The Municipal World

Published Monthly in the Interests of Every Department of our Municipal System-the Best in the World

Vol. 3

ST. THOMAS, OCTOBER, 1892.

No. 10.

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MUNICIPAL CLERKS.

Taxes in Collector's Roll.

Lytle's Rate Table will assist you in entering Taxes in the Collector's Roll. It gives rates by tenths of a mill from one to nine and nine-tenth mills. The author, a Clerk of considerable experience, knowing what was wanted, issued the work, which should be in the office of every Clerk. Price \$2.00

Address orders to The Municipal World, St. Thomas, Ont.

CALENDAR FOR OCT. - NOV., 1892

Legal, Educational, Municipal and Other Appointments.

OCTOBER.

- 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 the Collectors' 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).
- 3. Night Schools open (Session 4892-93).
- 10. Selection of Jurors in every municipality. Jurors Act, Sec. 18.
- 15. First day on which quail may be killed.
- Last day for passing by-laws for holding first election in Junior Township after separation.—Municipal Act. Sec. 91.

NOVEMBER.

- Last day for transmission by local Clerks to County Treasurer of taxes on lands of nonresidents.—Assessment Act, Sec. 121.
 - Last day for transmission of Tree Inspectors Report to Provincial Treasurer.—Tree Planting Act, Sec. 6.
 - All Subscriptions to The Municipal World should be paid on or before this date. The first day on which deer may be killed.
- Last day for Collector to demand taxes on lands omitted from the roll. -- Assessment Act, Sec. 154.

NOTICE. 怜

We desire to ensure the regular and prompt delivery of this journal to every subscriber, and request that any cause of complaint in this particular be reported at once to the office of publication. Subscribers who may change their address should also give prompt notice of same, and in doing so should give both old and new address.

As many people, either thoughtlessly or carelessly take papers from the Post Office regularly for some time, and then notify the publishers that they do not wish to take them thus subjecting, the publishers to considerable loss, inasmuch as the papers are sent regularly to the addresses in good faith on the supposition that those removing them from the Post Office wish to receive them regularly, it is right that we should state what is the law in the matter.

- 1. Any person who regularly removes from the Post Office a periodical publication addressed to him, by so doing makes himself in law a subscriber to the paper, and is responsible to the publisher for its price until such time as all arrears are paid.
- 2. Refusing to take the paper from the Post Office, or requesting the Postmaster to return it, or notifying the publishers to discontinue sending it, does not stop the liability of the person who had been regularly receiving it, but this liability continues until all arrears are paid.

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THE MUNICIPAL WORLD

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VOL. 2

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NO. 10.

The Municipal World.

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K. W. McKAY, Editor, Box 749, St. Thomas, Ont.

Communications and advertisements for next issue must be in on or before the 20th of this month.

ST. THOMAS, OCTOBER 1, 1892.

The manner of enforcing the Act respecting noxious weeds and diseases of fruit trees makes it a dead letter in nearly every municipality. If land owners and others are really in earnest in their desire to rid the Province of these pests, they should petition the Ontario Legislature to amend the Act so that the fine for each conviction would not be less than \$2.00, nor more than \$10.00, and costs, in any case, and also that half the fines should be paid to the informant. With this provision in the act tramps and others out of employment would be able to make a comfortable living while pursuing their usual avocation, and after a few delinquents had been fined all would see the desirability if not the necessity of at once clearing their premises of the weeds and trees mentioned in this act.

The public and local health authorities need to be more than vigilant during this month, as they may at any time have to contend with the dread disease, cholera. It is very gratifying to know that the enforcement of the quarantine regulations are carried out so efficiently, for in one day, with our rapid means of communication, any such pestilence is easily transmitted from one country to another, and it does not take long to cause sad havoc among the populations of careless and improvident communities.

Local boards of health should be composed of the best men in the community; men possessed of sufficient determination to enforce regulations even if it does inconvenience their fellow-citizens. The worst trouble to be contended with in case of an epidemic such as small-pox or cholera, arises from actions of people who are in no way likely to be affected by the disease, but who, as soon as anything of the kind is announced, become so frightened and unreasonable as to interfere with the authorities in the proper discharge of their duties.

The resolution referring to reduction of members of county councils, mentioned on page 39 of the August number, was not carried by the Middlesex county council, but referred to a committee who recommended no action. The report was adopted.

* *

The prompt collection of taxes is a matter that every member of the municipal council should insist upon. In many municipalities the roll is not returned for months after all the taxes collectable should be in the hands of the municipal treasurer. This delay is owing to the action of the collector in waiting on delinquents, and we are sorry to say that they are often encouraged by members of the council. The time fixed by the Act for the return of the roll is the 14th December; the greater part of the taxes should be in the hands of the Treasurer by that time.

If the ratepayers are given to understand that the taxes must be paid by a certain day, and that all not then paid will be collected in the manner provided by the act, there will be no difficulty in securing the money, and the finances of the municipalities will be placed on a better and more business-like basis.

The salaries paid collectors are never very exhorbitant, and they should make every effort to be in a position to make their final report to the treasurer on or before the first of January, and in this they should be encouraged by the council.

* *

We have not received many replies in reference to our suggestion of holding a meeting of municipal officers in Toronto, and from the success that has attended the formation of county associations in different parts of the province, we would suggest that an effort be made to hold a meeting of the clerks in each county during the months of October or November, before the assessment roll slips, etc., are prepared for next year. Every clerk, no matter how well posted, would receive some benefit from attending a meeting of this kind, and if properly represented to the county council, the action of the Oxford county council in encouraging the Clerk's Association would no doubt, be carried out in each county.

At the county meeting, the advisability of forming a provincial association could be discussed, and if thought desirable, we will fix a date and announce it as thoroughly as possible in the January number,

but by all means let us have an association in each county.

Reduction of Members of County Councils.

The secretary of the Bruce county association of Patrons of Industry, has kindly forwarded us a resolution adopted at the last meeting of their association in reference to reduction of number of members of county councils. It is more comprehensive than many of the resolutions published, and while it recommends the act submitted to the legislature of last session, it suggests important amendments thereto, the principal being the division of counties into districts, which in our opinion, is the key of the whole question. In general the resolution agrees with our opinion expressed in article on reduction of the number of members of county councils published in the April number of THE WORLD. We recommend the resolution to the consideration of all who are desirous of bringing about a reform in that direction.

The resolution reads as follows:

rst. We recommend the reduction of the number of county, councillors as proposed by the act before the Ontario Legislature at its last session.

2nd. That the number of representatives be based upon a rate, according to population, as mentioned in proposed act.

3rd. That each county be divided into districts for this purpose, each district to elect its representatives by public vote to be taken at the municipal election.

4th. That each district formed be bounded by existing municipal boundaries.

5th. That the method of electing candidates should be as follows: The county council at its last session in each year should appoint a returning officer in each district whose duty it would be to receive nominations from any qualified voter in the district, when, if there is more than one nominee, he will prepare ballot papers to be used under the supervision of the municipal returning officer.

To save a few dollars a number of councils, last winter, refused to publish the auditors' report as required by statute. They have received notice from the bureau of statistics asking for a copy of the report and pointing out that, in not sending a copy, they have violated the law. As a result the councils will have to get the reports printed.

Selection of Jurors.

The mayor, reeve, the city, town, village or township clerk, and the treasurer or treasurers, if there be more than one of the respective towns, villages or townships in Ontario, are ex officio the selectors of jurors for every township and village, and for each ward of every such city or town. They are required to assemble annually on the 10th day of October, or if that day be a Sunday or a statutory holiday, then on the first day thereafter not being such holiday, at the place where the meetings of the council of the municipality are usually held, or at such other place within the municipality as may, for that purpose, be appointed by the head of such municipal corporation, or during his absence or the vacancy of the office, by the clerk thereof, for the purpose of selecting from the Assessment Rolls of such city, town, village or township, the names of persons qualified and liable to serve as jurors.

Before entering upon the performance of their duties, the selectors are required to make and subscribe an oath or affirmation as follows:—"I, A. B., do swear (or affirm, as the case may be), that I will truly, faithfully and impartially, without fear, favor or affection and to the best of my knowledge and ability, perform the duty of a selector of jurors, and will select from the proper lists the requisite number of the most fit and proper persons to serve as jurors for the year of our Lord 18; So help me God.

Sworn, or affirmed, before me at the day of 18.
(Signed) C. D., (Signed) A. B.
J. P.

This may be made before any justice of the peace having jurisdiction in the municipality. The manner of the selection is as follows:-First, to write down on one or more sheets of paper twice as many names of persons appearing by the voters list or assessment roll to be possessed of the requisite property qualifications or otherwise duly qualified to serve on juries, as have been required by the county selectors to be selected and returned from the township, village or wards of the municipality. The clerk is required to produce for the information of the selectors the proper voters list and assessment roll. In selecting the names for the list mentioned, the selectors are required to proceed from letter to letter in alphabetical order, and write down the names consecutively of all those persons qualified to serve on juries and not exempt by law, and at each subsequent annual meeting the selectors shall begin at the letter next to that at which they lett off the preceding year, and so on until they have gone through all the letters of the alphabet, and when they again begin with the letter A. When the selectors have obtained the names of a sufficient number

of duly qualified persons before they have exhausted the entire number of those qualified in any one letter, they are required at the next annual selection to commence at the beginning of such letter, but shall not select from the names of any persons that were written down and selected from, and returned the preceding year. The selectors shall select from the list at least two-thirds of the persons whose names they have so written down who, in their opinion, are best qualified to serve on juries and shall place a number opposite each name of the said two-third so selected, and shall then prepare a set of ballots of uniform and convenient size, and such ballot shall be numbered to correspond with the numbers opposite the names of the two-thirds selected, and the selectors shall then proceed to ballot for jurors until the number required for every such municipality by the county selectors has been selected.

The manner of balloting is to place all the ballots in a box, which shall be then shaken so as to mix the ballots, and for one of the selectors to openly draw from the said box indiscriminately one of the ballots, and declare the number of such ballot, whereupon the clerk or one of the selectors present shall immediately declare the name of the person opposite whose name the corresponding number is on the list, and the name and addition of the person whose name is so selected shall be written down on a piece of paper provided for that purpose, and the selectors are required to continue until the necessary number has been completed. After having made such selection by ballot, the selectors shall distribute the names of the persons so balloted into four divisions, the first to consist of persons to serve as grand jurors in high court, the second of persons to serve as grand jurors in the inferior courts, the third of persons to serve as petit jurors in high court, and the fourth of persons to serve as petit jurors in the inferior courts, and shall make such distribution according to the best of their judgment.

The selectors are then required to make a duplicate report, under their hands and seal, of their selection, ballot and distribution, which report is required to be in the form of schedule A of the Jurors Act. One of the reports shall, on or before the 25th day of October, be deposited with the clerk of the peace for the county in which the municipality lies, and the other duplicate with the clerk of the municipality. The clerk of the municipality is required to keep a book and enter the dates of the meetings of such selectors of the municipality, the persons present thereat, and the letters of the alphabet from which the selections of names of persons are, from year to year, made, and when the names in any one letter have not been exhausted in any one year, the clerk shall enter in such book the names and additions of all such persons whose names begin with the last mentioned letters that were written down and selected from and returned during the then current year.

For making the selection and distribution of jurors, the selectors are entitled to such sum of money as is authorized by the council of the municipality of which they are officers, and upon receipt of the certificate from the clerk of the peace that the report has been returned to him, as required by law, such sum shall be paid to the selectors by the treasurer of the municipality and in such manner as the municipal council directs.

Organization of County Constables.

The organization of the county constable force should receive the attention of every county council. Under the present law, county constables are appointed by the magistrates at the court of general sessions of the peace; interim appointments are made by the chairman, the county judge. The appointment of high constables and lockup keepers is also made in this way. County councils have no authority to appoint these last mentioned officers, but have the authority to fix their salaries. We believe that a uniform system for the organization of the county constable force in each county is advisable. The high constable should, in all cases, be the chief officer, and should receive a salary in proportion to the duties he is required to perform. These should be defined by the body from which he receives his appointment. If some systematic organization is introduced, a larger number of good men could be induced to accept the office of county constable, and the services of all those who are unfit for the position dispensed with. In return for any small expenditure, a county council might have to pay towards the organization and maintenance of the force. Hand cuffs, which cost considerable in counties where they are furnished to the constables, could be properly looked after and distributed. By having a better class of men on the force, the councils would not require to pay as many accounts for services in trivial cases which many constables work up for their own benefit. One of the duties of the high constable would be to inspect all the lockups and recommend and certify to repairs necessary, and when the services of constables are required in important matters, the high constable, as head of the organization, would know who are the best men to take charge of the matter. Under the present system the ends of justice are often defeated by placing important cases in the hands of incompetent men. We believe that in every county, in which a police magistrate or magistrates are appointed, the organization of the constables will be found to be very inefficient and bring the necessity of improvement in this direction very plainly before the authori-

Collectors and their Duties.

Sections 122 to 137 of Consolidated Assessment Act 1892.

Immediately after the receipt of the collector's roll, which should not be later than the first day of October, the collector is required to commence to collect the money due in respect of taxes, and his first duty should be to prepare the written or printed notices specifying the amount of taxes. In cities and towns he is required to call at least once on the person taxed, or at the place of his usual residence, or domicile, or place of business, if within the municipality, and demand payment of the taxes. This may be done by leaving the notice at either of the places referred to. In townships and villages the collector is required to call at least once on the person taxed, or at the place of his usual domicile or place of business, if within the local municipality, and demand payment of the taxes payable by such person, or if so empowered by by-law of the municipality, he shall leave with the person taxed, or at his residence or domicile the written or printed notices specifying the amount of such taxes, and in all cases, at the time of such demands or notice, as the case may be, immediately thereafter he is required to enter the date on his collection roll opposite the name of the person taxed, and such entry shall be prima facie evidence of such demand or

Except in municipalities where by-laws have been passed requiring the payment of taxes by any day or days, named therein, by installments, as provided in section 53 of the Consolidated Amendment Act, any person neglecting to pay his taxes for fourteen days after such demand or after notice served pursuant to such by-law as aforesaid, or in the case of cities and towns, after such demand or notice as aforesaid, the collector may, by himself or by his agent, subject to the exemptions provided for by sections 27 and 28 of the Act respecting the law of landlord and tenant, levy the same with costs by distress of the goods and chattels of the person who should pay the same, or of any goods or chattels in his possession, wherever the same may be found within the county in which the local municipality lies, or of any goods or chattels found on the premises, the property of, or in the possession of any person on the premises, and the costs chargeable shall be those payable to bailiffs under the Division Courts Act.

In cases where collectors have to resort to compulsory measures, although they are authorized to levy in person, and without the authority of any process, yet it is scarcely contemplated that the collectors themselves would, as a matter of course, act the part of bailiffs and auctioneers in seizing and selling, so while the power is given to the collector still, it is also said, he may, by his agent, levy, and when the

bailiff or agent is appointed he should receive a warrant in the following form:

City of to wit: To A. B., my Bailiff.

You are hereby authorized, and required to distrain the goods and chattels of C. D. of, &c., which you shall find on the premises of the said C. D. at, &c., or any goods and chattels in his possession, whereever the same may be found within the county of, &c., for the sum of, &c., rated against him for taxes on the collector's rolls of, &c., for the year, &c., and now in arrear and unpaid, and in default of payment of such arrears of taxes and the lawful cost of the said distress, to sell and dispose of the said distress according to law, for the recovery of the said arrears of taxes together with said costs, and for you so doing this shall be your sufficient authority.

Given under my hand at, &c., this lay of A. D., 18.

E. F., Collector.

Of course the collector is liable for anything done by the bailiff, which he had authorized him to do. If, at anytime after the demand has been made, or the notice served pursuant to such by-law, or in the case of cities or towns, after the demand has been made or notice served by the collector as aforesaid, and before the expiration of the time of the payment of the taxes, the collector has good reason to believe that one party by whom taxes are payable is about to remove his goods and chattels out of the municipality before such time has expired, and makes affidavit to that effect, before the mayor or reeve of the municipality or before any justice of the peace, such mayor, reeve or justice shall issue a warrant to the collector, authorizing him to levy for the taxes and costs, in the manner provided by the Assessment Act, although the time for payment may not have expired.

To prevent misunderstanding, a city is deemed to be within the county of which

it forms judicially a part.

In the case of persons whose names appear on the roll, but who are not residents within the municipality, the collector shall send to him by post, addressed in accordance with the notice given by such non-resident, if notice has been given, a statement and demand of the taxes charged against him in the roll, and shall, at the time of such transmission, enter the date thereof on the roll opposite the name of such person. The notice is required to contain, written or printed, on some part thereof, the name and post office address of the collector.

As provided in section 126 of the Assessment Act, a collector may make distress of any goods or chattels which he may find upon the land of non-residents who have required their names to be entered on the collector's roll, only after one month from the date of the delivery of the roll to him, and after fourteen days from the time such demand or notice, as aforesaid,

has been so transmitted by post. If this notice has not been given by non-residents, and their names still appear on the roll, the collector has no authority to levy the tax by distress. After the collector has levied the taxes with costs by distress, on the goods and chattels of a person who should pay the same, or of any goods and chattels in his possession, wherever the same may be found in the county in which the local municipality lies, or of any goods or chattels found on the premises, the property of, or in possession of any other occupant of the premises, he should by advertisement posted up at least in three public places in the township, village or ward, wherein the sale of the goods and chattels distrained is to be made, give at least six day's, public notice of the time and place of such sale, and the name of the person whose property is to be sold, and at the time named in the notice the collector or his agent shall sell at public auction the goods and chattels distrained, or so much thereof as shall be necessary. If the property distrained is sold for more than the amount of the taxes and costs, and no claim of the surplus is made by any other person on the ground that the property belonged to them, or that he was entitled by lien, such surplus shall be returned to the person in whose possession the property was when the distress was made. If such claim is made by the person for whose taxes the property was distrained, and the claim is admitted, the surplus shall be paid to the claimant. If the claim is contested, such surplus shall be paid over by the collector to the treasurer of the local municipality, who shall retain the same until the respective rights to the property shall be determined by action or otherwise.

If the taxes payable by any person cannot be recovered in 'any special manner provided by this Act, such as distress and sale of the goods of resident taxpayers, and the sale of land in the case of non-residents who have requested their names to be put on the roll, and before a municipal corporation can sue for the taxes imposed in the ordinary manner upon a resident ratepayer, the corporation must be able to show, in the first place, that the defendant's name is on the roll, and in the next place, that they have done what would be necessary to entitle them to distrain by warrant for the taxes. If a person sued have goods that might be seized, except perhaps where there would be no occasion to make the previous demand mentioned in section 124, a ratepayer cannot be made to pay a tax of which notice has not been given him as the law has provided. In order to entitle a corporation to sue a non-resident owner, it must not only appear that the special remedy provided by the Act is unavailable, but that the defendant's name is on the roll, and it must also be distinctly averred and proved that the owner has requested his name to be placed on the roll.

The attention of municipal councils in villages and townships is directed to section 123, sub-section 2, of the Consolidated Assessment Act, which provides that collectors in these municipalities shall call at least once on the person taxed, or at the place of his usual residence or domicile, or place of business, if within the local municipality, in and for which such collector has been appointed, and shall demand payment of the taxes payable by such person.

The balance of the section, which is the part introduced by amendment of '92, reads as follows:-"Or, if so impowered by bylaw of the municipality, he shall leave with the person taxed, or at his residence or domicile, or place of business a written or printed notice specifying the amount of such taxes, and shall at the time of such demand or notice, as the case may be, or immediately thereafter, enter the date thereof on his collection roll opposite the name of the person taxed, and such entry shall be *prima* facie evidence of such demand or notice." This amendment is an important one, and unless the by-law referred to is passed, the only valid notice would be that mentioned in the first part of the section, which requires the collector to call once on the person taxed and demand payment of the taxes, whereas, if the by-law is passed he may either call and demand the taxes, or leave with the person taxed, or at his residence or domicile, or place of business a written or printed notice specifying the amount o' such taxes.

We believe the usual custom is for collectors to call and leave a written or printed notice with the person taxed. This will not be sufficient unless the council pass a by-law providing for the service of the notice in accordance with the terms of the amendment. Collectors have no authority to levy taxes by distress and sale, if the person who neglects to pay his taxes has only been served with a notice which was not authorized by by-law as sufficient.

In section 124 it is stated that the collector may levy the taxes with costs by distress of the goods and chattels of the person who ought to pay the same, or of any goods or chattels in his possession wherever the same may be found within the county. The person who ought to pay the same is the person in possession of the land in respect of which the taxes are payable at the time of the seizure. If he is not actually assessed for the premises, etc., as mentioned in section 27 of chap. 143, R. S. O., 1887, he is entitled to exemptions mentioned and enumerated in section 2 and following sections of chapter 64. R. S. O., 1887. If there is any agreement between the person actually assessed, and the person in possession as to payment of taxes, they should fight it out between them, and the collector or his municipality should not be compelled to enquire into or be guided by the terms of the agreement.

Costs allowable to collector or his bailiff in enforcing warrant of distress:

Enforcing warrant: Where amount of taxes does not exceed \$20....\$ 50 Where amount of taxes does not exceed \$60, but above \$20 Where amount of taxes exceeds \$60. 1.00 For every mile necessarily travelled in going to seize under warrant, where money made, or paid after levy..... Every schedule of property seized: Not exceeding \$20..... Exceeding \$20 and not exceeding \$60 Exceeding \$60.... 75 Every bond, when necessary..... Every notice of sale, not exceeding three, each Necessary disbursements and allowances for removing or retaining property seized 3 º/o Five per cent, on the amount realized from the sale of property seized, such percentage not to apply to any overplus.

If warrant be satisfied in whole or in part after seizure and before sale, collector or his bailiff to be entitled to charge and receive three per cent. on the amount realized.

Cholera.

Duties of Municipal Authorities.

In the event of cholera visiting us it must be remembered that, as in the case of other infectious diseases, everyinfected person should be considered a centre of propagation of the disease, its special contagion, contained in the discharges from the bowels and stomach, being transported by air and water, and spreading in proportion to the density and want of cleanliness of the population among whom it occurs. The germs of cholera, like other organisms, multiply themselves to an unlimited extent, so long as suitable conditions exist for that multiplication. These conditions are to be found in impure air, impure food and drink, overcrowded and badly ventilated houses, and other conditions of filth.

This remark is applicable to many diseases frequently in our midst as well as to cholera, and it is well to remember that whatever steps for removing the impurities referred to may now be taken, they will be repaid tenfold in the lessening of the amount of disease in general, even if cholera should not visit us. But, should it appear amongst us, it may be a life-long regret to many that such necessary means were not taken in time.

Every municipal council which has not already done so should at once organize a local board of health.

- 1. The local board of health should issue and enforce directions for the immediate reporting of all cases or suspected cases of cholera, as of other infectious diseases, in compliance with the Public Health Act.
- 2. On receipt of such notices, the local health officers should immediately examine into the reports. If the medical attendant reports the case this will be sufficient verification.

The board should secure the isolation of those sick with or exposed to the disease;

Give notice of infected places;

Attend more carefully to the relief of the poor; Regulate funerals of persons dead from the disease;

Cause rooms, clothing and premises to be properly disinfected;

Give certificates of recovery and of freedom from liability to communicate the disease.

- 3. Every person known to be sick with the disease should be promptly and effectually isolated from the public. No more persons than are necessary should have charge of the patient, and these should be restricted in their intercourse with other persons. The children of the family and other inmates should be prevented from mingling with others in schools or other places until the period of incubation of the disease shall have passed.
- 4. Notices should be placed on the house in which a case of the disease exists, and no unnecessary persons allowed to enter.
- 5. Boards of health should have distributed in every house copies of the instructions to house-holders and private individuals issued by provincial board of health, or others of a similar nature, and should see that thesame are carried out.
- 6. In populous municipalities, isolation hospitals should be provided just as soon as intelligence is received of the existence of cholera on this continent. These hospitals, if happily not required for cases of cholera, will be a useful investment for cases of smallpox, scarlet fever or diphtheria, constantly occurring. In less populous districts they should be rapidly constructed on the nearer approach of the disease.

7. In populous districts, reception buildings should also be established for the reception of persons not actually attacked with cholera, but who require to be kept under observation lest they should become fresh centres for spreading the disease. Such persons should there be provided with clean clothing, allowed to prosecute their daily avocations, and kept under observation fourteen days.

- 8. The local board of health should provide a public laundry and disinfecting house, otherwise the infected clothing may become a ready means of spreading the disease.
- If it be found that carelessness exists in carrying out the precautions recommended regarding funerals, some officer or officers should be detailed by the local board of health to see that they are so carried out.
- To. It must be borne in mind by local authorities that want of the necessities of life and of medical attendance and medicines favor the spread of the disease and increase mortality, and that such wants are more apt to occur during a time of epidemic, when bread-winners may be prostrated or waiting upon those who are attacked.
- vithout causing unnecessary alarm, for reports of approaching disease, and should promptly notify the secretary of the provincial board of any such. They should also make notes of the source of any ocase which may occur in their locality, and of all other facts likely to be of service in a statistical point of view, or in the future study of the disease, and its prevention or limitation.

Use a Heavy Roller.

The steam roller for the consolidation of the metaling of newly coated Roads is a recent economic improvement. The road metaling is consolidated at once, a a smooth, firm surface is provided, and the broken stones are pressed in their original angular condition. Where the heavy roller is not used the broken stones are subject to great wear by being in a continuous state of disturbance, producing mud; the angles are worn round and such compact consolidation as is produced by the roller becomes impossible, and the crust is weakened and ill-adapted for heavy traffic. -Ex.

ENGINEERING DEPARIMENT.

A. W. CAMPBELL,
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EDITOR,

Municipal Engineering.

It is not my intention to introduce any new methods for measuring or computing earthwork, nor attempt to put any one method forward as the best. No one method can be applied to all cases, and the engineer must adopt the one most suited to the work in hand. I wish briefly to refer to certain points, however, which apply to any method used.

The "minor details," as they are usually called, which taken together make up the greater part of the engineer's work, are not more than mentioned in a general way in works on engineering subjects, so that there are many things to be learned in practical work that are not thought of before. It is in these miner details that the greater part of the mistakes of practice will occur. A difficult curve will be located exactly, and important measurement, will be checked and rechecked, but an omission will be made in the note of a culvert, opening a road crossing, or some matter similarly small, which sometimes assumes large proportions later, when there is a question raised, and no notes are to be found.

In the question of earthwork of any kind, excavation or embankment, for railroad or other purposes, the principal points to be observed in the field work are:

- 1. Obtain notes that will give correct results when computed, that they shall correctly represent the ground measured.
- 2. The notes should be clear and not ambiguous, not only to the one who takes them, but to anyone else fa miliar with the subject. It does not require any more time or effort in the field to make a neat, compact page of notes than it does to cover one or two pages with what should be on one, and oftentimes an engineer's reputation will depend to a great extent on this one thing.
- 3. Make complete all notes in the field where any question could arise as to whetherthey might not be different, and note any omission of measurements that may be necessary.

The exact manner of keeping the notes, whether the distance out shall be above the line, and cut or fill below, or vice versa, or whether the notes shall be kept from the bottom of the page up, or from the top down are matters of personal convenience or habit and for uniformity are often regulated by the company for whom the work is being done.

Accuracy with the instrument and tape are important, this accuracy is often carried out to a greater degree than necessary. The idea that by giving the rod readings to hundredths in ordinary cross-section measurements, the exact amount of earth

in the section is more nearly obtained, is erroneous. If the surrace of the ground were a perfect plane between the consecutive cross-sections this would do; but even in ordinary level country a slight elevation or depression in the ground or a change of a few feet in the location of the cross-sections will often change the rod reading a tenth or perhaps more, so that beyond a certain point we do not gain in accuracy of results by closer rod readings.

Correct results depend much more on the care and judgment exercised in making the cross-sections at the right places, especially in rough and broken country where a good deal of averaging is required.

It is always desirable to make as fast progress as possible in measuring up work and also to do it easily, for there is, comparatively speaking, a hard and an easy way of doing work. The engineer who will so plan the work that the most time and labor can be saved, other things being equal, is the best man. There are many ways in which the work in the field may be facilitated. For instance, it is unnecessary to find the elevation of each point takan, and then the difference of that point and grade and get the cut or fill. Take the difference between the height of instrument and grade and this gives the number to which the rod readings at the different points of a station are to be added or subtracted. This may seem too simple and apparent to need mentioning, but I have seen men of practical experience who still use the long way.

In setting slope stakes in a moderately level country, it is quite convenient to have a tape marked with the cut or fill at the proper distance out; this marking may be done on the back of a linen tape with common pen and ink and does not injure the tape for measuring. For instance, to mark a tape for a 16 ft. railroad embankment, slope 1½ to 1, beginning at the 8 ft. mark on the tape, for a fill of O. 1 make F. O. 1, at 8. 15, F. O. 2, at 8. 30, F. 1. 10, at 9. 5 and so on. This enables the tapeman to set the stakes at once as soon as cut or fill is given and prevents mistakes in getting the wrong distance out.

In rough country, where there is considerable difference in elevation between the centre and side, or on side hill work, the slope board and rod are indispensable. The slope board is usually ten feet in length, one edge straight, the other usually rounded widest in the middle, where a hand hole is cut and a small level bubble placed. The level rod is held vertically at a station, one end of the slope board is placed against this, the other on higher ground, the board is raised till level and the difference of elevation is read on the rod. There should be a line of levels at both top and bottom of slope to check on when possible, but a good degree of accuracy may be obtained with the slope board and much faster progress made on

steep hill side than by any other method. There are so many methods used in the computation of earthwork, and so many formula, tables and diagrams prepared that I could hardly mention all of them, and no one formula can be selected that would apply to all cases. The nature of the work and the ground will usually determine to a great extent the method to be used.

The most simple and hence the easiest of application is the method of average and areas, that is, one half the sum of the areas of the end sections multiplied by the length of the section and divided by 27 for the number of cubic yards. Its simplicity and convenience of application makes it a very popular method. In the state of New York and perhaps other states, it is approved by statute to be used on public works, it is also used exclusively by many of the railroad companies for computing earthwork.

Probably the most exact method of computing earthwork is by the prismoidal formula, which is $S = \frac{2}{6xz_7}(A+4M+A)$ in which S equals cubic yards, L equals length of section, and A and A equal areas of the end sections, M equals area of a middle section. The area of the middle section is not a mean of the two end areas, but the dimensions of the middle section are means of the corresponding dimensions of the end sections. While accurate results may be obtained by this formula, it requires too much time, and is too tedious in its application for general use.

The Good Roads in Ontario County.

To fill in space a great many papers are writing editorials in favor of better country roads for the farmers to haul their grain upon, and to read the stuff one who knew no better might suppose each farmer grew forty or fifty thousand bushels of grain and had to hire draymen to haul it all to market. If our farmers could grow one-tenth as much as they could with the greatest ease haul on our concessions as kept at present they would all get rich in a very short time. The present plan of cutting a township up into road divisions and appointing a leading farmer in each division to oversee the performance of statute labor may not be the most economical method, but it is a guarantee that some person near at hand is responsible for the condition of roads tn his beat, whereas if ever iittle improvement had to be wirepulled through the municipal councils or their commissioner, or engineer, half the roads would be neglected entirely and would be far better closed up. It is a great task for councillors and their commissioners to make such works and improvements as are too large to be covered by the present statute labor system, let alone to have to note every big stone which the frost heaves or the wash of showers lays bare .- [Whitby Chronicle.

Drainage.

Drainage of Swamps.

In almost, if not every, township, extensive tracts of swamp lands are found, not only unfit, in their natural condition, for cultivation, but, in many instances, by reason of obnoxious effluvia, arising from stagnant water, dangerous to health.

In their natural state these swamps are usually covered with a heavy growth of timber; but the greater portion of them have been partially cleared, and many of them are mowed, producing a coarse, wild, and nearly worthless grass.

The soil of these tracts is usually a black mud or peat, partly the product of vegetable growth and decay on the spot, and partly the deposit of the lighter portion of the upland soil, brought down by the washing of showers and by spring freshets. The leaves of the surrounding forest, too, are naturally dropped by the autumn winds into the lowest places, and these swamps have received them for ages. Usually, these lands lie in basins among the hills, sometimes along the banks of streams and rivers, always at the lowest level of the country. Their surface is usually level and even, as compared with other surrounding lands. Their soil, or deposit, is of various depth, from one foot to twenty, and is often almost affoat with water, so as to shake under the feet in walking over it.

The subsoil corresponds in general with that of the surrounding country, but is oftener of sand than clay, and not unfrequently, of various thin strata, indicating an alluvial formation. Notoriously, such lands are unhealthful, producing fevers and agues in their neighborhood, often traceable to tracts no larger than a very few acres. In considering how to drain such tracts, the first inquiry is as to the source of the water. What makes the land too wet? Is it the direct fall of rain upon it; the influx of water by visible streams, which have no sufficient outlet; the down-flow of rain and snow water from the neighboring hills, or the bursting up of springs from below?

Examine and decide which and how many of these four sources of moisture contribute to flood the tract in question. We assume that the swamp is in a basin, or, at least, is the lowest land of the neighborhood. The three or four feet of rain water annually falling upon it, unless it have an outlet, must make it a swamp, for there can usually be no natural drainage downward, because the swamp itself is the lowest spot, and no adjacent land can draw off water from its bottom. Of course, there is lower land towards the natural outlet, but usually this is narrow and quite insufficient to allow of drainage by lateral percolation. Then, always, more or less water must run upon the surface, or just below it, from the hills, and

usually a stream is found in the swamp, if none pours into it from above.

The first step is a survey, to ascertain the fall over the whole, and the next, to provide a deep and sufficient outlet. Here we must bear in mind a peculiarity of such lands. All land subsides, more or less, by drainage, but the soils of which we are speaking far more than any other. Marsh and swamp lands often subside, or settle, one or two feet, or even more. Their soil, of fibrous roots, decayed leaves, and the like, almost floats, or, at least, expands like a sponge, and when it is compacted, by removing the water, it occupies far less space than before. This fact must be borne in mind in all the process. The outlet must be made low enough, and the drains must be made deep enough, to draw the water after the subsidence of the soil to its lowest point.

If a natural stream flow through, or from the tract, it will usually indicate the lowest level, and the straightening and clearing out of this natural drain may usually be the first operation, after opening a proper outlet. Then a catch water open drain, just at the junction of the high and low land, entirely around the swamp, will be necessary to intercept the water flowing into the swamp. This water will usually be found to flow in both on the surface and beneath it, and in greater or less quantities, according to the formation of the adjacent land. This catch-water is essential to success. The wettest spot in a swamp is frequently just at its edge, because there the surface-water is received and because there, too, the water that has come down on an impervious subsoil stratum finds vent. It is in vain to attempt to lay dry a swamp by drains, however deep, through its centre. The water has done its mischief before it reaches the centre. It should be intercepted before it has entered the tract to be reclaimed.

This drain must be deep, and therefore must be wide and sloping, so that it may be kept open, and it should be curved round, following the line of the upland to the outlet. Often it has been found that a single drain, six or eight feet deep, has completely drained a tract of twenty or thirty acres by cutting off all the sources of the supply of water except that from the clouds. This kind of land is very porous and permeable and readily parts with its water and is easily drained, so that the frequent drains necessary on uplands are quite often unnecessary. Many instances are given of the effect of single deep drains through such tracts in lowering the water in wells, or entirely drying them, at considerable distances from the field of operation.

When the surface-water and shallow springs have thus been cut off, the drainer will soon be able to determine whether he has effected a cure of his dropsical patient. Often it will be found that deep-seated springs burst up in the middle of these low tracts, furnishing good and pure water for use. These, being supplied by high and distant fountains, run under our deepest drains and find vent through some fracture of the subsoil. They diffuse their ice-cold water through the soil and prevent the growth of all valuable vegetation. To these we must apply Elkington's system, and run a deep drain from some side or central drain, drawing off the water low enough beneath the surface to prevent injury. A small covered drain with three-inch pipes will usually be sufficient to afford an outlet to any such spring.

Rules for Drainage and Sewers.

- 1. Natural streams should not be arched over to form main sewers.
- 2. Valley lines and natural streams may be improved so as to remove more readily surface water and extreme falls of rain.
- 3. Main sewers need not be of capacity to contain flood water of the area drained; such flood water may be passed over the surface, in most cases, without causing injury.
- 4. Main sewers should be laid out in straight lines and true gradients from point to point with manholes, flushings and ventilating arrangements at each principal change of gradient and line. All manholes should be brought up to the surface of the road or street to allow of inspection and should be finished with a cover easily removable.
- 5. Duplicate systems of sewers are not required. Drains of natural streams in valley lines for storm waters may be retained and may be improved, or, if necessary, enlarged.
- 6. Earthenware pipes make good sewers and drains up to their capacity. Pipes must be truly laid and securely jointed. In ordinary ground they may be jointed with clay. In sandy ground special means must be used to prevent sand washing in at the joints.
- 7. Brick sewers ought to be formed with bricks moulded to the radii.
- 8. Brick sewers should, in all cases, be set in hydraulic mortar or in cement. In no case should any sewer be formed with bricks set dry to be subsequently grouted.
- 9. Main sewers may have flood water overflows wherever practicable to prevent such sewers being choked during thunderstorms or heavy rains.
- 10. Sewers should not join at right angles. Tributary sewers should deliver sewerage in the direction of the main flow.
- 11. Sewers and drains, junctions and curves, should have extra fall to compensate for friction.
- 12. Sewers of unequal sectional diameters should not join with level inverts, but the lesser, or tributary sewer, should have a fall into the main at least equal to the difference in the sectional diameter.
- 13. Earthenware pipes of equal diameters should not be laid as branches or

tributaries, that is, nine inches leading into nine inches, or six inches into six inches, but a lesser pipe should be joined on to the greater, as six inches to nine inches, twelve inches to fifteen inches, nine inches to twelve inches.

14. House drains should not pass direct from sewers to the inside of houses, but all drains should end at an outside wall. House drains, sink pipes and soil pipes should have means of external ventilation. The largest block of buildings may have every sewer cutside of the main walls. No foul water drains or cesspit should be formed beneath any house basement. All fluid refuse should pass at once from the drains to the sewers and from the sewers to the outlet.

15. Sinks and water closets should be against external walls so that the refuse water or soil may be discharged into a drain outside the main wall. Down spouts may be used for ventilation, care being taken that the head of such spout is not near a window. Water closets, if fixed within houses and having no means of direct daylight and external air ventilation, are liable to become nuisances and may be injurious to health.

16. Inlets to all pipe drains should be properly protected.

17. Sewers having steep gradients should have full means of ventilation at the highest points.

18. Tall chimneys may be used with advantage for sewers and drain ventilation.

Road-making in rural districts has, of late, been receiving a good deal of attention both in Canada and the United States. The attack upon the statute labor system is being renewed in Ontario, and its utter failure will be clearly demonstrated. In many parts of the province the country roads are practically impassable during the spring season. This entails upon the farmers a heavy task in trying to reach the markets with their products. A few loose sods thrown upon the worst parts of the road is the rough and ready repair that statute labor affords. It is argued, with a good deal of force, that the better way would be to employ skilled road builders and have the work systematically done. It is time Ontario got beyond the back-woods way of building roads.

The county council of Leeds and Grenville has by a vote of seventeen to ten declared in favor of the establishment of a county poor house, or house of industry; and has appointed a committee to meet committees from the towns of Brockville and Prescott to make arrangements regarding it. It is expected that the buildings and land—100 acres—will cost about \$16,000.

Ventilation.

Ventilation is a gradual, continuous and complete changing of the air contained in any structure, a substitution, in fact, of fresh air for foul, but so gradual a substitution that the motion of the air should be imperceptible.

Of course in factories, imperceptibility need not be so much regarded, and in the case of sewers and underground railways it is obvious that any method may be followed which promises the most perfect results.

Dr. James Johnson says that all deaths resulting from fevers are but as a drop in the ocean when compared with the number who perish from bad air.

It is to the efforts of science that we must look for an alteration in so disastrous state of things, and men of science may be assured that society will ere long demand, not as an eminent philosopher is reported to have said, a new faith—we neither look for nor expect that—but a longer life, increased freedom from disease and greater means of enjoying sound health while life lasts.

I believe we cannot doubt that much of the apathy manifested towards our subject by people, generally results from the abortive experiments and useless methods so often tried and resorted to for the purpose of supplying the want of ventilation.

Before I leave this part of my subject, I will mention one other difficulty in the way of ventilation, and this by no means a small one—I mean the cost.

Although efficient ventilation will not cost a very large sum per room, it cannot be denied that somewhat will be added to the expense of the house and this "somewhat" the speculative builder never will add until he finds intending tenants and purchasers who refuse to take houses which are not properly ventilated.

As with houses, so with all other buildings and works: if we make up our minds to ventilate them we must also resolve to pay for it.

I fear that people who build houses for their own occupation are but little in advance of the speculative builder, as far as any recognition of the absolute necessity of efficient ventilation is concerned. Many hold to such crude devices as open doors and windows; others think that a hole of any size, or in any part of the wall, quite sufficient, while I believe the majority pooh-pooh the whole question.

It then becomes the duty of scientific men and bodies to educate the public up to the recognition of the fact that ventilation is every whit as important as drainage to individual houses and that man can no more live in a foul atmosphere than he can while constantly imbibing poisonous water.

Scientific men acknowledge the necessity of ventilating dwelling houses

and buildings, such as are herein mentioned, but with the general publicitis unfortunately far otherwise, and one of the greatest difficulties to be encountered in the progress towards a complete and perfect sanitary condition is this inertia of those most interested. Difficulties, however, are only made to be overcome, and it is in the hope of doing something, however little, towards overcoming this particular difficulty that I venture to trespass on the patience of the reader.

It is usually only in times of panic caused by the approach or presence of some fearful epidemic, that people seriously turn their attention to sanitary matters; and at times like these they accept the wildest schemes and act upon the crudest notions, until finding that they are no better and perhaps worse off than before, and the fright beginning to wear off, they begin to lapse into carelessness and vote sanitary science all nonsense. I think detective education is responsible for a great deal of this. I do not intend to assert that the generality of people, at any rate in the upper and middle classes, are what is commonly called ignorant; probably most of those who would be willing to turn their attention to sanitary matters, not being professionally engaged in them, have had at least the usual amount of education, as the term is commonly understood, but what is called the science of life-living, i.e. how life is sustained and the reasons why sanitary matters should be so carefully attended to in order that health and strength may be assured, are things of which comparatively few know anything at all.

All persons readily admit as a truism that they cannot live without air, but unfortunately they seldom get much beyond the bare admission. Air is as much as ubstance requiring space as solids or liquids are, and means of passage into, or out of rooms, churches, etc., just as much as water requires pipes or channels to allow it to flow into, or out of, reservoirs. With most persons air seems to be an abstract idea, rather than a substance of vital consequence to the whole living creation.

Air which has once passed through the lungs is unfit to be respired again, just as unfit as any other substance which has once passed through the system is to be used, as it were, over again. So that were there no other source of contamination to the air of a building, ventilation would be rendered necessary by the very presence of living beings.

As it is, however, there are so many other evil influences at work in most houses, and other buildings, that the necesity is made far more absolute.

In this paper I wish to impress upon the reader the very great importance of pure air, as pure as the district affords, being insured in our houses.

Ventilation is a want arising chiefly from modern ways and customs, and it is therefore a comparatively new branch of science, and we owe our present knowledge of the subject especially to modern researches and discoveries.

In private houses the necessity for ventilation will arise from, commonly: 1. The presence of fires; 2, artificial light; 3, the presence of persons living in the house (that is from the air required by them as well as the exhalation from their bodies), and 4, from badly constructed waterclosets, cess-pools and drains.

In factories, there will be in addition to the above causes the presence in the air of a vast quantity of minutely divided fiber and dust, which is highly prejudicial to health of the workers, and also the tumes from chemicals, etc., where the manufacture of such is carried on.

In sewers the necessity of sufficient ventilation will almost entirely arise from the generation of poisonous gases by the putrid filth carried down. And in underground railways the fires of the engines and the saturation of the air by the waste steam will render ventilation in certain cases a necessity.

Considering these cases, in the above order we have, first, in dwelling houses the presence of fires.

At first sight it would seem an error to include this under the head of causes which make ventilation a necessity, as fires are often, indeed, mostly the only means of ventilation in private houses. But under the term, I include not only the removal of foul air, but the supply of fresh air, and from this point of view it will be seen that the common fire is a very grrat consumer of fresh air and requires a supply of that, quite as much as of the fuel which feeds it.

It may be well to mention here some well known facts connected with the combustion of fuel.

The fuels commonly used are composed principally of carbon and hydrogen in about the following proportions:

Name	Carbon	Hydrogen	Ashes, etc.	Water
Coal	.812	.048	.140	
Coke	.850		.150	
Wood	.408	.052	.350	.200
Charcoa	1.930	-	.070	
Peat	.464	.048	.288	.200

Now combustion consists in the union of oxygen gas with the elements, carbon and hydrogen, and the results is the development of light and heat, and the formation of carbonic acid and water, the carbon of the fuel uniting with the oxygen of the air to form carbonic acid and the hydrogen doing the same to form water.

Carbon exists in its pure and chrystalized form as the diamond, and this beautiful gem is combustible in oxygen gas, burning entirely to carbonic acid. This experiment has been tried, however, only in the labratory.

One pound of carbon requires for its combustion 158 cubic feet of air, while the same weight of hydrogen requires 473 cubic feet. From these facts it will be

seen that the different fuels mentioned above will take for their proper combustion the following quantities of air, viz.:

Coal148 cubic feet)	
Coke	THE RESERVE
Wood 65 "	- P pound
Charcoal	
Peat 81 "	

There is a certain quantity of oxygen in coal, wood and peat which somewhat reduces the amount of atmospheric air required by these fuels.

From the above tables, at which assume the temperature of the air to 26 deg. F., it will be seen that the ordinary fire plays no unimportant part in the consumption of air; for if we assume one pound of coal per hour as the quantity required, then 148 cubit feet of air will be consumed in that period, or 2.46 feet per minute or 2.072 cubic feet per day of 14 hours.

These, as we have said, are minimum quantities. In practice, at least double must be allowed, as a large percentage will escape unconsumed.

In the case of common fire the products of combustion do not certainly escape into the room, but the air to supply the fire is required all the same, and I feel sure that not in one house in a hundred is this supply ever thought of, but is left to chance and the cracks in the doors and windows, from which drafts whistle across the room in every direction.

The second clause-artificial light-requires far more serious consideration than the fire, for commonly the products of combustion are passed directly into the room, and are breathed in a diluted form by the persons in it. The introduction of coal gas has been most pernicious in this respect, for few houses are built with any regard to the method of lighting, nor are the ways in which the gas is generally burnt calculated for anything but to do the greatest amount of injury to the persons using it. Some form of gas light such as the sun-burners and the ventilating globe lights are comparatively free from defect in these respects, but I have never seen the latter used save in one or two private houses, and the former are almost entirely confined to offices and public buildings. I have experienced some difficulty in obtaining the quantity of air consumed by the ordinary bat's wing or fish tail burners when lighted. But taking the Argand burner, using five feet of gas perhour, and forty-five feet of common air in the same time, as a standard, and knowing that the common burners burn from two to four feet per hour, according to size and pressure, I think I shall be safe in calculating that the average consumption of gas by the common burners at thirty-six cubic feet per

Now, a room twenty-five feet long by sixteen feet broad, and ten feet six inches high, will contain 4,200 cubic feet of air, but a deduction must be made for furniture, etc.,

of at least ten per cent., leaving 3,780 cubic feet, or say 3,800, as the net quantity of air in the room.

Such a room will require at least three gas burners to light it, and these, as we have seen, will consume 108 cubic feet of air per hour, rendering it absolutely unfit for breathing by depriving it of its proportion of oxygen.

Road Making Again.

It appears that the gentlemen of one of our municipal councils do not agree with the views expressed in this journal on the subject of road-making. It is better that they should differ from us than that they should ignore the subject altogether. We have had municipal bodies and the public differ from us before-at least for a time. There is a natural tendency to cling to old ideas and old systems, no matter how antiquated or absurd. A few years ago municipal representatives and a majority of the people were opposed to a poor house. Now we are getting a poor house with almost universal approval. So, too, a new court house was bitterly opposed. Now people are so pleased with the new structure that they wonder why they didn't build it years ago. And no one will ever feel the slight burden of taxation which these evidences of progress will impose. So some councillors and path masters will cling to the statute labor system in road making long after its usefulness is gone. But the question of better roads is here to stay. And the man or the systems that stand in the way of good roads will be changed or disappear. Once the people realize how much worse their roads are than the roads of other countries, and how much they lose every year by having bad roads, and they will have good roads, no matter what they cost. But as a fact, good roads cost far less in the end than bad ones, and the intelligent and progressive people of the present day begin to see this. - Sentinel-Review.

The provisions with respect to the new criminal code, in regard to the sale of firearms to minors, are far more severe than most of people imagine. One clause says: Everyone is guilty of an offence, and liable on summary conviction to a penalty exceeding \$50, who sells or gives any pistol or air gun or any ammunition to a minor under sixteen years, unless he establishes to the satisfaction of the justice, before whom he is charged, that he used reasonable diligence in endeavoring to ascertain the age of the minor before making such sale or gift, and that he had good reason to believe that such minor was not under the age of 16. Everyone is guilty of an offence and liable under summary conviction, to a penalty not exceeding \$25, who sells any pistol or air gun without keeping a record of such sale, the date thereof, and of the maker's name or other mark by which such arm may be identified.

LEGAL DEPARTMENT.

H. F. JELL, Solicitor, Editor.

BRUNKER V. THE CORPORATION OF THE TOWNSHIP OF MARIPOSA,

A by-law passed by the council of the defendant corporation pursuant to Ont. Stat., 53 vic., chap., 56, sec. 18 was entituled a by-law to prohibit the sale by retail of spirituous liquors in the township of Mariposa; and enacted "that the sale by retail of spirituous liquors, is and shall be prohibited in every tavern, inn, or other house, or place of public entertainment, and the sale thereof is altogether prohibited in every shop or place other than a place of public entertainment. It was held that the last part of the clause must be read in connection with the previous part so as to limit the prohibition to a sale by retail, which is now put beyond question by Ont. Stat. 54 Vic., chap.46, sec. 1. It was also held that the quantity of liquor to be considered a sale by retail need not appear in the by-law, being defined by the statute: that the locality within which the liquor could be sold was sufficiently indicated; and that the want of penalty in the by-law did not invalidate it. The day named in the by law for the appointment of agents to attend at the final summing up of the votes was nearly three (3) weeks after the first publication of by-law, and the day named for the clerk to declare the result of the polling was the second day after the said polling. It was held that both days were sufficient. The notice at the foot of the by-law, after certifying that the foregoing, (viz: the copy of the by-law published) was a true copy of the proposed by-law, which had been taken into consideration by the council, and which would be finally passed in the event of the electors' assent being obtained thereto after one month's publication in a named paper, stated that all persons were required to take notice that on the fourth of January, 1892, a poll will be opened, naming the statutory hours, at the several places named in the by-law for the purpose of receiving the votes of the electors on the same. Two of the days of publication were Christmas and New Year. It was held that the formal notice was sufficient and the fact of publication on the days named did not render the publication invalid: publication not being a judicial act so as to prevent publication on those days.

TRUSTEES OF ROMAN CATHOLIC SEPARATE
SCHOOL SECTION, NO. 10, OF THE
TOWNSHIP OF ARTHUR VS. THE
MUNICIPAL CORPORATION OF
THE TOWNSHIP OF

ARTHUR.

Six Roman Catholics, some of whom were supporters of an existing Roman Catholic Separate School, No. 6, and others, public school supporters in several adjoining public school section, convened

a meeting for the purpose of establishing a Roman Catholic separate school, which they thereupon assumed to do, but only three of them were residents of the same school section, and heads of families. It was held that the requirements of Ontario Statutes, 49 Vic., chap. 46, secs. 22 and 24, were not complied with, and consequently there was no valid incorporation of the trustees elected at such meeting, Chancellor Boyd remarking, "that the creation of corporations is a prerogative act, and where the power to make them is, as in this case, delegated to private persons, the question prescribed by the legislature should be substantially followed. In such case, form is of the substance, and blunder in form means invalidity." was also held that a question as to the valid incorporation of trustees of a Roman Catholic separate school does not come within the range of 49 Vic., chap. 46, sec. 68. Ontario Statutes; R. S. O., 1887, chap. 223, sec. 67, which pre-supposes incorporation. Mr. Justice Meredith also held that the incorporation must be by Roman Catholics within an existing public school section, and, therefore, apart from the informality of the proceedings, there could be no valid incorporation here; that the relief of the dissatisfied supporters of Roman Catholic Separate School, No. 6-if they were entitled to any-was in additional school accommodation, under R. S. O., 1887, chap. 227, sec. 28, subsec. 11, and not as here sought; that no provision is made for the withdrawal of a Roman Catholic separate school supporter from one section to support another; and that the plaintiff's remedy, if duly incorporated, was not in an action to recover rates collected by the defendants for others, but in proceedings to compel the collection of their rates. It might be added that the action was brought to recover the amount of certain school rates, which the plaintiffs alleged the defendants had received as trustees for them.

M'GILL V. THE LICENSE COMMISSIONERS OF THE CITY OF BRANTFORD.

License commissioners, appointed under the provisions of chap. 194, R. S. O., 1887, on the 17th April, passed a resolution providing that after the first of May following, in all places where intoxicating liquors are, or may be sold by wholesale or retail, no such sale or disposal of the same shall take place therein, etc., between midnight and 5 a. m., which was afterwards amended by substituting 11 p. m. for midnight. It was held that under sec. 4, enabling the license commissioners to pass resolutions for regulating taverns and shops there was power to pass the resolutions here; and that such power was not interfered with by sections 32 and 54. No by-law on the subject having been passed by the municipal council.

THE QUEEN EX REL.—M'GUIRE VS. BIR KETT.

The defendant had a contract for the supply of iron up to the end of 1890, but

on the 26th November, 1890, he wrote, informing the corporation that he withdrew from his contract, and enclosing his account up to date. On the 9th December, 1890, the then mayor of the city notified the defendant that he would be held responsible for any expense the corporation should be put to in consequence of his refusal to fulfil his contract. On the 15th of December, 1890, the city council adopted a resolution, cancelling defendants' contract and releasing him from any further obligation in connection therewith. At the same time a notice of reconsideration was given, which, by the rules of the council, had the effect of staying all action on the resolution until after reconsideration. There was no reconsideration and no subsequent meeting of the council till the 7th January, 1891, previous to which the defendant had been elected mayor for 1891. At the time of his election his account above-mentioned had not been paid. It was held that the resolution had no direct effect in releasing the defendant from liability under his contract either at law or in equity, and whether or not the resolution was to be considered in force, it did not touch the account, the existence of which unpaid was sufficient to invalidate the election, under the other circumstances of the case. The election was, therefore, set aside, but although the relator had notified the electors of the objection to the defendant's qualification, the seat was not awarded to the candidate having the next largest vote, on account of the resolution of the council, which led the electors to disregard the relator's warning, and a new election was ordered.

THE CANADA SOUTHERN RAILWAY CO., V.
THE CORPORATION OF THE TOWN OF
NIAGARA FALLS, ET AL

The act of incorporation of a railway company, the predecessors in title of the plaintiffs, and which was incorporated for the purpose of constructing and operating a certain line of railway, conferred upon the company, as regards the disposition of lands acquired by them, powers of letting, conveying and otherwise departing therewith for the benefit and on account of the company from time to time as they should deem necessary. Nearly forty years before the commencement of this action the predecessors in title of the defendants laid pipes for conveying water along the railway track of the plaintiffs' predecessors, using them for such purposes almost continuously up to the present time, said privilege having been given to them by resolution of the directors of the company, who, a few years afterwards, passed another resolution, and in pursuance of the same, executing a deed granting, releasing and confirming such rightand privilege, which, at the time this action was brought, had become vested in the plaintiffs, who, a few years before the commencement of the action, desiring to alter the position of their track, gave notice of expropriation to the immediate predecessors in title of the defendants and placed the track over the water pipes. The plaintiffs sought in this action to have the resolution and deed mentioned declared ultra vires, and also claimed an injunction restraining the user of the water pipes, and, if necessary, an order for removal. It was held that the resolutions and deed were ultra vires as not within the powers specified by the charter or such as could fairly be regarded as incidental thereto, or reasonably derived by implication from the same, also that the plaintiffs were not prevented from asserting their own title and denying the defendants and lastly that the defendants not having used and enjoyed the easement or privilege for forty years had not acquired a prescriptive title thereto, pursuant to chap. 111, sec. 35, R.S.O., 1887.

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.

EXETER.—What steps are necessary to be taken by a village corporation to raise money by debentures to meet depentures coming due early next year?

Since the money to be raised is not such as is required for the ordinary expenditure of the village, if not payable within the same municipal year, the by-law providing for the raising of the money before the final passing thereof should receive the assent of the electors of the village in the manner provided for in section 293 and following sections of Consolidated Municipal Act, 1892.

CLERK.—I am clerk of a new municipality which was organized in January, 1891, having been separated from a union of townships in that year the council, with the exception of the reeve, are new to the business, and they naturally wish to keep down expenses as much as possible, and also to pay out no more than is necessary. Some of the members of the council are of the opinion that I should not charge fees, and instructed me to write to your valuable journal and ask if the following fees are legal, or if it is allowable to charge fees of any kind.

What I agreed or proposed was, that I receive yearly a salary of \$40.00 and the following fees: Returning officer \$4.00, selecting jurors \$2.00, making out voters' list \$5.00, making out school rolls and tax \$5.00 (for ten sections and union sections). Registration of births, etc., about \$3.50.

(Postage and stationery \$5.00). There are 260 names on the assessment roll.

Kindly let us know in your next issue if the above named fees are permissable or legal, also, if you think the charges I have made are too high.

The fees payable to a clerk, as division registrar of his municipality for the registration of births, marriages and deaths, are regulated by section 30 of chapter 40, R. S. O., 1889, and are paid to the clerk upon his receiving from the inspector a certificate of the number of registrations made by him as such division registrar. The fees chargeable by, and payable to, a clerk for services performed by him in connection with the revision of voters'

lists are regulated by "the Ontario Voters' Lists' Act, 1889," and are payable to the clerk on the order of the judge having in charge the courts of revision. As to the other items mentioned by our correspondent, it makes no difference whether they are included in the amount of his salary (which must be fixed by by-law of the council) or paid for separately. We would not like to venture an opinion as to whether the allowance or salary asked by our correspondent is too high or not. The circumstances in different municipalities We might add, however, are so various. that we have yet to discover the clerk who is overpaid for his services to his munici-

C, F.—I have been instructed by council to ask your advice in the following matter. School section sends requisition annually for levy for school rates amounting to over \$400.00; in collecting levy, one-third is not realized owing to non-residents, not sufficient distress, etc. In fact, only eleven school supporters paid their tax last year. Is there any remedy for council paying full amount of requisition? The land will never bring amount if sold for taxes. Would you kindly state steps to be taken if there is any remedy, as school is situate where only very small part of those living in section even derive benefit. Is there any way for council to recover amount lost, only by sale of land? 2. Can council having bought in land at sale for arrear taxes, sell to highest bidder as soon as the year given for redemption is expired? Give mode of proceeding by council with land bought in for arrears. I might mention that this municipality is situate in Nipissing district, unorganized territory.

We assume from the wording of your question that your locality has municipal organization. We do not see how you can refuse to pay the full amount annually required by the school section. The only way to recover the portion of the levy remaining unpaid is by sale in the manner provided by statute of the lands in arrears and liable for the amount of same. council can purchase the lands in arrears for the amount of the arrears, at an adjourned sale of such lands, where the price offered at such adjourned sale is less than the amount of the arrears. As to mode of procedure in this case, see section 170 of the Consolidated Assessment Act, 1892, or the same section of chapter 193. R. S. O., 1887.

C.—1. Can a council give a money grant to a minor municipality to repair its roads (not a new road)? 2. If not, should a minor municipality, whose reeve and deputy reeve protested against paying any share of said grant, retain it out of the county levy, or how can they get it? 3. Farmers' stock is exempt from taxation, should a county equalization committee rate townships for personal property as before exemption, could they put, say ten per cent., on towns and villages, and five per cent. on townships?

(1) No. A county council cannot legally make a grant not provided for or authorized by statute.

Sub-section 5 of section 566 of the Municipal Act, authorizes a county council to pass by-laws "for granting to any town, township or incorporated village in the county aid, by loan or otherwise, towards opening or making any new road or bridge in the town, township or village in cases

where the council at large are sufficiently interested to justify the council in at once, assuming the same as a county work, and also for guaranteeing the debentures of any municipality within the county as the council may deem expedient." In note K to this sub-section Mr. Harrison says in his Manual, "the ordinary powers of a county council are, so far as roads and bridges are concerned, to deal only with county roads and bridges." See also note K to section 20, and note B to section 282 of the Municipal Act, and in note L to sub-section 566.

The case cited, namely, Strachan vs. Frontenac, is very plain and conclusive as to this point. It was a case where county council by by-law granted moneys to different municipalities to assist said municipalities "in preserving, improving, and repairing roads and bridges therein, and to be expended by said municipalities where required as they may deem expedient for the benefit of the said county." was alleged that these moneys were a portion of surplus not required for the current year's expenditures, and it appears that similar grants had been made in previous years. Mr. Justice Wilson, who gave the decision in the case, referring to the sections of the statutes, states that there was nothing in any of them which could justify the county council in using the county funds in preserving, improving and repairing roads and bridges, which the said council had not assumed, and had not pretended to assume, and which they cannot assume, because the grant is not for any particular road or roads, bridge or bridges, but for all the roads and bridges, which besides are not new roads and bridges. and in which the county at large are not sufficiently interested to justify the assistance. The by-law is plainly in excess of the powers of the county council. The by-law shows no justifiable appropriation of the county funds under any authority expressed or implied; on the contrary it shews a misapprehension of them in direct violation of the statutes, and usage will not sanction it, It calls rather for a special intervention to put a stop to so unwarrantable an assumption of the powers." It was held that the by-law was clearly ultra vires and must be quashed.

- 2. A minor municipality would not be justified in retaining any part of the county levy. The levy being illegal the municipality should seek legal redress by an application to quash the by law making provision for the levy, and to restrain the county council from enforcing the same.
- 3. The law as to equalization of assessments is the same now as before the exemption of farmers' stock. The mode, or basis, of the equalization must of necessity be left to the judgment of the committee having the matter in hand. The circumstances to be taken into consideration in the various municipalities are too various to admit of the laying down of any definite rule.

C. H. R.—Our council wish me to submit the following question to The MUNICIPAL WORLD and to ask if you will kindly give your views on the matter in your September issue: "A" has purchased town lots 8, 10, 12 and 14, and 7, 9, 11 and 13, in block K, north of Tuscarora street, in the town of Walkerville. The balance of said block K is the property of the public school board and a \$1,000 brick school house is erected thereon. "A" has petitioned the council to close up that portion of an alley running north from Tuscarora street to the said school property lying between said lots 8, 10, 12 and 14 on the one side, and said lots 7, 9, 11 and 13 on the other, as being no longer necessary or required by the town. If there is no opposition to the passing of the by-law, have the council a legal right to close the portion of the alley prayed for? Should any one or more of the trustees or a ratepayer object, will that prevent the town council passing the by-law?

We assume your council has observed the preliminary formalities laid down in sec. 546 of the Con. Mun. Act, 1892. Subject to the provisions of secs. 542, 543 and 544 of the said act, we think your council has the right to pass a by-law closing the alley in question whether any of the parties interested object to such a proceeding or not, if they (the council) deem it advisable or expedient to do so. If any party interested sustains damage in consequence of the passing of the by law, such party is entitled to compensation. You did not state whether the school board had been utilizing the alley for the purpose of bringing wood and other supplies to their premises or for any other purpose. If not, we do not see how the board would sustain any injury by the closing of the portion of the alley, as their premises can be reached from either Tuscarora, First, or Second streets, which bound the same on the north, west and east, respectively.

SUBSCRIBER—There is a joint stock cheese company in the township. The assessor did not assess it last spring as it had not been assessed before, and no other factory in this section of country. A person appealed to the county judge to have it assessed, which was done. According to section 366 of the Municipal Act, has the council power to exempt said factory from assessment and the different rates of taxation for a term of ten years? If so, does the by-law require to be different from the ordinary, or should it be an agreement or contract between the company and municipal council? Please advise in your next is ue, and oblige.

We see no reason why the joint stock cheese company should not be exempted from taxation for a term of ten years by a by-law of the council passed in accordance with the provisions of sec. 366 of the Con. Mun. Act, 1892, provided other companies of the same kind in the township are similarly exempted. See Mr. Harrison's note (a) to said sec. 366, and also sec. 286 of said Act.

Reeve, Denbigh (Lennox and Addington)—We are requested to open a government road allowance running between two lots owned and occupied by two settlers. It is fenced and has been for years, as a lane or road for cattle. It leads from the traveled road into the woods, though for the last few years it is not used for cattle, and one of the parties keeps up a brush fence and bars across it at the back end. This allowance is now required to let a back settler in and out. Now to open and make this road have we to advertise and go through the routine laid down in Revised Statutes, page 1952, section 546, or do we simply

act on sec. 552? There has been no road made in lieu of this allowance, and it seems a hardship on municipal councils if they must go to the expense, delay, and trouble of opening up a road in this position through the obstinacy of one man.

If the road allowance is an original road allowance, and location thereof is known, we think it unnecessary that the formalities prescribed in sec. 546, Con. Mun. Act, 1892, should be observed, a by-law accurately describing the limits of the road allowance providing for the opening of the same, should be passed by the council after the notice mentioned in sec. 553 has been served upon the party or parties in possession.

TREASURER.—Years ago our town council instructed its treasurer to deposit all municipal moneys in a local banking house. I. Was a resolution sufficient, or is a by-law necessary. 2. As the present treasurer is acting under that resolution, would he, his sureties, or the municipality be the loser in the event of loss being sustained through the insolvency of the banking house?

- 1. We consider the resolution of council sufficient to warrant the treasurer in making the deposit mentioned, a bylaw not being necessary.
- 2. The present treasurer is qualified in acting under the resolution referred to as it remains in force until duly rescinded.
- 3. Should the local banking house fail and any loss of the moneys of the municipality be thereby sustained, neither the treasurer nor his sureties would, under the circumstances, be responsible. See sec. 250, Con. Mun. Act, 1892. Sub-Sec. 1 (particularly the latter part) and Mr. Harrison's note (a) to said sub-section.

Voted it Down.

By a standing vote of thirty-eight to seven the county council of Simcoe voted down a proposition to erect an industrial home in that county; but from the numerous indigent people from that district, who come into this county, and make application to enter the York county home, we are forced to the conclusion that an institution of the kind is very much needed in the sister county.— Ex.

* *

The Lambton county council, at the June session, passed a by-law providing that county pupils attending the high schools in the county shall pay a fee of \$1 per month. This is an important change, and will aid considerably in lessening the high school rate. The by-law will go into effect at the beginning of the next term.

* *

It may not be generally known that Central Bank bills are no longer negotiable. The final dividend was decided recently and all the books of the institution stored away in the vaults at Osgoode Hall, Toronto. There is, therefore, no more assets to redeem any bills that may be in circulation.

CORRESPONDENCE.

This paper is not responsible for opinions expressed by correspondents.

All communications must be accompanied by the name of the writer, not necessarily for publication, but so that the publishers will know from whom they are received.

Forestry.

To the Editor of THE MUNICIPAL WORLD ;

SIR,-It is high time that the people of this province and more especially the farming community were aroused to the necessity of taking steps to discourage the needless and wasteful cutting down of the timber. Notwithstanding all that has been said and written on this subject, the destructive process has been but little abated, and strange to say the class whose interests are most directly imperilled, the farmers, are probably the chief agents in this wholesale devastation. Now farmers are generally credited with having a keen eve to their own financial interests, but certainly this characteristic is not manifested to any great extent in the management of the wooden portion of their lands.

Every intelligent observer ought by this time to be aware of the evils entailed by deforestation. Now the too extensive clearance of the timber robs the fields of a needed protection against parching or freezing winds, besides altering the climate, so that droughts and floods are much more frequent and destructive than formerly. The literature of forestry has been popularized so that all ought to be familiar with such facts. Nevertheless we find that the area of forest in our own settled countries is steadily growing smaller. In some localities the proportion of bush to cleared land is not more than five per cent., and comparatively little is being done to restore the equilibrium by replanting. Wood is growing scarce, so much so that farmers who once owned bush lots which, if properly managed, might have been the source of a continual supply. are obliged to secure fuel at a considerable distance from their homesteads.

If the farmers would only show, in managing their affairs, something of the same foresight and careful regard for future interests as the business man is obliged to exercise in order to avoid bankruptcy, they would take time by the forelock and not merely carefully preserve such patches and remnants of the original forests as they still possess, but set out trees in appropriate situations with an eye to the shelter afforded as well as the value of the timber. A farm provided with wind breaks and adorned with ornamental trees around the buildings and along the highway presents a much more inviting aspect than one devoid of trees, and will sell for a higher figure if placed on the market. Moreover, it is as absolutely certain as any future event can be that wood will considerbly increase in value in the near future, and if valuable varieties of trees are planted the result will be an investment which, in the long run, will be found exceedingly profitable.

The need of maintaining an adequate proportion of well-wooded land is so vital to our national prosperity that the efforts of the Provincial Government to stay the destruction ought to be warmly seconded. An extensive reserve is to be set apart in the northern section of the Province, where the soil is unfitted for agriculture, which will be permanently in timber. This is well and good, but the individual owners of the cleared portion of Ontario ought also to do their duty in the direction of timber preservation and replanting. If a few leading men in each locality will take the matter in hand and set the example, public opinion will soon be developed in the right direction.

The official report of the Ontario Government on Forestry is now issued, and I shall be pleased to send a copy post free to any one sending his name and address.

R. W. PHIPPS, 251½ Richmond Street West, Toronto.

Clerks' Salaries.

To the Editor of THE MUNICIPAL WORLD:

SIR-In your last issue "Reeve" has been expatiating on "what he knows" about municipal clerks' duties and remuneration. At the outset he admits that the complaint that such remuneration is too small, etc., "is to some extent true," but he adds, "it is the same with all public offices." Assuming the latter statement to be correct, which we do not by any means admit, in the name of common sense is that any reason why the injustice should be perpetuated? Surely the "Reeve" is not so narrow-minded as to decline to attempt to put right what he admits to be wrong.

The "Reeve" then proceeds to characterize as "unreasonable" and "presumptuous" that the legislature should have any more jurisdiction over clerks' salaries than it now has. Will the "Reeve" be good enough to say if it be more "presumptuous" on the part of the legislature to define clerks' salaries than to prescribe their duties? And he knows that the greater pertion of their duties are set forth by the act of parliament; and he also knows that the legislature is continually adding to their duties, session after session, and he further knows that it is very seldom, indeed, that we hear of a local council making a corresponding increase in the salary of the official whose duties are thus enlarged. There is no analogy between the supposed cases of the office clerk and farm laborer, on the one hand, and the municipal officer on the other, hence the "heroics" about "despotism" and "British fair play" are scarcely in order. The "Reeve" still further proceeds to give it as his opinion that we have "too many acts, too many members and sessions, etc., etc., which may be true, and he might have added that there are many who think we have too many reeves also, but the ordinary mind will fail to perceive the con-

nection between that subject and the matter at issue.

ANOTHER CLERK.

Sept. 5, 1892.

To the Editor of the MUNICIPAL WORLD:

SIR,-I think it a perfectly absurd suggestion that clerks' salaries should be based upon the number of names on the assessment roll, as the amount of work in the various municipalities is not in proportion to the number of ratepayers. It seems to me that each correspondent is trying to fit his own coat on everybody else's back, and such a performance is sure to make many a misfit. C. P., in the September number, says 25 cents per head for every name ought to be enough. Surely he is not clerk or he would not go in for starvation rates. The salaries are altogether too low now without proposing to make them lower. Again, although I am a clerk, I agree with "Reeve," in September number, that the legislature should have no more jurisdiction over clerks' salaries than at present.

I am much pleased with THE MUNI-CIPAL WORLD.

Yours, etc.,

C. E

To the Editor of THE MUNICIPAL WORLD :

SIR.-The "Reeve's" arguments on clerks and their salaries are sound, and I agree with him on all points. Making a few men rich by Act of Paliament at the expense of the many is about played out. If "Clerk" is not sufficiently paid, let him resign, there is no law compelling him to act if he does not wish. The exorbitant charges that some clerks make for extras shows the estimation they have of what their pay should be. But what about the ratepayers who have to pay them? Where is the protection for them? What protection is the Government going to give them? Those who have to pay should be allowed to say how much they will pay, and what work they want done, and there should be no outside interference in the matter, and councillors should have the same liberty in their business as other people, and be allowed to ask for tenders for their clerkship. Then there would be less grumbling by clerks.

DEPUTY REEVE.

Councils and Drainage.

Members of municipal councils should do all in their power to prevent the diversion of all water out of its natural course. There are very few drainage improvements proposed in which some individual is not desirous of having the water taken out of its natural course for his benefit, and while at the time it may appear to be a very small matter, still, when people become better acquainted with the provisions of the drainage law, and suffer damage, which is always greater during the wet season, they are not backward in taking advantage of any claim they may have,

owing to such diversion. The length of time is no barrier, and where a council consents to having a watercourse constructed along the side of a road to pass one man's place, through which it would naturally flow, and connect with a watercourse on other property, the owner of such other property has a claim against the township for any damages that may be occasioned by such diversion, and when any such claims are presented the township engineer should be required to locate the ditch properly, in its natural course, and the best settlement possible made with the person making application for damages.

We know of a case where a ditch was constructed along the side of a road thirty years ago, and maintained partly by statute labor and partly by work of the party for whose benefit the ditch was constructed. On representation being made to the council they ascertained the facts and at once put in a culvert, turning all the water diverted by the ditch on to property that had been highly improved during the thirty years, but through which the water would flow naturally. owner of this property was at first disposed to close up the culvert and enter an action against the council, and, in fact, did so, but when he secured the advice of an experienced municipal lawyer, he was pleased to consider that he had been saved the treuble of taking care of the water for thirty years, and at once put in large tile to carry the same through his property.

When proceedings are commenced under the Ditches and Watercourses Act, in which the township is a party, the representative of the council should never consent to an agreement, but should insist in all cases on having the engineer decide properly where the water should go and the proportions of the ditch to be constructed by each.

Our reason for suggesting this, is that agreements are seldom drawn up properly or filed with the clerk, and if at any time an engineer is put on to enforce an agreement he finds it next to impossible to make anything like a satisfactory job. More especially is this found to be the case when a ditch has been constructed under an agreement, before the property is improved, and it is often found that the work at first performed has been almost thrown away, owing to circumstances which have been overlooked, but which would have been noticed had a competent engineer been employed to take the level and ascertain the natural course of the water. Trivial actions for damages in after years can always be avoided by following this course.

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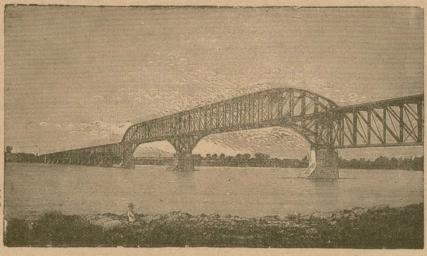
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Bridge Rods Right and Left Hand Sleeve Nuts

Structural Iron Work.

The cost of Metal Bridges, to a term of years, is less than the cost of building repairing and replacing wooden bridges, and believing the onlyreason 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 exist 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 ordinaryleve 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 P.Q. OFFICE: Room No. 4, Windsor Hotel, MONTREAL, P.Q.

Address Inquiries in Response to this Advertisement, to

DOMINION BRIDGE COMPANY, LTD., Montreal, Que.

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I am desirous of purchasing any and all

Debentures of Towns, Villages, Townships
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As they are issued (no matter for what purpose), and will pay the very highest prices for them. MUNICIPAL OFFICERS will kindly bear this in mind and write me, sending particulars and copy of By-laws, &c., at any time they are issuing debentures for sale. I have money to loan on first mortgage at very lowest rates of interest.

GEO. A. STIMSON.

9 Toronto Street, Toronto.