocent children to the wards of the aged pauper, the idiotic and the criminal-disposed, simply on the ground of economy. All children's aid societies, and all good people composing any organization, were earnestly enjoined to see to it that no child remained in such surroundings. Town and county councillors should be educated and exhorted up to a true sense of the

duty they owe to the little ones who are left dependent upon their mercy, and to a realization of the fact that every dollar spent in protecting and educating the children will be repaid a hundredfold. In this new land we do not desire to see perpetuated the vagabondage and vice of an older civilization, and this can only be avoided by a generous and enlightened appreciation of the claims of childhood."

## Municipalities' Insurance.

Municipal insurance for cities is advocated by THE MUNICIPAL WORLD. That is right as far as it goes, but a system of insurance that is good for one municipality should also be good for another; and if good for some it ought surely to be good for all.

The only reasonable objection to municipal insurance is the burden of very large conflagrations. These happen occasionally, and their effect is ruinous when the constituency is small. To overcome that, a law might provide for grouped municipalities' insurance; that is to say, that any number of municipalities, either cities, towns, villages, or townships adopting the plan of municipal insurance should each pay half the losses in its own municipality, the other half to be paid pro rata by all the others. Rules to put such a system into effect could easily be framed into a law that would provide insurance at actual cost to every municipality working under such law, and many of the complaints that are now made could no longer have any foundation. The greatest degree of economy would be ensured and the maximum of care to prevent losses would be provided for, since only such municipalities as would comply with the reasonable conditions enumerated in the act could enter the group and enjoy the advantages provided.

Municipal insurance is a good proposition, but municipalities' insurance is a better one.—*Farmers Sun.*

## Standing Committees.

One feature which is universally accepted as an essential part of our municipal system without thought or question as to its origin is the standing committee. The history of this institution may be traced from the British House of Commons in Elizabeth's time. Many writers have familiarized us with the knowledge that the transaction of business through standing committees is one of the distinctive peculiarities of our procedure. Professor Jamieson, in the last number of the *Political Science Quarterly*, in referring to this question, says; "It is somewhat surprising that no attempt appears to have hitherto been made towards tracing completely the history of an institution of such obvious importance. He then proceeds to trace it from the procedure of the House of Commons under Queen Elizabeth and that of the colonial legislative assemblies down to the time of the revolution. He states

that the system, while it prevailed in the early days in the House of Commons, long ago became virtually extinct in that body, so that now it is regarded as a purely American invention it is well known to have existed in times prior to 1789.

The procedure of legislative and municipal bodies in Ontario having been copied from that in vogue in the early English colonies in America, shows us to what extent an ancient custom may be continued without any thought as to the origin of such a useful system of procedure without which the business of the municipal councils of the present day could not be carried on as efficiently as they are at present.

## The Magistrates' Court.

A writer in the *Farmers' Sun* discusses the question of law reform from the Patrons' point of view, and suggests that additional authority be allotted to Justices of the Peace, as follows:

"The lowest form of court in our country, though by no means wanting in dignity and honesty, is our Justice of the Peace. Only one branch of civil litigation being allotted to this court, namely, civil disputes and claims for wages under the Master and Servants' Act, in which the Justice of the Peace have power to award judgment up to \$40, if his jurisdiction is invoked within 30 days after the wages have been incurred. This jurisdiction has always worked satisfactorily, and we have never heard any well-founded complaints against the exercise of this jurisdiction in small cases of simple contract debt; it is sometimes a hardship throughout the country for men who are owed small debts to have to wait sometimes two or three months to have a small matter of simple contract debt disposed of and then probably have to travel many miles with his witnesses, only to find that the defendant has failed to appear in the court.

What we deem is wise to propose as being a more desirable method of procedure is that any Justice of the Peace living near to the defendant should have the right to issue a summons calling upon the defendant to show cause why the plaintiff should not have judgment for any simple contract debt amounting to not more than \$40, and after hearing the witnesses for both parties should deliver judgment and within seven days should transmit to the Division Court Clerk all the papers, and that the clerk should thereupon make the necessary entries and issue execution thereon, the judgment to then become a judgment of the Division Court with all the necessary incidents of a judgment of that court. In many of the states of the neighboring republic the Justices' Court is found to work well in the collection of small debts, and we know of no good reason why the establishment of such courts in Canada would not work well, the right by the plaintiff to have his case tried in this way, of course, to be optional.

Through the efforts of the provincial press, numerous adherents of Osgoode Hall have expressed themselves as favorably inclined to the removal of many of the expenses that surround an ordinary citizen desirous of approaching that time-honored institution, to obtain his measure of justice. Whether opinions thus given are actuated by self-interest or a desire for a free advertisement we are unable to decide, but we do know that it would be in the public interest to increase the authority of Justices of the Peace to the extent suggested.

County Poorhouses on the Cottage Plan.

BY

A. M. ROSEBRUGH, M. D.

Secretary, Prisoners' Aid Association.

II.

In my article in the August number of the MUNICIPAL WORLD, I give a perspective view of a County Poorhouse or House of Industry, constructed on the cottage plan. From an extensive correspondence with members of Boards of State Charities and correction in the United States, I learn that the consensus of opinion is decidedly in favor of the cottage system. The cottage system has long since been adopted as the proper system for the construction of industrial schools and juvenile reformatories, and it is now being adopted in the construction of asylums and hospitals for the insane. And at the present moment the State of New York

7. By the cottage system the rooms are better ventilated, and they receive more light and more heat from the sun, and this promotes good health and good spirits.

In providing for the classification of the sexes, it is ever to be born in mind, that the standard of morality among many of the inmates of county houses of industry is very low indeed, and for this reason they should be so separated, that they can never either speak to or even see each other. Hence it is necessary that the sexes shall be kept absolutely apart, not only in the building and the yards, but also at church service. This perfect insulating of the sexes can only be attained by the cottage system.

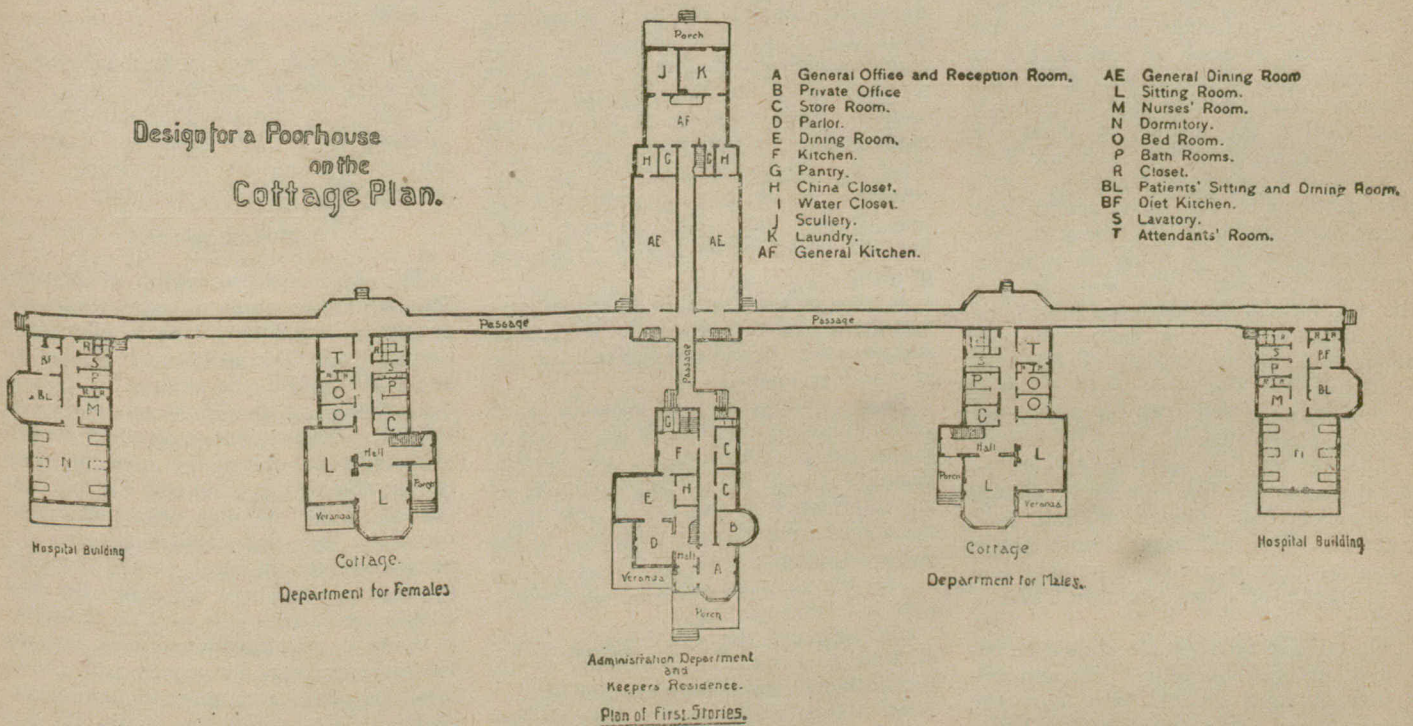
The plan of a county home or poorhouse presented herewith, was designed by Hon. William P. Letchworth, L. L. D.,

hospital, is not shown on the plan. The rooms on the ground floor are used as day rooms, while those on the next floor are used as dormitories. The room over the kitchen and dining-rooms is the chapel, and, for the separation of the sexes, this is divided into two by a partition the entire length of the room, except where the reading desk or pulpit is located.

The cottages are only two storeys high. In a poorhouse where so many of the inmates are old and infirm, it is not right that they should be compelled to travel up and down more than one flight stairs, and moreover, in case of fire, egress is much more difficult in a high building; besides this, the cost of supervision is less when there are but two storeys.

It might be objected that the difference in cost is in favor of a higher building. With regard to this, Hon. Mr. Letchworth

Design for a Poorhouse on the Cottage Plan.



is establishing a colony for epileptics on the cottage plan. In the construction of the county homes or houses of industry, the cottage plan presents many important advantages, among which may be enumerated, the following, viz.—

1. It effects a perfect separation of the sexes.
2. Caretakers are relieved of much responsibility.
3. It is safer in case of fire.
4. It is safer in cases of contagious diseases.
5. It removes the strong prejudice which many of the respectable indigent poor have against entering a county poorhouse
6. It provides better opportunities for providing women with little delicacies which they sometimes require

of the State Board of charities and Correction of New York, assisted by George J. Metzger Esq, Architect, Buffalo N.Y. As already stated, the Hon. Mr. Letchworth has given this question special study for several years, both in Europe and in America. This ground plan is almost self-explanatory. In the centre and well to the front is the administration building and keeper's residence combined. In the rear of the administration building is the building for the two dining-rooms, and the kitchen and laundry. To the right is the cottage for the men, and to the left is the cottage for the women. To the right of the men's cottage is the mens' hospital, and to the left of the womens' cottage is the womens' hospital. The hospital buildings and the covered passage ways are of one storey only, while the other buildings are two-storeys. The barn, which is to the rear of the men's

speaks as follows: "The difference in the expense of constructing a two-storey building and one that is higher is not so great as one would suppose, notwithstanding the cost of the roof is the same in both, because the sub-structure for a building exceeding two storeys is more expensive than it is for a two-storey one. The higher a building is carried the more it is exposed to the wind, which takes hold of it as at the end of a lever, bringing greater strain upon the various parts, thus requiring greater strength throughout."

Respecting basements in county poorhouses, the same high authority speaks as follows: "My observations have led me to the conclusion, that the evils resulting from the use of them have been so great, that these places should be emphatically condemned. I have never yet found a poorhouse basement that, at certain seasons of the year, was not damp and mouldy,

the beaded moisture sometimes trickling down the walls. In some of our older poorhouses may still be found in the basement, single rooms which were formerly occupied by the inmates. These damp unwholesome places were at one time a source of abuse and a cause for just complaint." He also says that in the country places where land is cheap there is no excuse for basements. Vegetables and fruits should never be stored in the basement, and a laundry underneath living rooms is particularly objectionable. Instead of basements there should be good cellars, but to be used solely for coal and other imperishable materials, as well as for the necessary pipes and air ducts.

The selection of the farm, and the location of the buildings is a matter of great importance. In some cases the farm selected is in and out-of-the-way place, difficult to reach, and having a poor quality of land. This is bad economy. The farm and buildings should be within a convenient distance of a railway station or a water way, and there should be about two acres to each inmate; thus, for instance, a county that will average 75 inmates in the county home should have 150 acres acres of land connected therewith. It is poor economy to erect good county poorhouse buildings on a small farm, and it is also poor economy to place an industrial home on poor land. The better the land the less the cost of maintenance of the institution. A good farm having a warm loamy soil will be pleasant to till. The fields will show heavy crops; there will be an abundance of fruit, and the garden will produce every delicacy.

The site for the building should be elevated, dry, and free from secret springs. It should be high enough to afford good drainage. The buildings should be so placed as to secure plenty of sunlight, and there should be plenty of lawn space in front.

The style of architecture should be unpretentious and domestic. The administration building should have more the appearance of a substantial dwelling house than that of an institution. In some cases, as already mentioned, in purchasing a farm for a county poorhouse, it may be found that the farm house already built may be made to do duty as the administration building and keeper's residence. The buildings, taken as a whole, should suggest a home rather than an institution. Hard and formal architecture which suggest at first sight a charitable institution should be avoided. True economy will be reached by building substantially, and by requiring that everything be done in a workmanlike manner.

There are other points in connection with the county poorhouse question to which, with the permission of the editor, I would be glad to refer at some future time.

Allow me to repeat the intimation made last month, viz: That plans of cottage system of poorhouse construction will be on

exhibition at the Toronto Industrial Fair, September 3rd to 15th, and that all interested are cordially invited to inspect the same. The exhibit will be found to the north-west of the north-west stairs, first gallery, main building.

#### Municipal Insurance.

The Guelph *Mercury* states that the Board of Trade, having had under its consideration the question of municipal corporations insuring the property of their citizens, and having thought favorably of the proposal, and having had the matter considered by a special committee, who submitted a report which the board thought it would be advisable to make more extensively known, with the hope and object of receiving suggestions and information from other places and of creating a general interest in the subject, having in view the necessity for obtaining legislative sanction for the scheme, has decided to send a circular letter to all municipalities and Boards of Trade in the province likely to be interested in the matter. Their estimate of the amounts paid yearly for insurance in Guelph is \$75,000. Deduct for collection and management 10 per cent., \$7,500; average loss by fire per year, \$7,000; total, \$14,500. This leaves a profit of \$60,500 per year.

In view of the above the board submits that the insurance rate could be lessened and the fire brigade supported by the insurance companies.

Before applying to the legislature for an act empowering municipalities to insure the property of the citizens, the Guelph Board of Trade will be much obliged for any information or suggestions bearing on the subject and having reference to the following points:

1st—Should such insurance be compulsory or voluntary?

2nd—Should the municipality insure all kinds of property in its bounds or only certain kinds, and if so, what kinds?

3rd—Should there be a limit to the amount insured or should the municipality insure to two-thirds the assessable value in all cases?

4th—Would your municipality join in petitioning the legislature for the necessary legislation?

\* \* \*

This question is not a new one, and we hope that the present agitation for legislative authority to authorize municipalities to undertake fire insurance, will not be allowed to lapse, without a thorough investigation. Its great importance to the people generally will be better understood when reliable data is presented. How to procure this is, we think, a question for advocates of the scheme to consider. We can suggest no better plan, than, that the council of every municipality interested, instruct their assessor when making their next annual assessment to ascertain from ratepayers and others the amount of fire insurance in force, the amount of premiums

paid annually, what the annual losses by fire amounted to, and the amounts paid on such losses by the companies interested.

If the estimate prepared by the Guelph board of trade is a fair guide, that city would save \$60,500 per year. The total taxes for all purposes paid by Guelph during 1892 amounted to \$79,193.00; the total assessment being \$3,438,809.00. If the same relation of assessment to insurance premiums paid, is applicable to the other cities, towns and villages in the province, a saving of \$6,000,000.00 annually would result. The total taxes paid during 1892 by the municipalities mentioned, amounted to \$7,200,000, so that if, as a result of the present agitation, we are to arrive at a plan whereby the question of fire insurance will be controlled by municipalities, we may look forward to universal insurance of property without any material increase in the present rate of taxation.

\* \* \*

The present municipal machinery is quite sufficient to handle the business of fire insurance, and an additional officer to be inspector of risks might be required, but in the smaller municipalities the assessor could perform the duties.

#### A Modest Demand.

The clerk of the township of Stanley, Huron county, wrote to the Scaforth Expositor, stating "if you wish the minutes of Stanley Council, send stamped envelopes and I will furnish the minutes." To this modest demand the Expositor replied as follows:—"If the council of the township of Stanley are getting so poor that they cannot afford to pay one cent for the publication of the minutes of their Council meetings, they had better sell out. In many counties the local papers are paid for inserting Council minutes. In this county the papers have been in the habit of doing it gratuitously and now Stanley Council must have its postage paid; soon it will be asking a premium from the newspapers for the privilege of publishing the minutes. No, gentleman of the Stanley Council, if you want your minutes published we are willing to do it gratuitously if you send them to us; if not, the readers of the Expositor in Stanley will know the reason they are not published. The obligation, whatever there is, is all on the side of the Council."

Chicago councilman—"I can stand a good deal, but this is too much."

Friend—"What's the matter?"

Chicago councilman—"I don't mind voting to make St. Patrick's day a legal holiday, and I didn't object when it came to adding Emperor William's birthday to the legal holidays, but when these Chicago Chinese laundrymen come forth and demand that we decorate the city hall and suspend business because its the anniversary of the day that the great Confucius caught the measles, I think it's time to draw the line."—[Life.

## ENGINEERING DEPARTMENT.

A. W. CAMPBELL,  
O.L.S., C.E., A.M.C.S., C.E.  
EDITOR.

The apparent magnitude of the task of building sewers and waterworks, and the necessary co-operation of a majority both in numbers and wealth of the citizens seem to be the hold back or reverse lever which retards the growth of many otherwise promising villages and lessens their advantages as places of business and residence, and we purpose presenting a few reasons why even in small towns and villages waterworks and sewerage are very desirable; and why also they are true economy. We hope to divest the undertaking of its apparent magnitude and in a future issue to show that the cost is not excessive and that the best economy even in the smallest village always leads to an efficient system of both water and sewage.

Whenever for the purpose of trade, manufacture, or convenient residence masses of human beings congregate in small towns, villages or hamlets an artificial existence to some extent is inaugurated. Each individual is no longer a law unto himself, neither can each family be a law unto itself. The habits and environments of those surrounding the individual or family must necessarily influence his or its position. The preservation of the health of the neighborhood is important, not only to one but to all; to the rich and to the poor. The poor man's health is his wealth, and wealth will not stop the ravages of an infectious disease when it once obtains a foot-hold, and disease itself is no respecter of persons. It may be that a single infected person will, under bad sanitary surroundings bring infection to an entire neighborhood. So easily are the seeds of disease spread that it becomes only a matter of common prudence to strive to maintain the body in vigorous health by removing unsanitary conditions which tend to lower vital energy.

Pure water, pure air and cleanliness can hardly be preserved in any village or town for any great number of years without resort to a public water and sewerage system. At the back doors of farm and village homes we find another serious evil, either in a defective drain or in the absence of any drain at all. In the latter case, the slops are commonly thrown on the ground and left to take care of themselves, the ground, instead of being soft and absorbent becomes bare, hard and often covered with mould. To a person unaccustomed to it the smell is nauseating. If a drain is used at all it generally ends nowhere, and is often no more than ten or twelve feet long, a little pool at the end catches what passes through it. The miscellaneous refuse from the kitchen finds its way through it and together with the wash water from the bed-rooms it must go through the usual process of decay in the drain or about its mouth. It is the rule, not the exception in most villages that these conditions exist.

Let us now see whether good results have followed where water and sewerage have been introduced. It is a well established fact known especially among the medical fraternity and sanitarians, that since the introduction of public water supply and sewage in cities Typhoid and other kindred fevers have been prevented entirely, or greatly reduced in number and virulence, and yet in unsanitary villages, and in the country zymotic diseases are still prevalent even if they are not increasing. A case is reported where a farm considered the finest in the section, beautifully located, and to all appearances a sanitary paradise, an affliction came, and when the authorities investigated the cause of disease it was found that the well of which the water for the family was taken, was located adjacent to the barn. The reason given for its being so located was that it was easier to carry water for the dwelling than for the stock. Gradually but surely the water was poisoned, the vital energies of the family lowered as the water deteriorated, and when the proper stage was reached, knocked at the door of the house taking away a number of the members of the family and leaving others broken down in constitution and forever enfeebled with disease. All this was due to unsanitary surroundings in what should have been a residence absolutely proof against this class of disease.

The inquiry is a pertinent one, as to how many dwellings in villages are in a similar situation, except that the slop drain and the outside privy (instead of the stock barn) exist near the well.

We therefore say that the construction of waterworks and sewerage in small towns and villages, in their relation to health and comfort are true economy. It has been found from the statistics kept, that the death rate has been lowered from four to six persons in every thousand, where water and sewage have been applied.

#### Narrow the Road Allowance.

The road allowance of sixty-six feet is considered by many to be greater than necessary. The Galt Reporter, in a recent article, throws out some suggestions that deserve consideration. It says that wherever regularly laid out by a surveyor and very often when "given" or "trespass" roads they are of a width of sixty-six feet. This width was deemed best because, we'll say first, land was plentiful, and next as a provision against snow filling. The practical result is that of this sixty-six feet about twenty feet are used for public travel, the rest lying waste, a temptation to animals wandering upon it, or a nursery for all the vile weeds which spoil a farmer's temper, increase his labor and lessen his profits. As a precaution against snow filling most farmers will admit it is a failure. Now, why not reduce the width of these road reservations to forty feet, sell the remainder, and spend the money realized on the really used roadway. Here and there a deep cutting of some hill would somewhat inter-

fere with this, but the proportion of such cases would be but small. In North Dumfries, small as it is, there are over two hundred and fifty acres of unused road reservation, land lying waste, cared for by no one and producing all that a farmer abominates. Why not sell that land and put it in under cultivation? It would bring some money which could be laid out on the used roads and it would be placed under cultivation and produce money. Let the road reformers look over their own townships and see if a similar state of things does not exist there. And while they are seeking action to result in permanent road improvements, see if one of the necessary means to that end is not the narrowing of the allowances and the reclamation of land now worse than useless.

\* \* \*

In grading or improving a road it is often found that timber and trees planted or growing thereon have to be removed. The rights of a township council in reference thereto are as follows:

By section 527 of the Consolidated Municipal Act of 1892, all roads are vested in the council and by section 550, sub-section 6, the council may pass by-laws for preserving or selling timber, ties, stone, sand or gravel on any allowance or appropriation for a public road.

Section 479, sub-section 20 of same Act provides for by-laws being passed relating to ornamental trees and shrubs growing or planted on any public street, etc., and for their preservation or removal and no owner of adjoining property, pathmaster or any other person is permitted to cut down or injure any such tree without the express permission of the council.

Under the above sections councils have ample power to prosecute or claim damages from any one who cuts down or removes trees from public roads without authority.

\* \* \*

The Ontario Tree Planting Act, chap. 210, R. S. O. 1887, makes provision for planting and preserving trees on any highway by the owners of adjacent land and such trees are to be deemed the property of such owners, but the council may pass by-laws to regulate the planting and removal when necessary of such trees, and any person who cuts down, removes, destroys or injures any such trees without having first obtained permission to do so by special resolution of the council renders himself liable to a fine of \$25. This applies to the person who has planted a tree as well as to a stranger.

The courts have held in reported case of Douglas vs. Fox, Common Pleas, Vol. 31, that the Tree Planting Act applies to trees of natural growth left for shade or ornamental purposes as well as to trees planted by owners of adjoining lands.

#### Publications Received.

Special report of the financial affairs of the township of York, by A. C. Neff, accountant, published by the township council.

Township of Woolwich; journal of proceedings and by-laws, 1893 and list of voters, 1894.

Report of bureau of industries, municipal statistics.

### Water Supply.

When chemists apply the word pure, to water they of course only do so in a comparative sense, because perfectly pure water does not exist in nature. Even in its primary form of rain it contains some traces of ammonia and nitrates derived from the atmosphere, and it always becomes more or less charged with earthy and saline matters before it reaches the streams. The rivers are charged with impurity and refuse from towns on their banks, and the water becomes gradually more dangerous, and although it is somewhat purified by oxidation and the absorbent action of vegetation, it requires the most conscientious and watchful care in the reservoirs of great communities.

All upland surface waters vary in quality in accordance with the nature of their surrounding conditions, but they are characterized as pure and accepted as satisfying all necessary conditions for drinking and household purposes, when they have no disagreeable taste or smell. When they are only of medium hardness and are free from excess of salt, and when they have no poisonous minerals and only a minimum of organic contamination.

In order to ascertain whether or not a given source of water really fulfils the needed requirements it must be subjected to the closest scientific scrutiny, for little reliance can be placed on the public taste. Nothing less than the determination within reasonable limits of accuracy of the amount of matter in the water foreign to the water itself, and of the probable origin of the impurities is of much public value and this determination is only rendered possible by accurate chemical and biological examinations. It is no exaggeration to say, that from a sanitary standpoint, the difficulties in the way of assigning proper importance to the various ingredients discovered in an analysis are well nigh insurmountable. In fact so great are they that careful chemists invariably make their reports and conclusions only after comparing their own conditions and results with the results recorded for similar conditions over a long period of years by established authorities.

The main causes of perplexity and doubt are not the inorganic salts which all drinking waters contain in more or less abundance, but these complex and enigmatically bodies which have come to be classified under the heads of organized and unorganized matter. The real difficulty in the analysis of water is to show, first, how far it is contaminated with bacteria or micro-organisms, and second, to what extent it is capable of affording nutrition to such organisms in the form of readily decomposing feeding material when these are known to exist to such an extent as to render the water unfit for domestic use. They may be so far removed although existing in alarming quantities, as to render it potable by a system of mechanical filtration which is now beyond

an experiment, as shown by the careful and repeated analysis of water before and after filtration of the St. Thomas water supply, which is filtered. In some cases showing the wonderful reduction from 45 000 to 90 bacteria per cubic centimeter.

The city engineer in his report to the board of water commissioners of St. Thomas, endeavored to make a clear interpretation of the analysis of their water supply by different scientists, and suggests that: "Uniformity in reporting the results of chemical and biological examinations of the water of different public supplies is of such great value for comparison, that the legislature should prescribe a rule for all to follow".

There being no prescribed rule by which the interpretation of a purely chemical analysis of water can be made by the ordinary reader the mere publication of certain analytical results even by the best authorities are practically without significance since they are commonly unaccompanied by any detailed, intelligible or popular explanations.

During the past five years there has been vast progress in biological science and the results of these analysis enables us to determine the extent of the vitality and approximate numbers of the organisms found in a water supply and from these we may deduct the value of the water as a nutritious medium for septic or other dangerous microbes that might gain access to it, but it does not tell us whether they are disease producing or innocuous, and we think that steps should be taken for the establishment of a prescribed rule setting forth all questions of importance in a plain and simple manner for the government of all scientists making analysis of public water supplies.

The following simple tests are easily performed, and are sufficient to determine whether any given water of unknown quality is safe for drinking purposes:

Pour a glass full of water into a decanter, cork it and shake it up violently for a minute or two. If it develops a very bad smell after this operation, the water may be suspected of sewage or other animal contamination.

2. Add to a small glass full of the water two or three drops of dilute sulphuric acid and stir. Then pour in about two drops of a weak solution of permanganate of potassium or sufficient to color it a faint rose. Cover the glass with a saucer and leave it standing for ten minutes then if the rose color has entirely disappeared the water is unwholesome and requires investigation.

3. Take a very clean dry glass and put into it a few drops of solution of nitrate of silver, and then pour in a couple of ounces of water, if it becomes milky, add to it a few drops of dilute nitric acid. If the milkiness does not now nearly all clear away, the water is proved to contain much

chlorine, and unless it be taken from some source near the coast or near to salt springs is contaminated with sewage.

4. Take two eight ounce bottles with well fitting stoppers, and wash them thoroughly clean. Nearly fill one of them with the natural water and the other with the water after boiling it for thirty minutes. Now put into each bottle a teaspoonful of pure granulated sugar, shake them until the sugar dissolves and then place them side by side at a temperature of about 80 F., and let them stand for three days. If the unboiled water rapidly clouds up and shows a marked fermentation emitting an odor faintly recalling rancid butter it probably contains phosphates and may be suspected of contamination with sewage. If the boiled water shows any signs of decomposition, the suspicion of serious contamination will be confirmed.

5. Pour a small quantity of water into a white saucer and carefully add to it one drop of sulphuric of ammonia. If a dark color is formed which immediately disappears on the addition of one or two drops of pure hydrochloric acid, iron salts are present. If the dark color does not disappear, the water contains ether and probably poisonous metals and should at once be rejected.

### Where all Agree.

All authorities agree that two rules must be followed in order to maintain good roads. First, take the water out; second keep the water out. With a properly constructed road, the materials must bind together so compactly that the surface will shed water like a roof, and stand the destructive wear of all kinds of tires, and weight of loads that it may properly be called upon to bear without injury. To properly build a macadam roadway, broken stones from one to two and one-half inches in diameter should be placed on the compacted bottom to a depth of three or four inches, and a ten or fifteen ton steam roller passed over it four or five times. Then more broken stones of the same size should be laid on to a depth of three or four inches in the centre of the roadway, and two to three inches at the sides. This should be rolled by the steam roller until a hard bed of stone three to four inches in diameter is formed. By proper under-drainage what would otherwise be poor material will make a good roadway. Broken stones or gravel may constitute the wearing surface. But a harder kind of trap-rock, such as is being used in New Jersey, Massachusetts and Switzerland, will wear more smooth and solid.—J. F. Beam, at the Central Farmers' Institute.

In Scotland the other day a deputation from the Labour party called on a town councillor and threatened him with opposition, when he coolly replied: "It's a richt; if there's to be a fecht I'm no gaun to tak' a lickin' lyin' doon. Bring oot your dowie!"



Value of the Recent Great Bicycle Relay Race.

One of the features of the great bicycle relay ride, which took place on the 15th and 16th of June, 1894, from Sarnia to Montreal, was the interest displayed by municipal authorities along the whole route. Organized and carried out as a pastime, the practical value of such a test on the conditions of our common highways could not fail to present itself to the community. This was seized upon by the *Mail*, which so successfully inaugurated and carried through the whole programme without a hitch of any kind, and the numerous reports on the condition of the roads, and the record of speed made on them during the great race, are valuable testimonies which every municipality can study with profit. The record of speed over adjoining relays, giving due consideration to inequalities of grades, will be the measure of the quality of the road service.

It is satisfactory to notice the great interest taken in the ride by road masters and councils, all of whom appear to have aided in preserving a smooth surface and a good road. In very few cases, if at all, is mention made of bad roads, in some districts, or relays, the surface is reported as newly gravelled and rough, otherwise the condition has been reported as good.

Two hundred and twenty business men have not given their time to the practice runs preparatory to the race, or devoted their strength and energies to the race itself as a mere pastime. An ultimate object was in view, a lesson was contained in their labors out of which we learn that the bicycle is an economic power capable of application at any time, when an unexpected interruption may occur to the present means of communication; that if an emergency arose, fleet riders can transport important despatches, almost as fast as railways, and that good roads are an important factor for this purpose.

The great ride will doubtless create an impetus to the extension of bicycle riding, which will extend into many country districts, and farmers will not be slow in appreciating the benefit of being able to run around on a machine nearly as rapid as a locomotive, which costs a moderate outlay to keep in repair.

The influence of the bicycle on the improvement of the highway has been clearly shown by the results achieved in this great race, it will be a retrograde movement, which it is not possible to conceive our municipalities capable of falling into if they do not apply themselves vigorously to a systematic and well organized system of road making and maintenance. It is a splendid object lesson, which will be appreciated by all intelligent road makers, and one which appeals directly to all members of the lately formed association for promotion of good roads in this province.

ALAN MACDOUGALL,  
M. Can. Soc. C. E.

The Cost of Engineering Work.

The question of costs of municipal work of all kinds is one which usually interests the taxpayer, and the lack of knowledge and consideration of it is probably the greatest stumbling block to all attempts at improving methods of management, and quality of work.

The works which cost the most are not always the best, and on the other hand, those which cost the least in the first instance, are very seldom the cheapest when service and maintenance are considered.

The work which is really the cheapest, is that which gives the best returns in all respects for the money invested. I think it will be admitted, that it is best to spend sufficient money on any work to secure the most efficient materials, and the most skilled labor and management; and in the case of so-called permanent improvements, to extend the payments equally over the probable life of the structure, since a municipal corporation can in nearly all cases secure money for improvements of a substantial character, at a lower rate of interest than the individual tax-payer, and further money borrowed for such purposes does not injure the credit of the municipality, provided always that the expenditure be made judiciously under the direction of honest and competent officials. Should the money however be injudiciously spent and the works be so badly constructed that they require renewal before the debentures are paid, the corporation will very soon feel the effect on its credit.

In estimating the cost of any proposed structure, we should not only consider the first or original cost of construction, but also the cost of maintenance and the benefit to the municipality as a whole, and to the parties most directly interested.

The item of benefit can in most cases only be determined after the completion and proper use for some time of the work, and depends somewhat upon the latter, so that it is not readily estimated in dollars and cents except in a comparative manner.

The original cost of construction and maintenance cost, can however be readily calculated so that it becomes a comparatively simple matter to decide what class of work or material will be the cheapest for any particular structure.

The yearly cost of a structure which must be kept up for all time is evidently the proper one to use in comparing the different classes of work, etc., and may be divided into three parts, viz:

1. Cost of original construction, divided by the number of years in the life of the structure.

2. Interest on first cost.

3. Average yearly cost of maintenance.

From the first cost of construction must be deducted the cash value of old material and so much of original structure as needs no renewal after the lapse of time estimated as the life of the structure.

In distributing the cost equally over the life of the structure, the amount payable to the original construction must be calculated after the manner of an ordinary sinking fund for the extinguishing of debentures.

As an example of the value of proper investigation in such matters, we will suppose that a bridge is desired at some particular point and it is desirable to know whether wood or iron construction will be the most economical. Suppose the span to be one hundred feet between centres, and for an iron bridge:

First cost.....	\$3,000 00
Value of old material.....	200 00
Maintenance per year.....	150 00
Life of bridge.....	50 years
Interest on money.....	5 per ct.

Then the yearly cost will be  
\$13.44 × 150. × 150. = \$313.44

For wooden bridge:

First cost.....	\$2000 00
Value of old material.....	50 00
Maintenance.....	150 00
Life of bridge.....	15 years
Interest.....	5 per ct.
Yearly cost \$90.29 × 100. × 150. =	\$340.29.

Which shows a saving in yearly cost of \$340.29-\$313.44 or \$26.85, provided that the bridge be constructed of iron.

W. F. VANBUSKIRK,  
A. M. Can. Soc. C. E.

Road and Roadmaking.

Bad roads are always expensive. What a wonderful contrast is made by a comparison of the cost of transporting the products of the farm, to the railway station only a few miles distant, and from the railway station to the sea board thousands of miles away. It often costs more to haul a ton of merchandise a mile over an unimproved public road than to haul it a hundred and fifty miles on the railway, which is an improved road. But that is not all. At times the condition of the common roads is such that it is absolutely impossible to haul any load at any price. The condition of the roads in the country districts the greater part of the year, is bad in the extreme. In many localities the farmer cannot market his produce at any cost, and if he is offered one dollar a bushel for his corn, it would do him no good for he could not haul it to market. A change in the system of road building is necessary beyond question, but the chief opposition to such a change comes from the persons benefitted most by good roads—we mean the farmers, and by reason of that opposition no legislature has as yet, had the courage to institute reforms. Farmers fail to realize the extent of the loss they sustain by lack of good roads, that can be depended upon in the rainy months of February and March as well as in August and September. Nor is that loss always to be estimated in dollars and cents, (the standard by which we are apt to measure valuables). There is a direct financial loss, it is true, that comes from a lack of good roads in various ways such as the enormous loss in time in going

to and from town; the loss from worry and over-exertion to horses and all draft animals resulting in shortening lives and limited periods of greatest usefulness; the loss in added wear and strain upon vehicles of all kinds; the loss that comes in the shape of diminished loads, the loss as we have shown in inability to take advantage of the most favorable markets, all these mean a direct and absolute loss of money that would astonish the objecting farmer could he know the amount. But there is a loss of those things that go far towards making the farmer's life worth living, the value of which is too great to be measured by the standard of dollars and cents. Man's social nature is strong and demands sustenance that is the result of intercourse with his fellows, deny him this sustenance and he becomes narrow, selfish, and morbid. Social intercourse adds immeasurably to a man's capacity for enjoying the good things of life, and contact with his fellows broadens him in his character and makes him a more useful member of society. Each town or village is the intellectual and social centre of the neighborhood around, and when the people can readily reach these centres, they are improved in mind and manner by coming into touch with the intelligence and culture that in turn comes from the larger towns and cities. By bad roads this co-mingling of country and town is prevented or rendered difficult. Again the loss becomes a financial one for viewed in the light of the broadest economy an intelligent, well informed citizen is worth more to the province than a dweller of the back woods who never sees a train of cars nor reads a newspaper.

Granted the proposition that we need better roads, that economy and the greatest good of mankind demand them, how are we going to get them? Clearly the way to an improved system of highways lies in legislation. Education of public sentiment must precede legislation—that is the way of all reforms. The present system must be shown up in its true light, as a wasteful, antiquated, unbusiness like method of dealing with one of the most vital parts of social machinery. Few people have even the faintest idea of the enormous waste of public funds through the so-called road system that prevails in their own county—a custom borrowed (inherited) from the old world more than a century ago, and long since discarded by them as unworthy of civilized nations.

It is to be hoped that the officers of the Association formed in Toronto, in February last, for the purpose of dealing with this question will not forget the responsible positions they were elected to fill. That they will think out this difficult problem, seek information from every quarter, search the books of their municipality to find out the amount of money that has been expended on roads, observe closely the work performed for that money, urge upon every person in their municipality to take an interest in this question and the

necessity of studying it up, so that when the next meeting takes place reliable statistics may be at hand, and every person present will be in a position to talk facts which will enlighten those who think only of complaining of high taxes and at the same time threatening vengeance on those managing the affairs of the municipality for not improving the roads which even they with the means at hand cannot but deplore.

#### Drainage

That drainage prevents drought is a somewhat startling proposition at first view. How can draining land make it moist? One would as soon think of watering land to make it dry. A drought is an enemy all farmers dread. If we take up a handful of rich soil of almost any kind after a heavy rain, we can squeeze it hard enough with the hand to press out drops of water. If we should take of the same soil, in a large quantity, after it was so dry that not a drop of water could be pressed out by the hand, and subject it to the pressure of machinery, we should force water from it. Any boy who has watched the process of making cider with the old fashioned press has seen the pomace after it has been once pressed apparently dry, and cut down and the screw applied anew, give out quantities of juice. These facts illustrate first, how more water may be held by a pulverized and open soil than by a compact and loose one. Water is held in the soil between the minute particles of earth. If these particles be pressed together compactly there is no space left between them for water. The same is true of soil naturally compact. This compactness consists more or less in most sub-soils, certainly in all through which water does not readily pass. Hence all these sub-soils are rendered more permeable to water by being broken up and divided; and more retentive by having the particles of which they are composed separated one from another, in a word by pulverization. This increased capacity to contain moisture by attraction is the greatest security against drought. The plants in a dry time send their rootlets throughout the soil and flourish in the moisture thus stored up for their time of need. The pulverization of dry land may be produced partly by deep or sub-soil ploughing which is always necessary to perfect the object of thorough draining; but it is much aided in stiff clays also by the shrinkage of the soil by drying.

Drainage resists drought again by the very deepening of the soil of which we have already spoken. The roots of plants we have seen will not extend into stagnant water. If then, as is frequently the case, even on sandy plains, the water line be in early spring very near the surface the seed, may be planted, may vegetate, and throw up a goodly show of leaves and stalks, which may flourish as long as the early rains continue; but suddenly the rain

ceases, the sun comes out in his June brightness, the water line lowers at once into the soil; the roots have no depth to draw water from below, and the whole field of clover or corn in a single week is past recovery. Now if this light sandy soil be drained so that at the first start of the crop there is a deep seed bed free from water, the roots strike downward at once and thus prepare for a drought. A moments reflection will satisfy any one that the dryer the soil in spring, the deeper the roots will strike, and the better able will be the plant to endure the summer's drought. Again, drainage and consequent pulverization and deepening of the soil increases its capacity to absorb moisture from the atmosphere and thus afford protection against drought. Watery vapor is constantly in all dry weather rising from the surface of the earth; the plants in the day time are, also from their leaves and bark giving off moisture which they draw from the soil. But nature has provided a wonderful law of compensation for this waste, which would, without such provision parch the earth to barrenness in a single rainless month.

The capacity of the atmosphere to take up and convey water, furnishes one of the grandest illustrations of the perfect work of the author of the universe. The numerous great rivers and their millions of tributaries constantly flowing into the sea, convey to it only as much water as the atmosphere carried back in vapor and discharges upon the hills. The warmer the atmosphere the greater the capacity to hold water. The heated thirsty air of the tropics drinks up the water from the ocean and bears it away to the colder regions where, through condensation by cold, it becomes visible as a cloud, and as a huge sponge pressed by an invisible hand the cloud condensed still further by cold sends down water to the earth in rain.

The heated air over our fields and streams in summer is loaded with moisture as the sun declines. The earth has been cooled by radiation of its heat, and by constant evaporation through the day. By contact with the cooler soil, the air borne by its thousand currents gently along its surface is condensed and yields its moisture to the earth again in form of dew.

Experience has abundantly proved that thorough drainage, upon soils requiring it, has proved a great relief to the farmer and that crops upon such land have been far better generally than those upon undrained lands in the same locality, and that in some instances the increased crop has been sufficient to defray the expenses of the improvement in a single year.

James Woodyatt, city clerk of Brantford, died at Belleville, on the 20th August. Mr. Woodyatt was born in England on June 20th, 1819, and came to Brantford in 1835. In 1859 he was appointed city clerk, a position he has occupied for 35 years. He was a Past Grand Master of the I. O. O. F., of Ontario, and representative to the Sovereign Grand Lodge for eighteen years. He was the first Grand Patriarch of the Grand Encampment of Ontario.

## LEGAL DEPARTMENT.

H. F. JELL, SOLICITOR,  
EDITOR.

## Municipal Corporations.

THEIR POWERS AND JURISDICTION.—  
HIGHWAY.

If the work referred to in section 560 of the Consolidated Municipal Act, 1892, is not proceeded with during the favorable season by the township officers, then the commissioners appointed pursuant to the said section, shall undertake and finish it themselves. Where the commissioners do the work, some provision is necessary for payment. It is, therefore, provided by section 561 of the said act that the money shall be paid by the county treasurer on the order of the commissioner or commissioners. When so paid the money is to be retained by the county treasurer out of any money in his hands belonging to the township; if none, then the county council may levy against such township a rate sufficient to cover such advances in questions of this kind. The county council is, as it were, being made the arbitrator between townships in the same county. But where the townships interested are in different counties, the wardens of the counties are, by section 562 of the said act, made the arbitrators; their power as such arbitrators is to determine upon the amount which each township shall be required to expend, either in money or statute labor, or both, and the mode of expenditure. The initiative action rests upon the warden of the county in which the township that first made the application is situated. He is the convenor of the meeting. It is made his duty to notify the warden of the county and the county judge of the time and place of meeting. This he must do within eight days of the time of his receiving the application. Section 565 of the said act makes provision as to the manner in which county and township councils may deal with minerals on or under highways.

Minerals, so far as the municipalities are concerned, are by this section placed on the same footing as growing timber, as to either, the municipal corporation may now pass a by-law for sale. The deed of conveyance or lease to the purchaser or lessee under the by-law shall contain a provision protecting the road for public travel, and preventing any uses of the granted rights interfering with public travel. The right of the public to the use of the highway as a highway is paramount to any right to reserve minerals, the latter right, therefore, must be so exercised as not to interfere with the former. The municipal corporation is liable to be held by any person sustaining damages by reason of defect in the highway.

Sub-section 3, of section 566, confers on county constables the right to pass by-laws for directing that on each or either

side of a highway, under the jurisdiction of the council passing through a wood, the trees (unless such are reserved by the owner for ornament or shelter), shall, for a space not exceeding twenty-five feet on each side of the highway, be cut down and removed by the proprietor, within a time appointed by the by-law, etc. Powers precisely similar to those by this clause, conferred on counties, are also conferred on townships by sub-section 3 of section 567. These sections do not apply when the trees are on one side of the road only. The former sub-section is to be read only as to the roads over which county councils have exclusive jurisdiction, the latter sub-section is to be read only as to roads vested in the townships. By this construction, conflict of jurisdiction is prevented. The sub-section under discussion authorizes a serious interference with private rights, and yet makes no express provision for compensation. The general rule is that when the property of a private individual is interfered with for a public benefit, compensation shall be made. If the proprietor himself cuts the trees they become his property, as owner of the land, but if he makes default the by-law may authorize the trees to be used either for municipal purposes or sold to defray the expenses by carrying the by-law into effect. Further expenses, if any, are to be paid out of the municipal funds. Sub-section 5, of said section 566, gives to councils of counties the power to pass by-laws to aid a town, township or incorporated village, by loan or otherwise, toward opening or making any new road or bridge in such town, township or incorporated village. The ordinary powers of a county council are, so far as roads and bridges are concerned, to deal only with county roads and bridges. County councils have no power to make grants in aid of the ordinary roads and bridges of particular local municipalities.

## Legal Decisions.

## MANGAN V. CORPORATION OF WINDSOR.

A contract for the construction of a sewer, between the corporation of the town and the plaintiff, provided for its construction within a limited time, but which was extended by resolution of the council, and again informally extended for a further period. The contract provided that, if the contractor neglected or refused to prosecute the work to the engineer's satisfaction, the corporation might employ and place on the work such force, men and teams, and procure such materials as might be deemed necessary to complete the work by the day named for the completion, and charge the cost thereof to the plaintiff, and by the specifications, which were made part of the contract, the same powers were conferred without any restriction as to time. The work not having been proceeded with to the engineer's satisfaction, the corporation, before the expiration of the second extension of

time, exercised the powers above conferred.

Held, that, under the contract, the power conferred could only be exercised during the time for the completion of the work or its extension thereof, but under the specifications, even after such time, and, therefore, even if they could not avail themselves of the second extension as granted informally, the powers would be properly exercised under the specifications.

A claim by the plaintiff that the defendants caused the amount stipulated for the payment of the work to be exceeded by the employment of more men etc., and the payment of larger wages than was necessary was found against him.

RE LONDON STREET RAILWAY CO. VS.  
CITY OF LONDON.

Judgment on appeal by the defendants from the judgment of Falconbridge, J., the trial judge, in favor of the plaintiffs in an action for an injunction to restrain interference by the defendants with the construction of a track on a portion of the street railway line operated by the plaintiffs on Dundas street, west of Richmond street, in the city of London. Appeal allowed, judgment of trial judge set aside, and action dismissed with costs.

The court held that the plaintiffs have no right to meddle with the roadway in question, except in so far as they are authorized by the by-law of the defendants, and the agreements ratifying its terms. Under the second clause of the by-law, they are entitled to lay a single track at the point in question. Whether they are entitled, along with this single track, to lay "necessary side tracks, switches and turnouts" is a matter in dispute which the court does not find it necessary to determine. Having the right to lay a single track, and not a double track, they are obliged, under the sixth clause of the by-law, to lay it in the centre of the street, and, as the gauge is fixed at four feet, eight and a half inches, each rail of the single track should be two feet, four and a quarter inches from the centre line of the street. Supposing them entitled to lay down a side track or switch, they must lay it on one side or other of their track, so that, for example, if they lay it down on the north side of their track, the whole south half of the roadway, excepting only two feet four and a half inches adjoining the centre line of the street will be entirely unobstructed. The plaintiffs, instead of doing this, have laid down double tracks, the inner rail of each track being two feet from the centre line of the street, with the result that they occupy on each side of the centre line of the street the space of at least six feet four and a half inches, besides the width of the rails and the projecting portion of the ties. It is plain, therefore, that the plaintiffs, upon their own construction of the by-law, are interfering on one side or the other of the centre line of the street with a strip of

the street upwards of four feet in width, without any shadow of right. They, in fact, being forbidden to lay down a double track, insist upon their right to proceed to lay down what they call a single track and siding in a form and manner which cannot be distinguished from a double track and in a form and manner forbidden in the case of a single track and siding. In so proceeding they were wholly without justification, and the defendants, being responsible by law for the condition of the highway, were well within their rights in interfering with the plaintiff's work and in restoring the highway to its proper condition.

TOWN OF TRENTON VS. DYER.

A point of vital importance to municipal corporations in general was recently decided by the Ontario court of appeal in this case. It was held that the provision contained in section 120 of the Assessment Act R. S. O. Ch. 193, requiring the clerk to deliver to the collector the roll certified under his hand, though possibly directed as to time is imperative as to the certificate, and a roll, unsigned by the clerk, is not sufficient authority to entitle the collector to distrain, and he and his sureties are not liable, under their bond, for the amount of uncollected taxes.

GIBSON VS. TOWNSHIP OF NORTH EASTHOPE.

The plaintiff in this case, in 1884, after signing a petition for the construction of a drain, wrote to the council objecting to the work for reasons set out, but in 1885, the council passed the necessary by-law, and issued debentures. Subsequently the plaintiff gave notice of his intention to move to quash the by-law, but afterwards he withdrew this notice and tendered for the work. In 1889 he attacked the by-law, alleging, among other grounds, that it was void by reason of his withdrawal. One justice of the Ontario court of appeal held that prior to 53 Vic. chap. 50, section 35, (O), a petitioner could not withdraw, and another justice held that there was no power of withdrawal, and that in any event the question, whether there had been withdrawal or not was for the council, and two others held that there was a power of withdrawal, but that the plaintiff was stopped from maintaining the action, his conduct having been such as to induce the council to believe that their jurisdiction was not contested.

ROYAL ELECTRIC CO. VS. CITY OF THREE RIVERS.

This is a case recently heard by the Supreme Court of Canada. The Royal Electric Co. having sued the city of Three Rivers for the contract price of the installation of a complete electric plant, which under the terms of the contract was to be put in operation for at least six weeks before the payment of the price could be claimed. The court referred the case to experts on the question whether the contract had been substantially fulfilled, and

they found that owing to certain defects the contract had not been satisfactorily completed. The Superior Court adopted the finding of fact of the experts, and dismissed the action. The Court of Queen's Bench for Lower Canada (appeal side) on an appeal, affirmed the judgment of the Superior Court. On appeal to the Supreme Court of Canada, it was held that where there are concurrent findings of two courts on a question of fact, this court will not interfere, unless the findings of fact are conclusively wrong, and that when a contract provides that no payment shall be due until the work has been satisfactorily completed, a claim for extras, made under the contract, will not be eligible prior to the completion of the main contract.

HOWDEN VS. LAKE SIMCOE ICE CO.

In this case the Ontario Court of Appeal recently held on an appeal from the judgment of the county court of the county of York, that allowing a broken wagon to remain on the highway for nearly two (2) hours is not in itself sufficient evidence of negligence to support an action by a person who strikes against the wagon while passing in a street car. Such a broken wagon does not become a nuisance or obstruction to the highway until, having regard to the difficulty of removing it, it has been allowed to remain thereon for an unreasonable time.

MONTREAL STREET RAILWAY CO. VS. CITY OF MONTREAL.

This is another recent decision of the Supreme Court of Canada. By a by-law of the City of Montreal, a tax of \$2.50 was imposed upon each working horse in the city. By a section of the Street Railway Company's charter, it is stipulated that each car employed by the company shall be licensed and numbered, etc., for which the company shall pay, "over and above all other taxes, the sum of \$20 for each two horse car, and \$10 for each one-horse car." It was held, affirming the judgment of the court below, that the company are liable for the tax of \$2.50 on each and every one of its horses.

The system of municipal government in the city of Toronto was recently examined by Dr. Shaw, an American expert, whose article appeared in the August number of the review of reviews. Among other things he states that practical permanency of tenure in the appointive municipal service insures a continuity of administration which might otherwise be impaired somewhat by the annual renewal of the entire council. The re-election, however, of a considerable part of the aldermen is always to be expected, and thus a nucleus of experienced members maintain the traditions of the body, and offer some guarantee against abrupt changes of policy. He also refers to the street railway franchise as the most complete and satisfactory municipal franchise that has ever been granted in America.

Interesting Decision on Preparation of Voters Lists.

His honor Judge Hughes, of Elgin, in a recent judgment explains on what part of the voters' list, under section 3 of the Voters List Act, the names of persons entitled to both the municipal and legislative franchise are to be inserted.

Notwithstanding section 5 prescribes that the same name is not to be inserted twice in the same part, the law requires that where a municipality is divided into several polling sub-divisions, the list must be made up into three parts for each polling sub-division, and that the voter's name should be entered in any polling sub-division where he possesses the qualification. Where a voter is entitled to both municipal and electoral franchise, his name must be placed in part one of every polling sub-division, and he may vote where he chooses.

The judgment reads as follows:

The way I regard the question that has been raised as I do, is from my analysis of the third section of the Voters' List Act which is the foundation upon which the revision of the lists by the county judge is laid.

1. There is to be a voters list every year.

2. It is to be prepared immediately after the final revision and correction of the assessment roll.

3. It is to consist of three parts in given forms.

4. Of all persons of twenty-one years of age, subjects of Her Majesty, whose names appear on the assessment roll as entitling them to be voters.

5. The list is to be made up for each separate municipality.

6. The first of the three parts is to contain the names of all male persons of full age and British subjects, that are found on the roll, as entitled to vote in that municipality at both municipal elections and elections for members of the legislative assembly.

7. If the provisions were to stop here, there is no room for question or doubt, because there would be only one part 1 and 1 part 2, and one part 3 for the whole municipality.

8. The second part is to contain the names of all other male persons of such full age and legal qualification and capacity as to their being subjects, whose names appear on the assessment roll to be entitled to vote in the municipality at municipal elections only, and not at elections for members of the legislature assembly.

How, or by what right has the municipal clerk, or the court of revision or the judge to place a voter on this list, who has the right to the legislative franchise? When this 3rd sub-section enacts and confines the power to place upon part 2nd of the list the names of persons who are only entitled to the municipal franchise?

9. There is no right to place such a name on part 2, any more than there would be to place it on part 3. There is no right to place him on part 3 because he has a municipal qualification, and there is no right to place his name on part 2 because he has a legislative qualification. The third part is to contain the names of all other male persons of full age, etc., and subjects, etc., of those persons appearing on the assessment roll to be entitled to vote in the municipality at elections for members of the legislative assembly only, and not at municipal elections, so that it is well defined in what part of the list a voter's name is to be placed.

10. The 5th sub-section perhaps gives rise to the objection to my ruling because it provides that the name of the same person is not to be entered more than once in any such part. It does not say in any such list, but in any such part, so that if there were only one list for the whole municipality or only three parts in the whole list, it would be clear that any such name of a person could only appear once.

11. But part 6 explains and provides that where a municipality is divided into several polling sub-divisions, the list is to be made in three parts, *i. e.* for each of the polling sub-divisions.

12. Sub-section 10 provides that where a ward of any municipality is divided into polling sub-divisions, and where, within the knowledge of the clerk, a person resides in one of the polling sub-divisions, his name is to be entered on the list of voters for that polling sub-division, and no doubt there has been some idea or argument hinged upon this sub-section, that what I have held on this subject is erroneous, but it has to be properly analysed first and then it will be found that it does not apply to the legislative franchise voter at all, but to a person who is assessed in each of two or more polling sub-divisions in the same ward for property sufficient to entitle him to be a voter at a municipal election, in which case the clerk is to enter his name on the list of voters in one sub-division only, where he is to insert the description of the qualifying property in that sub-division with the additional words *and other premises*.

13. The 11th sub-section does not affect this question in the least, because like section 10, it refers only to the municipal qualification of a voter where property is partly in one sub-division and partly in another.

14. The 12th sub-section plainly points out that if the qualification to become a voter at a municipal election is in respect of taxable income, the clerk is to place his name at the place where the voter resides.

15. By using this order of treatment, I am not overlooking the provision of the 7th sub-section with regard to the Manhood Suffrage Act, which only applies to the column of the voters list in which the words manhood franchise or the letters

M. F. are to be inserted. It does not in any wise affect the question as to the part of the list, or the ward, or polling sub-division in which a voter's name has to be placed where he is entitled to the electoral franchise.

The 8th sub-section only applies to the qualification for a municipal election and does not affect this question.

After the foregoing analysis I think it will be clearly seen what my reasons are for the conclusions I have reached on this subject.

The statute does not point out that the clerk either may or must place the name of a person entitled to the electoral franchise in any polling sub-division or ward of the city apart from his municipal franchise, in other words wherever he is entitled to both, they must be placed in part 1, and the clerk has no right to sever them or prescribe that he shall vote on his municipal franchise in one polling sub-division and on his electoral franchise in another, or *vice versa*. Supposing a municipal election and a parliamentary election were to be held on the same day, as they might be, he has the right to exercise both franchises in the same place or in divers places just as he pleases.

It is the same in principle, where a taxpayer has property in several wards of the city, he has the right to vote for mayor and for aldermen; he has an equal right to vote for aldermen in all the wards and for mayor in any of the wards where he has a vote, and his name should be entered on the voters list for all those wards, but he can only vote for mayor in one polling place, but in which ever ward he chooses.

#### The Care of County Paupers.

Toronto News.

There are, according to a *News* correspondent, fifteen persons over sixty years of age in Barrie jail, not one of whom has violated any statutory or local law of the country. Their one offence consists in the fact that they are unable to provide homes for themselves.

This is a state of affairs of which any civilized community should be ashamed. The remedy is not to be found, however, in making the care of paupers a charge on the Ontario Government. That would involve a very large increase in the patronage enjoyed by the central authority, and against the patronage system as it at present exists. As it at present exists, the whole country is even now in revolt. What is needed is a general law that will force each county, in which the necessity exists, to provide for its own poor by means of the erection of an industrial home. By this means a reproach will be removed, each community will be forced to bear its own burdens, and there will be no increase in the danger that is inseparable from the placing of large power in the hands of one central body.

#### QUESTION DRAWER.

SUBSCRIBERS only are entitled to opinions through the paper on all questions submitted if they pertain to municipal matters. Write each question on a separate paper on one side only. When submitting questions state as briefly as possible all the facts, as many received do not contain sufficient information to enable us to give a satisfactory answer.—Ed.

W.—1. A school section asks municipal council to raise a sum of money for erection of school house by debenture. Council loes so creating certain expenses. Who pays these expenses?

2. Must medical health officers and local boards of health take a declaration of office after appointment.

1. 55 Victoria, chapter 60, section 3 amends section 115 of the Public Schools Act, by adding thereto the following sub-section.

The expenses of preparing and publishing any by-law or debentures under the said section 115, and all other expenses incident thereto, shall be paid by the school section on whose behalf such debentures were issued, and the amount of such expenses may be deducted from any school rates collected by the municipal council for such school section, anything in the Public School Act to the contrary notwithstanding.

2. Yes. See section 271 (a), Consolidated Municipal Act 1894.

J. H.—Is a ratepayer, holding the office of township treasurer this year, and resigning such office before the end of the year, an eligible candidate for the office of reeve or councillor at the next municipal election? The qualifications of such ratepayer in re-property, age, citizenship being efficient.

If the person referred too by our correspondent had in good faith resigned his office as treasurer of the municipality prior to the nomination meeting, and the municipal council had accepted such resignation, and there had been a final settlement and adjustment of all transactions between him and the municipality, he is qualified for election.

J. W.—In 1893 special auditors were appointed by the township council to audit the books, rolls and accounts of the township, from the time of organization up to date.

These auditors found that during several years, S. S. No. 3, had received more money than had been raised in the said section by school taxes. Has the township council power to levy (in addition to the ordinary rate) a special rate on S. S. No. 3 to recover the amount which the said section owes the township? If not how can the money be recovered?

If amount paid to trustees was by error in excess of amount required, the municipality would have a claim against the section, but if the amount of taxes collected was less than the amount paid to trustees by reason of non-payment of taxes on real property, the municipality is by section 203 of the Assessment Act 1892 required to make up the deficiency. The municipality in return, having full claim to all arrears of taxes collected as such:

The amounts overpaid the section should be charged in treasurers books, and deducted from future levys as the council may direct.

W. N.—The treasurer of this municipality having just died, will you kindly answer the follow-

ing question. Would it be legal to appoint a female to the office of treasurer for the balance of the late treasurer's term?

We believe there is no objection to appointing a lady to a municipal office. When appointing the county clerk of Lampton recently, a lady came within a few votes of securing the appointment.

F. J. C.—1. In view of section 67 Assessment Act 1892, has the council any authority to remit or reduce in whole or in part any persons taxes?

2. Or is there any other statute conferring such authority upon the council?

3. Can the court of revision exercise this authority without having a by-law passed by the council for that purpose?

4. In the absence of any by-law can the council grant a rebate of taxes?

1 and 2. We would draw our correspondents attention to sub-section 12, of section 479 of the Consolidated Municipal Act 1892. In a case coming under the provisions of this sub-section, the council would have the right to exercise the authority suggested by our correspondent by by-law.

3. Yes.

4. The release if made, must be made by by-law.

#### Rules and Regulations for the Government of Common Gaols.

##### THE TURNKEY.

A turnkey shall at no time enter a ward where important prisoners are confined without the gaoler or another turnkey being present, one of whom must remain outside the corridor gate and shall lock the said gate as soon as the officer accompanying him has entered the corridor. The officer entering the corridor must not have in his possession any key that will open the corridor gate, or any key whatever except the cell keys.

It is the special duty of turnkeys, under the direction of the gaoler, to guard and watch the prisoners and to oversee them when at work, seeing that they are never left alone when in the gaol yards, or when cleaning any portion of the gaol or premises outside of the wards; and they shall see that the work of cleaning the cells, corridors, and other parts of the gaol, the airing and making-up of the beds, and the other ordinary work of the gaol, are performed by a certain hour every morning, to be named by the gaoler.

They shall not receive any visitors within the gaol without the permission of the gaoler.

They shall immediately report to the gaoler any case of disobedience, insubordination, or infraction of the rules and regulations on the part of any male prisoner, and shall see that the punishment awarded by the gaoler is strictly carried out.

##### NIGHT WATCHMEN.

Where the number of prisoners in a gaol renders it necessary to have a night watchman, such officer shall be deemed a turnkey, and shall be subject as such to these rules and regulations; and he shall obey the directions of the gaoler.

He shall commence and leave off duty at such hours as the gaoler shall direct; and before going on duty on each night he shall pass through all the male wards of the gaol with the gaoler, or in his absence with a turnkey, when he shall count the prisoners and see that their number agrees with the report of the gaoler or turnkey, and that they are all securely locked up in their cells, and that the corridor cells are also securely locked.

When on duty he shall move about noiselessly, but shall not open a cell wherein any prisoner is confined without first calling the gaoler or turnkey; he shall be attentive to any unusual noise and ascertain the cause thereof; and shall be especially vigilant in guarding against any attempt at escape or any danger from fire, giving instant attention to any smoke, smell of burning, or other indication of fire, and immediately giving warning thereof to the gaoler.

##### PRISONERS.

All prisoners shall be searched on admission, the males by the gaoler, deputy gaoler, or chief turnkey, and the females by the matron, and all dangerous weapons, articles calculated to facilitate an escape, and other articles not necessary for a prisoner's use while in gaol shall be taken from them, and a list thereof entered by the gaoler in the prisoners' effects book, together with an account of all money and other articles which may be sent to the prisoners while in confinement; and on the discharge of a prisoner, such articles and money shall be delivered to him or her, except unlawful weapons, burglars' tools, and other articles which may be legally confiscated by the gaol authorities, or which are retained by order of a judge.

On the admission of any prisoner, the name, age, and all other particulars respecting such prisoner which are required in order to fill up the columns of the gaol register, shall be recorded in the register.

On admission to the gaol, all prisoners shall be bathed and cleansed, and they shall be required to keep themselves clean and decent in their persons; and all male prisoners shall, on conviction and sentence, have their hair cut as close as may be necessary for the purposes of health and cleanliness; but the hair of a female prisoner shall not be cut without her consent, unless the gaol surgeon orders it to be done on the ground of health, or on account of vermin or dirt.

To be continued.

Every collector's roll is required to be completed and balanced on or before the first day of October, and a summary showing the total of the different rates entered therein, and should be handed to the treasurer of the municipality before the roll is placed in the hands of the collector, and the treasurer should charge the collector with the total amount on the roll, and credit the different accounts for which special rates have been raised, with the amount entered in the roll for each.

## A Special Audit ..

is needed in many municipalities, their books and financial affairs, being somewhat mixed. I straighten them out, and start them off anew. Write me, if you have a case. Don't leave it till the new year, when I may be too busy to visit you.

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The cost of Metal Bridges, for a term of years, is less than the cost of building repairing and replacing wooden bridges, and believing the only reason so many bridges are still built of wood to be that those who are charged with the duty of contracting for them are not aware how little difference there really is in the first cost of a good Iron or Steel Bridge and a well built wooden one, of equal strength, we are at all times pleased for an opportunity to quote prices to officers of counties, cities and townships, so that they may intelligently compare the cost of metal and wooden bridges. To enable us to name prices closely we need information on the following points: Number of spans and length of each span. Width of roadway and number and width of footways and sidewalks. Kind of Lumber to be used for floor joists and plank and its value. Name of nearest R. R. Station and distance of bridge site from station. Depth of water at ordinary level and height of floor above water. Also strength and capacity of bridge required, if any particular strength has been determined on; or a general statement as to the nature of travel over the bridge; whether on a country road, a well-ballasted turnpike, or located in a village or city, and subject to heavy loads.

**WORKS: LACHINE LOCKS, P.Q. OFFICE: 20 St. Alexis Street, MONTREAL, P.Q.**

Address Inquiries in Response to this Advertisement, to

**DOMINION BRIDGE COMPANY, LTD., Montreal, Que.**

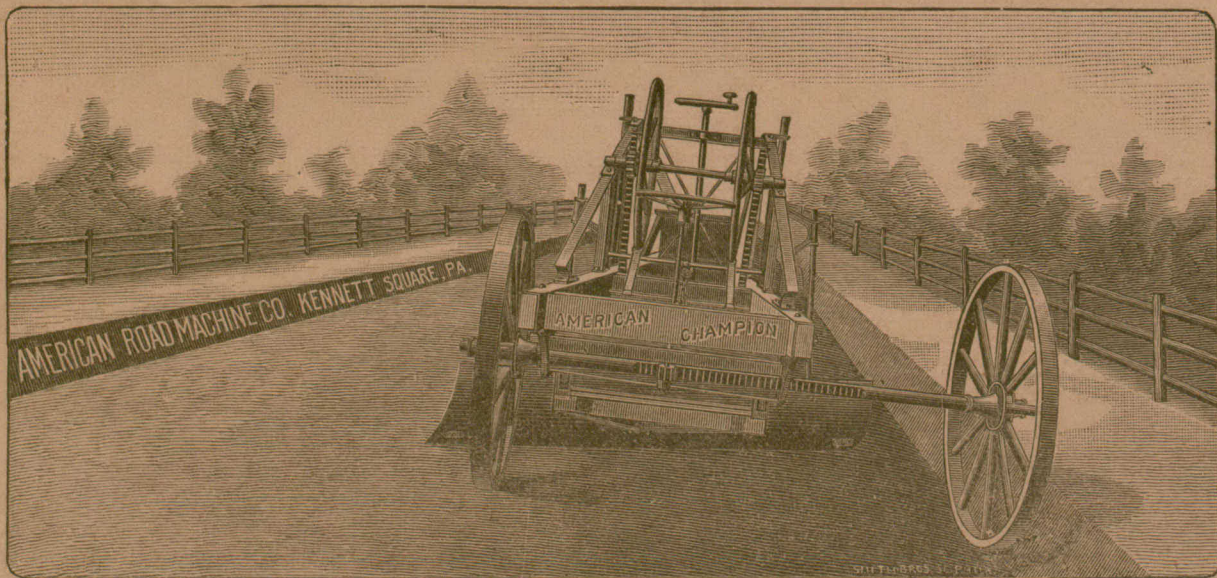
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**WHY?**

No town or township can afford to be without an American Champion Road Machine.

Because it gives you better roads which will enhance the value of your property, and at same time save you money.

"The Road Machine we purchased has given good satisfaction. We graded 190 rods, 48 feet in width, in three days, with three teams, at a cost of twenty-eight dollars and fifty cents, and would recommend it to any Council who may require one."—*Yarmouth Township Council, 1892:*



The above cut shows the rear view of machine at work. We send our machine on trial. Send for catalogue, testimonials, prices, etc. All correspondence promptly and cheerfully answered.

Address all communications to **American Road Machine Co., F. L. Wright, Manager, 124 York Street, Hamilton, Ont.**