

The Municipal World

PUBLISHED MONTHLY IN THE INTERESTS OF

THE MUNICIPAL INSTITUTIONS OF ONTARIO

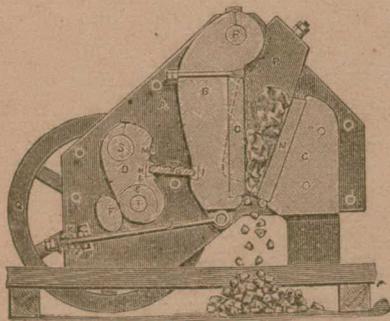


Vol. 5. No. 4.

ST. THOMAS, ONTARIO, APRIL, 1895.

Whole No. 52

COPP'S ROADMAKING MACHINERY



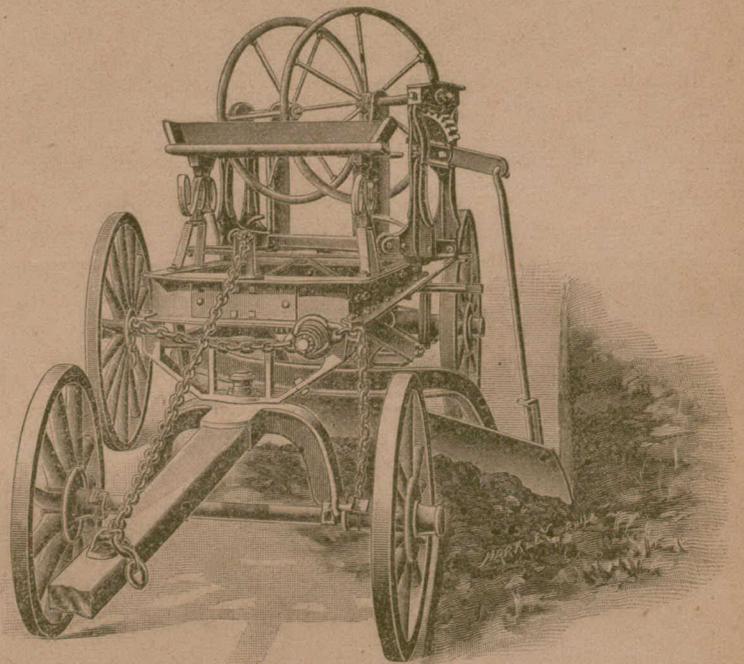
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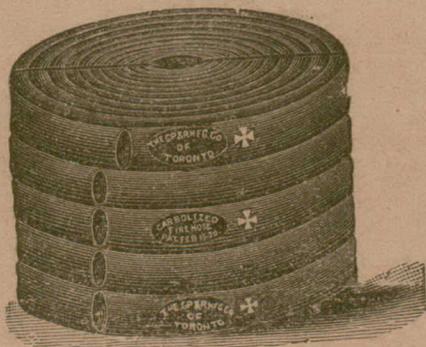
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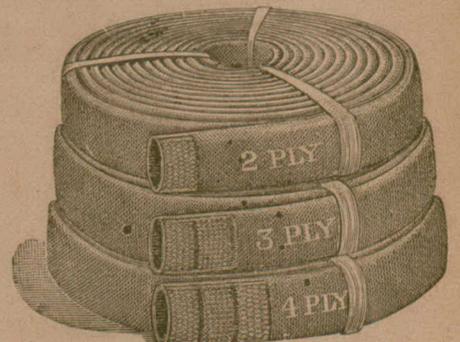
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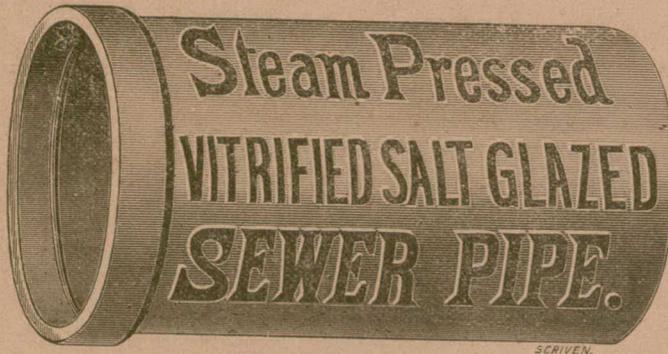


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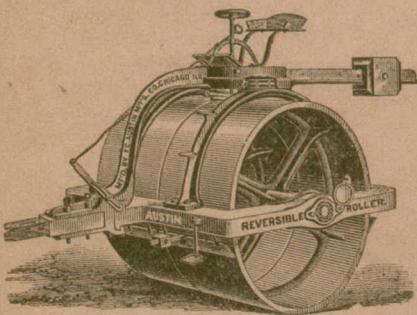
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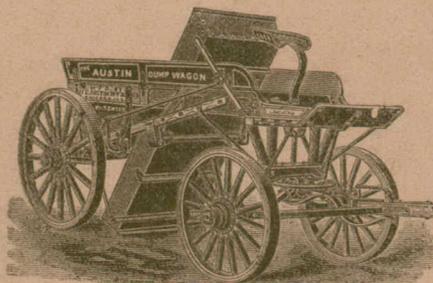
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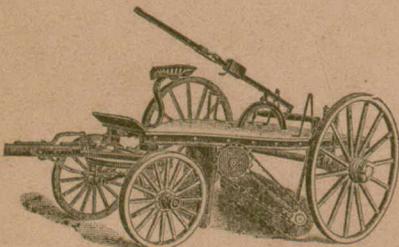
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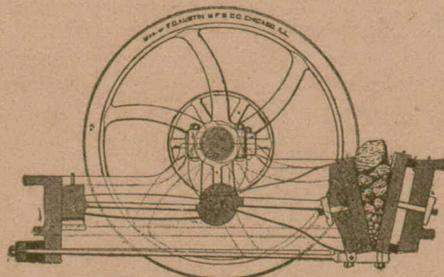
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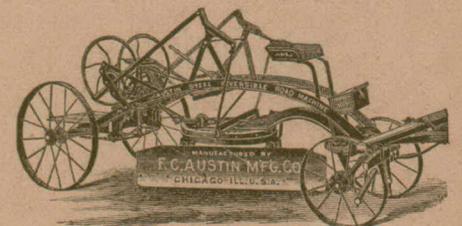
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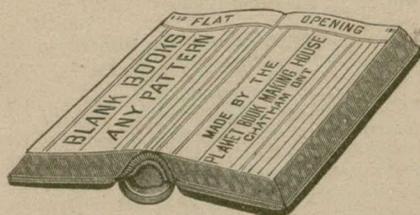
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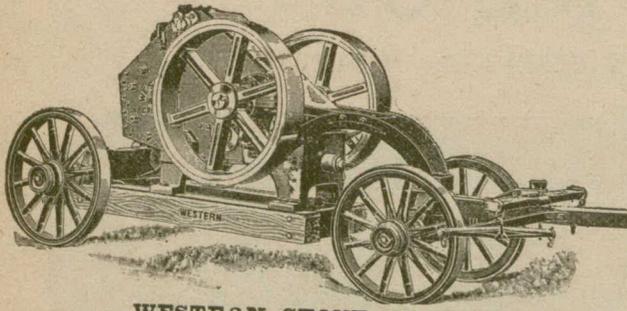
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Western Roadmaking Machinery



WESTERN STONE CRUSHER

visited towns and cities where other crushers were in operation, and finally selected the Western, not because it was the cheapest in price, but because they thought it was the best crusher tendered for, have had their judgment confirmed, and join with me in recommending the Western to any municipality or others requiring a first-class crusher. Yours respectfully, ORMSBY GRAYDON, City Engineer.

P. S.—The other crushers in competition were the Champion, Blake, Chicago and others.

Crushers can be furnished with or without screens, trucks or elevators.

MUNICIPAL OFFICERS in Ontario will consult their best interests by examining the Western Rock Crusher before deciding on the purchase of machinery for the preparation of roadmaking material. With reference to the crusher purchased by the City of London last year, the City Engineer says:

LONDON, ONT., Jan. 5th, 1895.

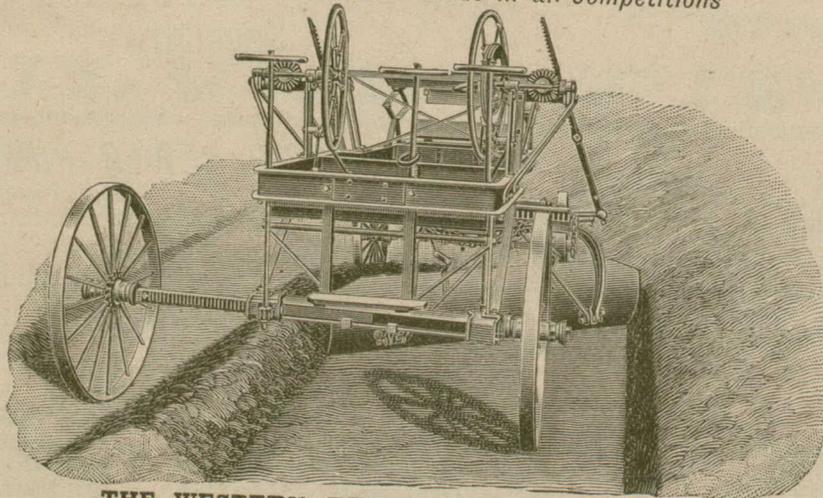
H. A. BROWNELL, Esq., General Manager Western Wheel Scraper Co.:

DEAR SIR,—The No. 10 Western Rock Crusher, bought of you last season, has proved entirely satisfactory and fulfils all claimed for it in every sense of the word. As it crushes to any size required, the product is especially adapted for the making of good roads. Since the Western has been in operation here, some seven months, it has not cost the city one cent for repairs, which speaks volumes for its first-class construction; nor have the plates or jaws, that are subject to so much wear and tear, been found necessary to replace. The committee who

The Western Reversible Leads in all Competitions

In the preparation of roadbeds for gravelling, the construction and maintenance of earth roads, and the repair of gravel roads, the Western Reversible Road Machine will do the work in the best possible manner.

All machines sold on trial.



THE WESTERN REVERSIBLE ROAD MACHINE

That these machines are the best is the opinion of those who have been using them. That they are economical is shown by the following testimonials from municipal officers. The Western Reversible is an all-steel machine.

All machines sold on trial.

TESTIMONIALS:

H. A. BROWNELL, General Manager, London, Ont.:

DEAR SIR,—We, the undersigned members of the municipal council of the Township of Burford, having witnessed the operation of your machine, the Western Reversible, on trial with the American Road Machine in this township, on the 22nd of last May, have no hesitation in saying that we consider the Western Reversible a superior machine in many respects. Although the price of your machine was considerably more, we had no hesitation in placing our order with you, and, after using it all summer, have no cause to regret it. We consider it a first-class machine, far superior to any method heretofore employed by us, both as a labor-saving and economical system of building or repairing our streets or roads, and can recommend it to any city, town or rural municipality. PHILIP KELLEY, Reeve, Warden of Brant county; CHAS. VANHORN, Deputy Reeve; JOHN MCCLELLAN, ADAM CROZIER, Councillors.

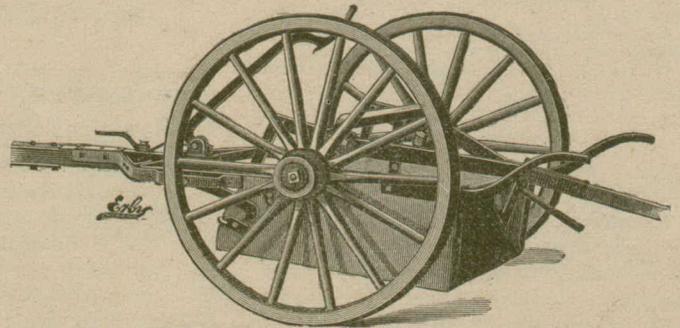
Burford, Ont., Nov. 26th, 1894.

KINGSVILLE, January 25th, 1895.

H. A. BROWNELL, Esq., Gen. Mgr., London, Ont.:

DEAR SIR,—After using the Western Reversible Machine last season, we can truthfully say that the machine has paid for itself three times over. We can further say that other road machines have been used in this township, but, in our opinion, they will not bear comparison with the Reversible Road Machine. In fact, the Western Reversible is worth more than any two machines of other makes that we have seen in Essex county. We consider that the work done by the Reversible machine was worth at least \$1,000, ordinary expenditure, to the roads in the township of Gosfield South last year. We recommend all the municipalities to examine into the merits of the Western Road Machine before placing their orders. As already stated, we have used other machines but do not hesitate to say that they are not as good as the Western, which, in our opinion, has no equal, and is the best all-round road machine in the market.

Yours truly, C. G. Fox, Reeve; R. W. SHANKS, Dep. Reeve.



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THE MUNICIPAL WORLD

Published Monthly in the Interests of Every Department of the Municipal Institutions of Ontario

Vol. 5. No. 4.

ST. THOMAS, ONTARIO, APRIL, 1895.

Whole No. 52

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Calendar for April and May, 1895.

Legal, Educational, Municipal and Other Appointments.

- APRIL.
- Clerks of counties, cities and towns separated from counties to make return of population to Educational Department.—Public Schools Act, Section 129.
 - Last day for Free Library Board to report estimates to the Council.—Free Library Act, Section 6.
 - Last day for petitions for Tavern and Shop Licenses to be presented.—License Act, Sections 11 and 31.
 - Last day for removal of snow fences erected by Councils of townships, cities, towns or villages.—Snow Fences Act, Section 3.
 - From this date no person compelled to remain on markets to sell after 9 a. m.—Municipal Act, Section 497 (6).
 - Last day for Boards of Park Management to report their estimates to the Council.—Public Parks Act, Section 17.
 - 7. Last day for Treasurers of Local Municipalities to furnish County Treasurer with statement of all unpaid taxes and school rates.—Assessment Act, Section 145.
 - 8. Last day for Collector to return to Treasurer the names of persons in arrears for water rates in Municipalities.—Municipal Waterworks Act, Section 21.
 - 11. Schools close.
 - 12. Good Friday.
 - 15. Easter Monday.
 - Reports on Night Schools, due to Education Department (session 1894-5).
 - 22. High Schools open (third term).—High School Act, Section 42. Public and Separate Schools in cities, towns and incorporated villages open after Easter holidays.—P. S. Act, Section 173 (2).—S. S. Act, Section 79 (2).
 - 20. Last day for non-resident land holders to give notice to clerk of ownership of lands to avoid assessment as lands of non-residents.—Assessment Act, Section 3.
 - 25. Last day for Clerk to make up and deliver to assessor's list of persons requiring their names to be entered in the roll.—Assessment Act, Section 3.
 - 30. Last day for completion of roll by assessor.
 - Last day for non-residents to complain of assessment to proper Municipal Council.—Assessment Act, Section 77.
 - Last day for License Commissioners to pass regulations, etc.—Liquor License Act, Section 4.
- MAY.
- 1. Last day for Treasurers to furnish Bureau of Industries, on form furnished by Department, statistics regarding finances of their municipalities.—Municipal Act, Sec. 252.
 - Last day for passing by-laws to alter School Section boundaries.—Public School Act, Section 81.
 - County Treasurers to complete and balance their books, charging lands with arrears of taxes.—Assessment Act, Section 152.
 - 3. Arbor Day.

Drainage Act Forms.

Petition of owners, section 4, per dozen.....	\$0 36
Oath of engineer, section 5, per dozen.....	20
Notice to party assessed, sec. 16, per doz.....	20
Oath of member of court of revision, sec. 26, per dozen.....	20
Summons, court of revision, section 28, per dozen.....	20
Notice of complaint, section 34 or 44, per dozen.....	20
List of appeals, section 37, per dozen.....	30

Drainage Laws.

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B—Declaration of ownership, per doz.....	\$0 20
C—Notice to owners, per doz.....	25
D—Agreement by owners, per dozen.....	50
E—Requisition for examination by engineer, per dozen.....	25
F—Notice of appointment for examination by engineer, per dozen.....	20
Notice of filing award, sec. 18, per dozen.....	25
H—Engineer's certificates, per dozen.....	25
Summons, appeal to judge, sec. 26, per dozen.....	20

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The Municipal World

PUBLISHED MONTHLY \$1.00 PER ANNUM
PUBLISHED MONTHLY

In the interests of every department of the Municipal Institutions of Ontario.

K. W. MCKAY, EDITOR,

A. W. CAMPBELL, C. E. } Associate
H. F. JELL, Solicitor. } Editors

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THE MUNICIPAL WORLD,

Box 1252, - - - St. Thomas, Ont.

ST. THOMAS, APRIL 1, 1895.

The new legislature is quite equal to any of its predecessors, if we may be allowed to judge its capacity, by the number of proposed amendments to the Municipal Acts. We notice that a bill to allow a treasurer to act as collector was not acceptable.

The Walkerville assessor has been looking after the assessment of incomes in his municipality, among others he called on Mr. Robins, the manager for Hiram Walker & Sons, who refused to state the amount of his income, and although he was fined for such refusal as provided in the Assessment Act, the assessor has not procured the necessary information.

We notice that some municipalities have made very favorable arrangements with their bankers, whereby they secure 4 per cent. interest on deposits, and pay 5½ per cent. interest on loans. The account of a municipality is generally a good one for any bank, and where the amount of business is large, councils can generally secure better rates than private individuals.

Notwithstanding the want of statutory authority, many county councils, at their first session, granted money to improve roads that they have not assumed. We are always pleased to know that councils are liberal in this direction, but to make illegal grants of this kind often leads to litigation, or an exchange of favors that would be entirely unnecessary if councils confined themselves to the powers conferred upon them. If it is necessary or right that these illegal grants be made, petition for a change in the law.

Owing to the provisions of the Anatomy Act, councils are not authorized to expend money to bury indigents. We believe that inspectors of anatomy have been appointed in every county, and it is their duty to take charge of all bodies not claimed by friends for burial. The name and address of this official should be known to every councillor. The only exception to the above is that the the inspector will not take charge of the bodies of persons dying of contagious diseases. Councils in these cases can properly pay the necessary expenses.

The large number of applications for Radial Railway charters has led the local Legislature to consider the advisability of passing a general act relating to these modern institutions. This will be of assistance to councils having to deal with franchises and will, no doubt, provide for many matters important to municipalities that inexperienced councillors might overlook.

A new rendering of section 245, which defines a clerk's duties, was brought to our notice a few days ago. A motion was introduced in a council to dispense with the services of the present clerk, and appoint in his place a man who could fill the position of clerk, village solicitor and accountant. It was urged in support of this resolution that an official who would be always on hand to give legal advice was necessary, and the mover stated that the proper reading of the Municipal Act, which provides that the clerk should "keep" the books, meant that he should keep or post the books, meaning thereby the books of the treasurer. We are pleased to say that a majority of the council were not in favor of this interpretation. The books, in the section mentioned refer to the minute books and other records of the council which the clerk is required to keep in his custody.

Many reeves are at a loss to know exactly what to do to secure the admission of indigent lunatics to asylums. It is not advisable to send them to gaol unless they are dangerous. In the case of an application to the head of a municipality where the lunatic is not dangerous, the reeve should at once write to the medical superintendent of the nearest asylum, stating that he desires to make application for the admission of a lunatic under the provisions of section 11, chapter 45, R. S. O. He will then receive the preliminary papers which are required to be filled out. These, when returned to the asylum, are examined, and if satisfactory, medical certificates to be signed by two physicians will be received with instructions to remove the patient to the asylum within ten days. In the case of dangerous lunatics, application may also be made to the head of the municipality, who should proceed the same as in ordinary cases,

and if the person is so dangerous as to require to be locked up, an information should be laid before a justice of the peace and the lunatic remanded to the gaol or lock-up for safe custody pending enquiry. Where this is not convenient he may be placed in the charge of the constable arresting him. This is provided for in section 14 of the act referred to. In this way he may be remanded or otherwise detained from time to time until the certificates are received from the asylum when he may be removed the same as in ordinary cases. All expenses of medical examination and conveyance to asylum are payable by the county.

The *Newmarket Era* refers to the passing of by-laws refusing to admit inmates to houses of industry until they have resided in the county for a stated period as follows:

Were it not for the rule our county council has adopted respecting residence, we should have the poor of adjoining counties flocking to our county and the ratepayers of York would be called upon to maintain them. To make houses of industry all that the county demands our legislature should change the permissive enactment respecting erection and maintenance of these homes to the imperative, striking out the word "may" and inserting the word "shall." This should be followed by another clause authorizing a county either to charge for the keep of the poor of another county, after notice—or providing for the transfer of such subject of charity from a county to the one to which properly belongs the charge of maintenance—the statute to define the length of time residence in a county shall be requisite to determine liability.

We agree that every county or union of counties should be compelled to establish a House of Industry or pay for the care of their poor in the way suggested. Until this is done, any municipality at present contributing to the support of one of these institutions is entitled to benefit thereby to the greatest extent possible. If a municipality has to care for a tramp, who may be from an adjoining county or a citizen of the wide, wide world, we doubt very much the legality of any regulation that would prevent his admission to the House of Industry, if committed by the reeve or other proper authority.

The Same in Ontario?

The most important official, in an English municipal corporation, is the town clerk. He has a large salary, and is expected to hold his office for life. He is the council's recording officer, the custodian of records, deeds, and charters, the council's legal adviser, the medium through which communication is had with the local government board, the publisher of registration lists and election announcements, the draftsman of bills which the council desires parliament to pass, the general secretary of the borough, and a high authority on municipal law, precedent and history.—*Municipal Government in Great Britain*, by Albert Shaw.

The Principle of Taxation.

Since the time of Solon the subject of progressive taxation has been before law-givers and economists, and the fact that it has been so sparingly adopted in civilized States may fairly be construed as an admission that the principle is viewed with suspicion and distrust. According to the Solonian laws the citizens of Athens were divided into four classes. The lowest class was altogether freed from taxation; the second class was assessed upon a capital estimated at five times the amount of their income; the third class at ten times, and the fourth or richest class on a capital assumed to be twelve times their income. This example has not been extensively followed, though a few countries, such as Germany, have not hesitated to tax capital when the needs of the State were great. A sense of equity has kept such taxation within narrow limits, and it is only among Eastern despots and French revolutionists that it has been carried to dangerous lengths. It has never taken deep root as a universal principle of taxation. A more common principle of State contribution has been that the equities of taxation should mainly rest on the ability to pay, or on the protection given by the State. Writers, like the well-known philosopher Babbass, have contended that every workman should pay income tax according to his earnings, because he receives as much protection from the Government as the millionaire. Taxation cannot be assessed in the ratio of protection, because the greatest amount of it is given to the poorest and feeblest of the population—to children, women, paupers and the disabled. When people are earning merely living wages they cannot pay a tax, for, if it were taken by the tax collector with one hand, he must restore it with the other as a pauper's dole. Wage-earners of full working ability do contribute to the State through indirect taxation of commodities, but they could not bear the added burden of an income tax without destroying their thrift as a provision for old age; for the abstraction of a fraction of their wages is far more burdensome to the working classes than is the withdrawal of a like fraction from the incomes of rich men. Hence, in countries with an income tax, the principle of graduated taxation has insensibly crept in by exempting persons at the lower part of the scale.—*Rt. Hon. Lord Playfair in North American Review for March.*

The Municipal Insurance Bill has been introduced in the Legislature. There seems to be a strong feeling against the proposal, and we understand that the bill will be presented and distributed to municipalities for consideration until next session, when it is expected that all councils interested will have recorded the views for or against the scheme.

Trees on the Highway.

It is a common practice for a council to direct a pathmaster or other officer to remove trees that may be growing on the highway. While this may be satisfactory in ordinary cases a reference to section 479 sub-section 20 of the Consolidated Municipal Act shows that before removing any tree, shrub or sapling growing or planted on any highway or other communication, a by-law should be passed. The by-law must provide for giving 10 days notice to the owner of the adjoining property to remove such tree, and if the owner of the adjoining property has planted such tree and protected it he is entitled to recompense for his trouble. It is in this section expressly stated that no owner of adjoining property, nor any pathmaster or other public official or any other person, shall remove or cut down or injure such tree, shrub or sapling with pretence of improving the highway without the express permission of the municipal council. The provisions of this section would seem to apply more directly to trees that may have been planted or left on the highway when it was first chopped for ornamental purposes. In the older municipalities it is not unusual to see fine shade trees growing in the road allowance. The Legislature appear to think that the adjoining owners have a vested right in trees, and have required a council to respect those rights to the extent of giving a notice and passing a by-law for the removal of any tree, shrub or sapling growing under its control.

The Dangerously High Buildings

MUNICIPAL INSURANCE THE ONLY PREVENTATIVE.

It seems to us criminal to build towering structures that the waterworks pressure cannot be relied upon to force water to from the firemen's hose. It is a criminal waste of property to place it where it cannot be protected, either for the advantage of its owners or its insurers, and of human life to domicile people in fire traps too high for unaided escape, and to send the city's employees, with their lives in their hands, to attempt the saving of property and rescue of lives among tottering, flaming ruins.

Why should such high buildings be permitted at all? Land is not so dear, nor distances so disadvantageous, in these days of rapid transit, as to justify the erection of a building anywhere in Canada that is incapable of being protected by the special means there employed for the extinction of fires and protection of life.

The lesson from the two great fires in Toronto recently points to municipal insurance as the only cure for such a serious defect in city architecture. Let the loss fall where the control lies, and no more fire traps will be permitted, while some special means will be found for the better protection of those now in existence.—

Ensign.

Debenture Instalment Tables

Showing annual payment required to discharge a debt of one dollar and its interest, also the respective amount of principal and interest annually discharged.

No. 1.

Debentures bearing 4 per cent., interest payable in five yearly instalments.

EQUAL ANNUAL PAYMENT—224627.

	INTEREST.	PRINCIPAL.
1	.04	184,627
2	.032,615	192,012
3	.024,934	199,693
4	.016,947	207,680
5	.008,640	215,988

No. 2.

Debentures bearing 4 per cent., interest payable in ten yearly instalments.

EQUAL ANNUAL PAYMENT—123291.

	INTEREST.	PRINCIPAL.
1	.04	83,291
2	.036,668	86,623
3	.033,204	90,087
4	.029,600	93,691
5	.025,852	97,439
6	.021,955	101,336
7	.017,902	105,390
8	.013,686	109,605
9	.009,302	113,989
10	.004,742	118,549

No. 3.

Debentures bearing 4 per cent., interest payable in fifteen yearly instalments.

EQUAL ANNUAL PAYMENT—8994110

	INTEREST.	PRINCIPAL.
1	.040,000	49,941
2	.038,002	51,939
3	.035,925	54,016
4	.033,764	56,177
5	.031,517	58,424
6	.029,180	60,761
7	.026,750	63,191
8	.024,222	65,719
9	.021,593	68,348
10	.018,859	71,082
11	.016,016	73,925
12	.013,059	76,882
13	.009,984	79,957
14	.006,786	83,156
15	.003,459	86,482

No. 4.

Debentures bearing 4 per cent. interest payable in twenty yearly instalments.

EQUAL ANNUAL PAYMENT.—7358175.

	INTEREST.	PRINCIPAL.
1	.0400,00	335,82
2	.0386,57	349,25
3	.0372,60	363,22
4	.0358,07	377,75
5	.0342,96	392,86
6	.0327,24	408,57
7	.0310,90	424,92
8	.0293,90	441,91
9	.0276,23	459,59
10	.0257,84	477,97
11	.0238,73	497,09
12	.0218,84	516,98
13	.0198,16	537,65
14	.0176,66	559,16
15	.0154,29	581,53
16	.0131,03	604,79
17	.0106,84	628,98
18	.0081,68	654,14
19	.0055,51	680,30
20	.0028,30	707,52

Clerks of local municipalities should not overlook section 265 of the Municipal Act, which requires a copy of the auditors statement to be filed with the county clerk, to be kept as a record of his office.

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.

Voting at Nomination Meetings.

To the Editor of THE MUNICIPAL WORLD.

In reference to your request respecting proceedings at nomination meetings—Section 116, Municipal Act reads: If two or more candidates are proposed, and if a poll is required by them or any elector, the clerk shall adjourn, etc. You ask if in case a poll is not demanded, how many clerks would there and then take the votes of the electors present and declare the candidate having the majority. The clerk in this case would have to decide whether he had any legal power to take such vote—the statute is silent on this point. My opinion is that if he did take a vote he would be taking on himself a very grave responsibility. First he could not be sure who of the persons present were duly qualified electors; secondly, he could find no authority in the statute for so doing. He would have to assume that because the act says when a poll is demanded he must do a certain act, when a poll is not demanded he may do something else.

I have long noticed the difficulty, and as in my experience over twenty years as a township clerk, I have never known a poll to be demanded spontaneously. I always meet the difficulty by asking some elector to demand a poll.

An old Township Clerk.

To the Editor of THE MUNICIPAL WORLD:

Dear Sir,—I am glad that the question of "demanding a poll" has arisen, as I was nearly placed in that position at last nomination. I cannot understand the statutes on it, but think that the person who was first nominated should be elected, if the second party nominated would not demand a poll, or the returning officer could elect which person he wished the same as he would have done in case of a tie at the election. I do not think a returning officer has any right to take a vote at the nomination.

Yours truly,

R. McLeay, Clerk.

To the Editor of THE MUNICIPAL WORLD:

Dear Sir,—In compliance with your request made in the last issue of THE MUNICIPAL WORLD, I would say that I have held four elections without a poll being demanded. My opinion is that when there is a contest it is to be by ballot. Would like your opinion in the matter.

E. D. C.

Publication of Financial Statements.

To the Editor of THE MUNICIPAL WORLD

Sir,—In your editorial jottings for March, you refer to municipalities publishing their receipts and expenditures, assets and liabilities on the 15th December of each year. We agree with you that a detailed statement as called for, is unnecessary, and believe that most municipalities would be favorable for a more satisfactory method in showing the ratepayers how their affairs are managed. The most simple and effective way would be to have the minutes and proceedings of municipal councils, together with assets and liabilities, statistics, etc., printed in pamphlet form, ready for distribution on nomination day. The ratepayers would then intelligently understand how the public funds had been handled, and would be enabled to judge the actions of each member of council, and help them to decide whether they were worthy or not of their confidence and support. Several municipalities in Grey county have followed this plan for a number of years and find it gives general satisfaction.

Respectfully,
S.

No Statute Labor Tax in Township of Malden.

Dear Sir,—Our highways are maintained and repaired by township rate; the best and only perfect system in the world.

Our township contains 18,000 acres of dry land, and our council usually expend about \$2,000 a year on the roads and bridges.

We had commutation of statute labor for a number of years at 50c. a day, until it outlived its usefulness, we then felt that a change was necessary and the next best thing to be done was to abolish it. We did so, two years ago, and there is no disposition to return to either of the old systems. The benefits of the present system as compared with statute labor are that under statute labor our township was divided into 18 road divisions, which meant that 18 men with different opinions, selfish motives, crank notions, and occasionally one with no idea at all, were ditching, grading and sometimes spoiling the roads in the township; and, as the road-master in each division got his certificate for superintending the work, it cost the township about \$100 a year to pay them.

Our aim is to elect only practical farmers, who are also good business men, to our council, and instead of doing odd jobs and patching round the township like road-masters, they

dig through ditches and gravel main roads, and give the people nearer to 100 cents on the dollar than they have ever received before. Another reason, the work done by the average farmer is very improperly done, because he does not know how, and the road-master is too much interested in the numerous stock of yarns, that were saved up for the occasion, to pay much attention to him, and allows the work to be done in a very careless manner; while under our present system, as a rule, only practical men who follow ditching and gravelling year after year do the work.

Yours truly,

JAMES HONOR,
Tp. Clerk, Malden.

Meetings of Council.

RE MUNICIPALITY OF MACDONALD.

This was an appeal from the order of the Chief Justice quashing a by-law and two resolutions passed by the council of the municipality at meetings held under the following circumstances:

At the close of the first meeting of the council for the year they adjourned to meet again at the call of the reeve. Subsequent meetings were held throughout the year upon notices issued by the reeve whenever it was necessary to call a meeting, but these notices did not contain any mention of the subjects or matters which were to be taken into consideration at the meetings, and the resolutions in question were passed at meetings so held.

It was contended by counsel for the municipality that these meetings should be considered as adjournments of the first regular meeting within the meaning of section 288 of the Municipal Act.

Held, that the meetings in question were not regular meetings, but were special meetings convened by the head of the council, as provided by section 284, and that as the notices calling the meetings contained no mention of the matters to be taken into consideration the learned Chief Justice was right in quashing the by-law and resolutions in question.

Welland House of Industry.

The annual report for 1894 shows that during the year 31 persons were admitted, 6 died, 19 were discharged and 3 absconded, leaving 52 in the institution on the 31st December, of whom 37 were males and 15 females. Average number of inmates during the year, 47. Including keeper's family and servants, 53. Whole number of weeks board for inmates, only 2,459 4-7. Keeper's family and servants included, 2,790 3-7. Net cost to county, \$4,236.06. Average expense per week for inmates, only \$1.68. Average expense per week keeper's family and servants included, \$1.48.

ENGINEERING DEPARTMENT.

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

Electricity.

The wonderful advancement made in the use of electricity in the mechanical and useful arts within the past decade, has led a majority of the people of this country into the belief that, aside from the electric telegraph, the whole field of electrical research and application has been of very recent date. While in the main this is unquestionably true, as we shall endeavor to show, yet we find in a work written more than one hundred years ago, by Tiberius Cavallo, in the introduction of his "Complete Treatise on Electricity," he wrote, "Discoveries crowded upon discoveries, improvements upon improvements, and ever since that time went on with so rapid a course, and is now spreading so amazingly fast that it seems as if the subject would soon be exhausted, and electricians arrive at an end of their researches; but, however, the *ne plus ultra* is in all probability, yet at a great distance, and the young electricians have a vast field before them, highly deserving his attention, and promising further discoveries, perhaps equally or more important than those already made."

After reading the above sentence, which is taken from the introduction of one of the most advanced works of its time touching this particular field of research, we have wondered what would have been Cavallo's introductory remarks if he could have returned hither and visited the World's Columbian Exposition. He certainly would have realized that the young electricians had been at work. The World's Fair was decidedly electrical in character; more so than any other yet held. Should we go back to the Centennial Exhibition in Philadelphia in 1876; there the electrical exhibits were so few and so meagre that they attracted but little notice. There were the telegraphic apparatus then in use, the burglar alarm, and a few pieces of electrical apparatus, and such machines as are usually found in scientific schools and college laboratories; there was an electric clock, and a few small electric motors, of a very crude make, the whole display, if display it could be called, were regarded by the ordinary observer more in the light of a lot of ingenious toys, than devices which in the near future were to be counted among the real harbingers of our greatest conveniences, luxuries and necessities of every city, village and hamlet of the land. Had the entire Centennial exhibit of electrical machinery and devices been placed in the electricity building at the Chicago Fair, it would scarcely have been noticed, unless placarded with special prominence as relics of '76.

The number of patents in this depart-

ment alone is increasing at the rate of more than 2,000 a year; and the number granted since 1876 is more than the whole number of patents of this class which were granted from the establishment of the present office down to 1876.

This statement will be more significant to those who visited the Columbian Exhibition with a view of studying and examining the uses to which this agent was there applied. It would seem next to incredible, yet the fact confronts us that almost the entire display of electrical wonders at the Fair dates back scarcely more than ten years. There seems to be no place, either by day or night, where the eye did not see some application or manifestation of electrical energy. The blackness of night was turned into day by thousands of miniature suns—arc lights—while the tens of thousands of incandescent lights which artistically studded the architraves and cornices of the majestic buildings of the White City produced a scenic effect which was truly awe-inspiring and aided much in making the agricultural triumphs of the magnificent buildings of the fair, no less imposing by night than by day. Added to these were the electric fountains, whose changing rainbow hues will mark another triumph in scenical engineering, as well as the great search-lights, whose scintillating rays pierced deeper into space than was ever before known by any artificial light.

Just at this time, much attention is being given to the utilization of water for generating electrical energy. So exact is our knowledge of electrical transmission of power that the engineer can readily tell how far, under given conditions, power may be transmitted commercially. Hence the water powers of the country might be given a commercial rating; those nearest to where the power is required always taking highest rank, other things being equal.

In 1891, the most important test on long distance at transmitting power yet made was successfully carried out on the experimental line, constructed for the purpose of obtaining power from the Lauffen Falls, Germany, which was transmitted a distance of 108 miles for use in lighting and for pumping water for an artificial cataract at the exposition at Frankford. Three hundred horse power was transmitted through five copper wires, about the size of a common lead pencil. While the distance was greater than economic limits would require, yet the experiment showed the possibilities in electrical transmission of energy. Unusual interest has centered in this experiment and the future will doubtless witness many improvements based upon the successful experiments recently made in Switzerland and Germany, and from the wonderful demonstrations so recently witnessed at the Columbian Exhibition. Where steam power is used for generating electricity, the engine may be located near where the coal is to

be had or other fuel, and here a large central station for distribution may be erected, and factories and cities supplied at distances varying anywhere from five to fifteen miles, which distances are regarded in practice as quite satisfactory.

What shall we say of the application of electricity for the future? At best we can but wonder and conjecture. It is quite probable that we have as vague a conception of the future of electricity one hundred years hence as Tiberius Cavallo had one hundred years ago. There is every reason to believe that this accelerated ratio, which has so significantly marked the past decade, will be witnessed in years to come. If the efforts now making for the deriving of electrical energy directly from the fuel be successful, this step will unquestionably be the most important invention since man's inventive faculties were first brought into activity. And there is little doubt that this end will be obtained.

Municipalities contemplating the installation of their own electric lighting plants and other electrical works should move slowly, as the next decade will undoubtedly see a complete revolution in the present appliances.

Road Education.

That the subject of good roads is interesting people in all parts of the country is not surprising, considering what loss of energy, comfort, time and money is sustained by all classes on account of bad roads, or at least roads not nearly as good as they might be even with the appropriations made by towns and cities for building and sustaining public highways.

That several systems now in vogue, experience proves to be unsatisfactory, expensive and bad, there is no doubt.

Most of the loss sustained in maintaining roads is from want of knowledge as to the best methods.

The practice of many towns in allowing all who wish to work out their highway tax is but little better than highway robbery.

The use of road machines while apparently doing a large amount of work does not do the best work, as they do not discriminate in the material applied in grading the road, for they scrape up what happens to be at the roadside, which is usually loam or sand, that in wet weather makes mud and in dry weather dust, and soon finds its way back to where it comes from.

It is believed that with the amount of money annually appropriated for highways, if intelligently and honestly expended, our roads should be infinitely better than now, and this would lead to a recognition of the great comfort and advantage, to all classes, of good roads, and thus encourage greater appropriations to meet the demand for still more improvement. Hence the need of more knowledge in road building.—*Benjamin P. Ware, in Good Roads.*

Thorough Drainage.

Thorough drainage does not belong to pioneer farming nor to a cheap and temporary plan. It involves capital and labor and demands skill and system. It cannot be patched up like a brush fence, to answer the purpose from year to year, but every tile must be placed where it will best perform its office for a generation. In England the rule and the habit in all things is thoroughness and permanency, yet the first and greatest mistake there in drainage was shallowness, and it has required years of experience and millions of dollars to correct this mistake. If we commit the same folly, as we are very likely to do, we cannot claim even the originality of the blunder and shall be guilty of the folly of pursuing the crooked paths for their exploration, instead of the straight highway which they have now established. To be sure the controversy as to the depth of drains has by no means ceased in England, but the question is reduced to this: whether the least depth shall be three or four feet. One party contending that for certain kinds of clay a three foot drain is as effectual as a four foot drain, and that the least effectual depth should be used, because it is the cheapest; while the general opinion of the best scientific and practical men in the kingdom has settled upon four feet, as the minimum depth where the fall and other circumstances render it practicable. At the same time, all admit that in many cases a greater depth than four feet is required by true economy. It may be seen at first that a controversy as to one additional foot in a system of drainage depends upon a very small point, but, a little reflection will show it to be worthy of careful consideration. Without going here into a nice calculation it may be stated generally as an established fact that the excavation of a ditch, four feet deep, costs twice as much as that of a ditch three feet deep. Although this may not seem creditable to one who has not considered the point, yet it will become more probable on examination, and very clear when the actual digging is attempted. Ditches for tiles are always opened widest at the top, with a gradual narrowing to near the bottom, where they should barely admit the tile. Now the addition of a foot in depth is not as it would perhaps at first appear, merely the addition of the lowest and narrowest foot, but rather of the topmost foot. In other words, a four foot ditch is precisely a three foot ditch in size and form with an additional foot on the top of it, and not a three foot ditch deepened an additional foot.

The lowest part of a four foot ditch is raised one foot higher to get it upon the surface than if the ditch were three feet deep. In clays and most other soils the earth grows harder as we go deeper, and this consideration in practice will be found important. Again, the small

amount of earth from a three foot ditch may lie conveniently on one bank near its edge, while the additional mass from a deeper one must be thrown further. And then is to be added the labor of replacing the additional quantity in filling up.

On the whole the point may be conceded that the labor of opening and finishing a four foot drain is double that of a three foot drain.

Without stopping here to estimate carefully the cost of excavation and the cost of tile, it may be said that almost upon any estimate the cost of labor even in a three foot drain in this country far exceeds the cost of tile. But if we call them equal then if the additional foot of depth costs as much as the first three feet we have the cost of a four foot tile drain fifty per cent more than that of a three foot drain. In other words, 200 rods of four foot drain will cost as much as 300 rods of three foot drain. This is probably as nearly accurate as any general estimate that can be made at present. The principles upon which the calculations depend having thus been suggested it will not be difficult to vary them so as to apply them to the varying prices of labor and tiles, and to the use of the plow or other implements propelled by animals or steam, when applied to drainage. The earliest experiments in thorough drainage were at a very small depth, two feet being, for a time, considered very deep, and large tracts were underlaid with tiles at a depth of eighteen and even twelve inches. It is said that 10,000 miles of drains two feet deep and less were laid in Scotland before it was found that this depth was not sufficient. Of course the land thus treated was relieved of much water and experimenters were often much gratified with their success but it may be safely said that there is no advocate known to the public in England for a system of drainage of less than three feet, and no one advocates a system of drainage of less than four feet deep, except in some peculiar clays.

The general principal seems well established that depth will compensate for width, or in other words, that the deeper the drain the farther it will draw. This principle, generally correct, is questioned when applied to peculiar clays only. As to them all that is claimed is that it is more economical to make the drains but three feet, because they must, even if deep, be near together, nobody doubting that if four feet deep or more, and near enough, they will drain the land.

There can be no doubt that with four foot drains at proper distances apart all soils, except some peculiar clays, may be drained even without reference to the changes produced in the mechanical structures of soils by the operation. There is no doubt, however, that all soils by the admission of air which must always take the place of the water drawn out and by the percolation of water through them are rendered gradually more porous. Added

to this the subsoil-plow, the follower of drainage will break up the soil to considerable depth and thus make it more permeable to moisture. But there is still another and more effective aid which nature affords to the land drainer upon which might be otherwise impracticable clays.

In discussing the subject of the depth of drains we are not unmindful of the fact that in this country the leaders of the drainage movement have achieved their truly striking results by the use of tiles laid at from two and one-half to three feet deep. It is stated that under-drains laid two and one-half and three feet deep have changed, in their character, lands from cold, wet and unproductive wastes in many cases, to fertile and productive fields of corn and wheat. We all know of fields drained only with stone drains two feet deep that have been reclaimed from wild grasses and rushes into excellent mowing fields. In England and Scotland thousands of miles of shallow drains were laid and were for years quite satisfactory. These facts speak loudly in favor of drainage in general. The fact that shoal drains produce results so striking is a stumbling block in the progress of a more thorough system. It may seem like presumption to say to those to whom we are so much indebted for their public spirit as well as private enterprise, that they have not drained deep enough for the greatest advantage in the end. It would seem that they should know their own farms and their own results better than others. We propose to state with all fairness the results of their experiments and to detract nothing from the credit which is due to the pioneers in a great work.

We cannot, however, against the overwhelming weight of authority and against the reasons of deeper drainage which to us seem so satisfactory, conclude that even three feet is in general deep enough for underdrains. Three foot drains will produce striking results on almost any wet lands, but four foot drains will be more secure and durable, will give wider feeding grounds to the roots and filter the percolating water, warm and dry the land earlier in spring, furnish a larger reservoir for heavy rains and indeed more effectually perform every office of drains.

A Cause for Unsuccessful Expenditure.

The erroneous idea that the evils of an undrained, wet, clayey soil can be remedied by a large quantity of materials has caused a large part of the costly and unsuccessful expenditures in making broken-stone roads.

The Whole Science.

The whole science of artificial road making consists in making a solid, dry path on the natural soil and then keeping it dry by a durable waterproof coating.

New Methods of Sewage Disposal.

The possibilities of electricity seem to be well-nigh illimitable. It has long been known that the action of the electric current on sewage causes a change and renders it harmless. The expense of the operation has always been a hindrance to its adoption.

The London *Lancet* discusses very extensively two systems of sewage disposal by electricity—one the Webster and the other the Hermite process. In the former the sewage itself is directly exposed to the current, while in the latter the sewage is changed by sea water which has been first acted on by the electrical current. In the Webster system, ordinary sewage is made to pass through channels in which fully charged electrodes are set. The sewage is thus presented to the current in a nascent state. The Hermite system was tested in the town of Worthing, England, where illness from imperfect sewerage had aroused the town council to the needs of improved methods.

Sea water contains calcium sulphate, magnesium sulphate and chloride, and sodium chloride. After electrolysis there is a slight loss of the magnesium and both oxygen and chlorine are set free. The sea water passes through a channel and comes in contact with the sewage and waste water. The report of *The Lancet* investigation committee is very long and carefully prepared and it shows that this electrolysed sea water, which has strong bleaching properties, causes the liquid parts of the sewage to become innocuous at once, while the solid parts must be exposed for a time to the fluid. The number of bacteria is reduced almost to nil and indeed cultures made with sewage which had been treated by this method were in many cases almost sterile. This fluid may also be used for cleaning in rooms and especially in hospitals, as it is harmless and very efficacious. Each closet and place where sewage is cast out must be supplied with Hermite fluid, and if acted on by the fluid the sewage becomes sterile and harmless.

There is no statement made as to the expense of this method of sewage disposal, but it must undoubtedly be inexpensive in places where sea water can be obtained. Its adoption by a small town must be looked on as a distinct advance in the difficult problem of sewage disposal.

There is no way by which money can be expended to better advantage than by putting in tile drains, particularly where there are spring hills or a moderate descent, and emptying into a culvert at the lowest points. It is surprising that this plan is not more generally adopted.

Our fathers of seventy-five or a hundred years ago built long lines of turnpikes straight over hills and along valleys. It has since been ascertained that it is often nearer round a hill than over it, affording an opportunity for a comparatively level road.

Small Iron Bridges.

As the construction of small iron bridges is becoming so frequent in township municipalities, the following suggestions as to the requirements of good bridges may be of service to municipal councillors in order that they may intelligently examine the article which is being supplied to them by the bridge company.

1. All the connections and details of the several parts of the structures should be of such strength that upon testing, ruptures will occur in a body of the members rather than in any of their details or connections.

2. Preference should be had for such details as shall be most accessible for inspection, cleaning and painting. No close sections should be allowed.

3. The webs of plate girders should be spliced at all joints by a plate on each side of the web.

4. All web-plates should have stiffeners over bearing points and at points of local concentrated loadings.

5. The pitch of rivets in all classes of work should never exceed six inches, or sixteen times the thinnest outside plate, nor be less than three diameters of the rivet.

6. The rivets used should generally be five-eighth, three-quarters and seven-eighths inches in diameter.

7. The distance between edge of any piece and the centre of a rivet hole should never be less than one and one quarter inches except for bars less than two and one-half inches wide, when it is practicable it should be at least two diameters of the rivet.

8. In punching plate or other iron, the diameter of the die shall in no case exceed the diameter of the punch by more than one-sixteenth of an inch, and all holes should be clean cuts without torn or ragged edges.

9. The rivets when driven should completely fill the holes. The rivet heads should be round and of a uniform size for the same sized rivets throughout the work. They should be full and neatly made and be concentric to the rivet hole and thoroughly pinch the connected pieces together.

10. Wherever possible all rivets should be machine driven. The machine should be capable of retaining the applied pressure after the upsetting is completed. No hand-driven rivets exceeding seven-eighth inches in diameter should be allowed.

11. Field riveting should be reduced to a minimum or entirely avoided where possible.

12. The effective diameter of a driven rivet will be assumed the same as its diameter before driving. In deducting the rivet holes to obtain net sections in tension members the diameter of the rivet-hole will be assumed as one-eighth inch larger than the undriven rivets.

13. When members are connected by bolts which transmit shearing strains the holes should be reamed parallel and the bolts turned to a driving fit.

14. The several pieces forming one built member should fit closely together and when riveted shall be free from twists, bends or open joints.

15. All joints in riveted tension members should be fully and systematically spliced.

16. In compression members abutting joints with planed faces should be sufficiently spliced to maintain the parts accurately in contact against all tendencies to displacement.

17. In compression members abutting joints with untooled faces must be fully spliced as no reliance should be placed on such abutting joints. The abutting ends should, however, be dressed straight and true so there will be no open joints.

18. All the angles filing and splice plates on the webs of the girders and riveted members should fit at their ends to the flange angles, sufficiently close to be sealed when painted against the admission of water, but need not be tool finished.

19. Web plates of all girders should be arranged so as not to project beyond the faces of the flange angles nor on the top be more than one-sixteenth inch below the face of these angles at any point.

20. Wherever there is a tendency for water to collect, the spaces should be filled with a suitable water-proof material.

21. In girders, with flange plates, at least one-half of the flange section shall be angles, or else the largest-sized angles should be used.

22. In lattice girders, the web members should be double and connect symmetrically to the web of the flanges.

23. The compression flanges of beams and girders shall be stayed against transverse crippling when their length is more than thirty times their width.

24. The unsupported width of plates subjected to compression shall not exceed thirty times its thickness, except cover-plates of top chords and end posts, which will be limited to forty times their thickness.

Road Improvement

BY P. K. HYNDMAN, P.L.S., M.C.S.C.E.

(Extract from paper presented at meeting of Ontario Good Roads' Association.)

THE DIVISION OF WORK AND FUNDS.

The work is of two kinds, viz., 1st, improvement, and 2nd, maintenance. The funds for and the expenditure on each should be kept entirely distinct. For the first the issue of municipal debentures, to run at least fifty years, seems the most desirable way of obtaining the necessary money. The payment of the interest and repayment of the principal would be provided for by an assessment on real property. For the second, the levying of a special and direct road-tax which will prove practical and satisfactory. Until a better one can be devised and legalized, the present statute labor tax must be utilized. Where it is possible the days of labor should be commuted into a money payment. If this cannot be done the labor should be thoroughly and suitably performed under proper direction and strict supervision.

SELECTION OF ROADS.

All the roads should be classified as county and township roads. They may be both metalled and unmetalled. Those which it may be deemed advisable to improve should be fixed upon, and the remainder should be repaired to the extent required, or, as the funds may allow. It will probably be found that the main travelled roads should be the first to be improved, either throughout their whole length or for a certain number of miles from the county or other large town or city, the branch roads being for the present put in a fair state of repair.

SCHEDULE OF IMPROVEMENT WORK.

Improvement to the roads should consist of the following kinds of work: (1) Alteration of alignment; (2) Reduction of gradients; (3) Thorough drainage, both under and on the surface; (4) Special repairs or renewals and reconstruction of bridges, culverts and cross-drains, extensive repairs to slopes and the clearing out of water courses, both inlets and outlets; (5) The formation of the surface of the carriage way to a proper cross section, and its thorough consolidation; (6) The procuring of the best material obtainable as road metal, and the laying of it on the road by steam roller in one or two consecutive coats; (7) The utilization of the full width of the road allowance for carriage and foot ways and for rows of trees for shade and shelter; (8) The planting out of trees along the road and the establishment of nurseries for seedlings or small saplings.

MAINTENANCE AND REPAIRS.

The chief points in the system of road repair, adopted by the public works department of India, are: (1) Renewal of the metalling by a fresh coat, mile by mile, and (2) the constant maintenance by

petty repairs of the carriage way, slopes, bridges, etc., the metal required for petty repairs being stacked on the other side of the road from that on which the material for the new coat was stacked. This is the best method that can be devised for the maintenance of improved roads. The repairs to existing or unimproved roads should be carried out in such a way as to bring them up gradually to the same condition as the improved roads, as far as that can be done, so that no work will have to be undone or be thrown away, when funds are available to improve them. The repairs to unmetalled roads should be done with the same object in view. The surface will require more constant attention to keep it free from ruts and holes, and if this is properly done vehicles will not leave the central carriage way to pass over a harder or smoother surface at the sides, thus destroying the whole road allowance. Timely repairs are essentially necessary to keep the road surface in a proper condition and secure economy.

RAILWAYS ON THE ROADS.

A system has been recently devised and put into practice of constructing railways, similar in equipment and operation to the street railway in the towns and cities, along the public roads and several have been made and opened for traffic for short distances. They serve in one case to connect neighboring towns together, and in another to take up agricultural products at the farm gates and bring them into the markets of the nearest city or town. For this latter purpose the system has been called "Radial Railways." The writer, more than 30 years ago, suggested the construction of light railways for steam or horse power on the public roads, but the commercial conditions of the country were not ripe for a project of that nature. Since electricity, however, has been utilized as a motive power the practicability of such a system has become assured and the construction and successful operation of one or two of these railways has proved this. As at present devised, however, the system has one objectionable feature, viz.: that it interferes with the ordinary vehicular traffic, and tends to destroy the metalled surface of the carriage-way. As the system is likely to be extended rapidly from all the large centres of population into the surrounding country it is very necessary, especially as the roads are to be improved, that the rural municipalities should be careful to avoid granting the franchise to these railway corporations for the construction of such lines, which will have a detrimental effect on both the road and the traffic.

THE BEST POSITION FOR THE RAILWAY.

The 66 feet of road allowance should consist of (1) a central carriage-way, (2) spaces on each side for rows of trees and (3) outside these sufficient widths for foot-ways. On a country road one foot-way is enough for pedestrian travel. The outer

width on one side should be utilized for the electric railway. The advantage of this arrangement would be two-fold. First, the passing of the electric car would neither interfere with vehicular traffic in taking up space or in frightening horses, nor disturb or destroy the road surface, and second, the railway could always be kept in good order, consequently, costing less for maintenance besides avoiding jolting over loose stones and the cars could be run at a greater speed and on more regular time. These advantages are of the highest importance by securing safety to the travelling public and in the saving resulting in less repairs both to the road and the railway.

If the foregoing suggestions for the division of the road allowance were fully carried out the whole Province could be provided, not only with good roads and a house-to-house railway system, but with magnificent avenues of beautiful and valuable trees, and with electrical communication and frequent postal and parcel delivery at almost every house and hamlet. The appearance of the face of the country would be entirely changed, and the present isolation and loneliness of the rural population would become a thing of the past. The increase to the traffic on both the road and the railway resulting from such facilities would cause a great impetus to trade and business generally, and to an extension of agriculture, and last, though not least, it would contribute to the enjoyment of life, and to the raising of a higher moral and intellectual standard, and the inculcation of a wider knowledge and broader and more liberal ideas together with the protection of good-will amongst all classes. May the day soon come.

The Queen's Highway.

It is well known that for soft or sandy ground the broad tire is much better than the narrow one. It does not sink so deeply, for which reason the same load can be drawn with less horse power. On all soft roads and soft stretches the owner of the vehicle would find the tire proportioned in width to the weight of the load to be decidedly to his own advantage in traction force to be expended, while on the hard roads he would be no worse off, though abstaining from the commission of a great injury on the street pavements. On all kinds of pavements the narrow tire works so much mischief that its extent is out of all proportion to the amount of money necessary to make the change in the wheels. It is a moderate estimate to place the shortening of the life of a pavement by narrow tires at one-third.

Doubtless a macadamized road is the best, but the cost makes them impractical in some localities except in cities and main streets of large towns.

LEGAL DEPARTMENT.

H. F. JELL, SOLICITOR,
EDITOR.

The Drainage Act, 1894.

Continued from January.

A far-reaching and important provision is that contained in section 23 of this act. The section quoted provides that in case no notice of intention to make application in the proper quarter to quash a by-law passed pursuant to section 19 of the said act within the time limited in the notice attached to the by-law, or in the event of service of the notice, and the application to quash the by-law is not made, or is made unsuccessfully, the by-law or so much thereof as is not quashed, *so far as the same ordains, prescribes or directs anything within the proper competence of the council to ordain, prescribe or direct*, shall, notwithstanding any want of form or substance, enter in the by-law itself or in the time or manner of passing the same, be a valid by-law. The words in Italics were not contained in the parent section of the Consolidated Municipal Act, 1892, section 572. In consequence of their insertion, the operation of the section as at present enacted is somewhat more restricted than formerly. Still, in effect, it provides that that which by reason of some substantial defect is utterly void when passed, afterwards becomes a valid by-law in consequence of the neglect of some person interested, within ten days after the final passing of the by-law to give notice of his intention to make application to quash the by-law. In the case of an ordinary by-law, if the application to quash be not made within the time in that behalf limited, the court will not entertain it, but the validity of the by-law is subject to be incidentally questioned in any action or proceeding that may afterwards arise in reference to it. The latter does not appear to be the case where the by-law called in question is one passed pursuant to the provisions of the Drainage Act, 1894, and the notice of application to quash the same has not been served within the time limited. It is to be observed that more is required in the case of quashing a drainage by-law than any other description of by-law. All that is in general necessary is that the application to quash should be made within one year after the passing of the by-law, see section 333 of the Consolidated Municipal Act, 1892, and in the case of a by-law promulgated or registered, no application can be entertained after the expiration of three months from the promulgation or registration. See section 334 and 352 of the last mentioned act. Section 24 of the drainage Act 1894, and following sections make provision for a Court of Revision, so called because it is its duty on proper application, to revise the assessments for the drainage works. If the council consists of five member only, they shall constitute the court, and if of more than five

members, the council shall appoint five of its members to constitute such court. Every member of such court of revision before entering upon his duties shall subscribe and make the oath set forth in section 26 of said act, before the clerk of the municipality. Three members of the court shall constitute a quorum, and the majority of a quorum may decide all questions before the court. It is well to bear in mind that section 27 of the said act enacts that no member of the court shall act as a member thereof while any appeal is being heard respecting any lands in which he is directly or indirectly interested, except roads and lands under the jurisdiction of the municipal council. The court of revision is the creature of the statute constituting it, and its jurisdiction is limited to the exercise of the powers, expressly given to it by the statute. The clerk of the municipality shall be the clerk of the court, and is empowered to issue subpoenas to witnesses in the form given in section 28 of the act, and any witness, who without good and sufficient reason fails to attend in obedience to such subpoena, he shall incur the penalty of \$20 to be recovered in the manner set forth in section 31 of said Act. Those who personally or by their agents may appeal against a drainage assessment are any owner of land, or where roads are assessed in the municipality any ratepayer, complaining of overcharge in the assessment of his own land, or any roads of the municipality or of the undercharge of any other lands, or of any road in the municipality, or that land or road within the area described in the petition which should have been assessed for benefit, have been wrongly omitted from the assessment, or that land and road which should have been assessed for outlet liability or injuring liability, have been wrongly omitted. Notice of complaint or appeal that he considers himself aggrieved for any or all of the causes aforesaid, must be given by the appellant or his agent to the clerk of the municipality at least ten days prior to the first sitting of the court of revision. Pursuant to subsection 10, of Section 569 of the Consolidated Municipal Act, 1892, the time for giving their notice was eight days prior to the sitting of the court of revision. The court of revision may, though such notice of appeal be not given, *by resolution passed at its first sitting*, allow an appeal to be heard on such conditions as to giving notice to all persons interested or otherwise as may be just. The words in italics are new and it would be well for members of courts of revision of the kind under discussion to bear them in mind.

To be continued.

The commissioner recently appointed to enquire into the financial affairs of the village of London West has audited the accounts of the village since 1884. The report showed that the former treasurer of the village, who was replaced in May 1894, is short in his accounts with the municipality \$904.

NOTES.

It has recently been decided by the common pleas divisional court in the case of the corporation of London west vs. Bartram, that the removal of a municipal officer may be by a resolution, it not being essential that a by-law should be passed for such a purpose.

"In *re* Burnham," the court of appeal has decided that there can be no interference whatever under the act respecting water privileges, R. S. O., Chap. 119, with an occupied mill privilege, and that the county court judge has no jurisdiction to authorize works that would affect the mode in which the occupied mill privilege has, up to the time of application, been used. Also that an order made under the act must state specifically the height of the authorized dam.

The same court held in *Garfield vs. city of Toronto* that where a sewer built without any structural defect, is of sufficient capacity to answer all ordinary needs, the corporation is not liable for damages caused, as a result of an extraordinary rain fall, by water backing into the cellar of a person, compelled by by-law to use the sewer for drainage purposes.

A change in the law as to ditches and water-courses made by the Ditches and Watercourses Act, 1894, is worthy of notice. The former Act provided, in case a ditch or drain constructed under the provisions of the act, became out of repair any owner whose duty it was to maintain and keep in repair any portion of such ditch might serve a notice on the person or persons whose portion or portions of such ditch or drain were out of repair, to put such portion or portions in a proper state of repair within 30 days from the receipt of such notice. In case of non-complaint with due notice the person causing the service of same was permitted to make application to his municipality to have the repairs carried out and completed. When such application was made the council were required to order an examination of the ditch or drain, to be made by the engineer or by some other person appointed by the municipality, who, within twelve days from the time of ordering the same was required to file his report with the clerk of the municipality. If the engineer or other person found the complaint well founded the council was required to proceed and let the work as provided in sec. 15 of the Act. By sec. 35 of the act of 1894 the procedure in the circumstances under discussion are rendered less cumbersome, the necessity for the application by the person serving the notice on the council before calling the engineer to examine the drain and, if necessary, let the work, is entirely dispensed with and the engineer can be summoned directly by the person serving the notice on the default of the recipients of the same.

LEGAL DECISIONS.

MERRIT VS. THE CITY OF TORONTO.

This was an action brought against the city of Toronto for a mandamus to compel the issue to the plaintiff of a license permitting him to carry on the business of an auctioneer under the terms and conditions of the by-law of the city regarding licenses to auctioneers, and for damages by reason of the wrongful refusal to issue such license.

The defence set up was, that the plaintiff was a person of notoriously bad character and ill-repute, into whose custody the goods and moneys of the public should not be entrusted, and that they were therefore justified in refusing to issue a license to him.

It was held that section 495 sub-sec. 2 of the Municipal Act, R. S. O. ch. 184, which empowers any city, etc., to pass by-laws for the "licensing, regulating and governing of auctioneers, etc.," is only for the purpose of raising a revenue and does not confer any right of prohibition so long as the applicant is willing to pay the sum fixed for the license. Where, therefore, a city refused to license the plaintiff as an auctioneer on the ground that he was a person of notoriously bad character and ill-repute, a mandamus was granted compelling the issue of the license to him.

THE CANADIAN PACIFIC RAILWAY COMPANY VS. THE CORPORATION OF THE TOWNSHIP OF CHATHAM.

Under a by-law passed under the provisions of section 569 and 576 of the Municipal Act, R. S. O. ch. 184, a drain was built in the defendant's township, which benefited lands in an adjoining township, and which, therefore, had been assessed for a portion of the cost. After the drain was built it was found that an opening through the plaintiff's embankment which, when the by-law was passed, was deemed sufficient to carry off the water brought down by the drain, was insufficient therefor, whereby the adjoining lands were flooded and actions were threatened against the defendants. To prevent such actions and to enable the water to be carried off an agreement was entered into between the plaintiffs and defendants under their respective corporate seals, whereby the plaintiffs were to build and the defendants to pay for a culvert through the embankment sufficient to carry off the water. The culvert was built by plaintiffs at a cost of over \$200 and on its completion was accepted and used by defendants, who, however, refused to pay for it on the ground that the agreement for its construction was *ultra vires*. No by-law had been passed authorizing the construction of the culvert, nor were any of the proceedings required by sections 569-582 of the Municipal Act, taken.

Held by Street, J., and affirmed by the Divisional Court, Rose J. dissenting, that the work in question was new work and therefore did not come within section 573; but came within sub-secs. 1 and 3 of sec. 583; and inasmuch as the cost exceeded \$200 no liability could arise until the proceedings pointed out by sec. 585 had been complied with, namely: the proceedings required by secs. 569-582, and as these had not been taken the agreement was invalid and could not be enforced.

Per Rose, J., there being an executed contract for the performance of work within the purposes for which the corporation was created, and the defendants having adopted and received the benefit thereof, were liable.

IN RE-CONFEDERATION LIFE ASSOCIATION.

Upon an appeal of a Life Company from the assessment as income of interest earned upon investments of their reserve funds, it was contended that by R. S. O., chapter 124, section 35, as amended by 57 and 58 Vict. (D) chapter 20, section 12, the company was compelled by law to set apart an amount equal to 4 1-2 per cent. interest upon the amount of the reserve required to be held by the company under the R. S. C., chapter 124; that this was a compulsory payment, and therefore it was proper that such sum should be deducted from the interest earnings of the company for the year, and only the balance of the amount earned for interest assessed as income.

Held, that the statute did not appropriate, by that name, the interest earned by the reserve fund, and direct such interest to be set apart. The statute only directed that out of interest earned by the company a sum equal to 4 1-2 per cent. on the amount of the reserve shall be added to the reserve.

Held, also, that the amendment of R. S. C., chapter 124, section 35; by 57 and 58 Vict. (D), chapter 20, section 12, does not alter meaning or legal effect of the original statute; the language used only more clearly expresses the intentions of the legislature. The county judge's judgment upon the same point in 1893 (prior to amendment of statute) affirmed.

Appeal dismissed, and assessment of whole interest earnings without the deduction claimed, confirmed.

ROBINSON VS. BEECRAFT.

This action involved the point whether it was necessary for a municipality to have a by-law prohibiting animals running at large, or whether it was necessary to have a by-law permitting animals to run at large. Defendant's mare was turned loose on the commons and broke several times into the field of plaintiff, and kicked a valuable colt, which died from the effects of the kick. The mare had also been impounded by plaintiff. It was

claimed by the defence that plaintiff's fences were not lawful fences, but the act respecting pounds provides that the owner or occupier of land is made responsible for any damage caused by an animal under his charge and keeping, and the owner of any animal not permitted to run at large by municipal by-law is made liable for damages resulting from such running at large, although the fence is not the height required by such by-law. The township of Southwold did pass a by-law regulating the impounding of cattle, but it did not make provision for permitting animals running at large, and it was held in this case in the absence of such permission that the defendant was liable for the inquiry which caused the death of plaintiff's colt.

PORT ELGIN PUBLIC SCHOOL BOARD VS. EBY.

The plaintiffs treasurer, who died before action, and two sureties on his behalf executed a joint and several bond in favor of the plaintiffs, conditioned that he should receive, safely keep, and faithfully disburse all school moneys collected, and deliver up to the plaintiffs *on demand* all moneys not paid out.

Held, that there could be no recovery against the sureties upon the bond without showing a demand personally made upon the treasurer, and a demand upon the administrators of his estate was of no avail.

WILSON VS. ELGIN.

The decision in this case as reported in the WORLD for January has been confirmed by the supreme court. The question for decision was whether or not, under the High School Act of 1891, 54 Vic., chapter 57 (Ont.), a county council can detach a minor municipality from a high school district except in the case where a high school is established or discontinued under section 8 of the act. In this case the township of Aldborough and other municipalities were by by-law of the county council of Elgin detached from the high school district then to which they were attached and left unattached to any other, thus freeing it from liability for taxation for high schools, although the appellant contended the children of the township retained the privilege of attending the high schools. The Ontario courts held the by-law of the county council valid. After hearing counsel for both parties the supreme court gave judgment dismissing the appeal with costs.

* * *

By-laws for altering the boundaries of school sections cannot be passed later than the first day of May in any year. No by-law for this purpose should be considered until all persons affected by the change have been notified as the council may direct. The persons affected would include those whose property is included in the application for the alteration, and also the trustees of all the sections interested.

ARTHUR VS. THE G. T. RAILWAY COMPANY.

If water precipitated from the clouds in the form of, rain or snow, forms for itself a visible course or channel, and is of sufficient volume to be serviceable to the persons through or along whose lands it flows, it is a watercourse and for its diversion an action will lie.

Where such a watercourse has been diverted by a railway company in constructing their line without filing maps or giving notice, the land owner injuriously affected has a right of action and is not limited to an arbitration.

For such diversion the land owner in the absence of an undertaking by the company to restore the watercourse to its original condition, is entitled to have the damages assessed as for a permanent injury.

RE STEVENS ET AL AND TP. OF MOORE.

A township council has power, under section 586 (2) of the Consolidated Municipal Act, 55 Vic., chapter 42, to maintain and repair a beneficial drain, originally constructed out of general funds, at the expense of the local territory benefited, by passing a by-law to that effect, without a petition therefor. And although such a by-law refers to lots "to be benefited," it does not bring the work within the category of drains to be constructed under section 569 of the act.

Application to quash the by-law in question being made by several persons, who among them owned one of the lots assessed, alleging that they were not benefited by the original drain and could not be by its continuance and repair, and that the amount charged against their lot was not duly apportioned among them.

Held, that they should have applied to the court of revision for relief; and not having done so, and the work having all been done and the benefit of it enjoyed, this court would not interfere to declare the by-law invalid.

Held, also, having regard to section 571 (2) that the applicants had sufficient notice of the by-law, service having been effected upon a grown-up person at the house where they all lived as members of one family.

Held, also, that upon this application the court would not inquire what other persons were not served who were not seeking relief, nor consider irregularities or errors in the assessment of such others.

It appeared on the face of the by-law that the drain in question was an old one, constructed out of general funds, and out of repair; and although the assessment was referred to as on the property "to be benefited," yet the same clause spoke of it as "upon the property benefited."

Held, that the by-law was not bad on its face. In drainage matters the policy of the legislature is to leave the management largely in the hands of the localities, and the court should refrain from interference, unless there has been a manifest and undisputable excess of jurisdiction, or an undoubted disregard of personal rights.

QUESTION DRAWER

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

W. A. M.—In your January issue article on "assessors" you state that if lots are returned to the county treasurer for non-payment of taxes, with an imperfect description he is unable to enter them up in his books until this omission is attended to, etc. Would you kindly tell me where you find your authority whereby any person has power to vary, alter or in any way interfere with the statements contained in the assessment roll after the same has once been finally revised or corrected by the county judge?

County Treasurers are entitled to sufficient information concerning all lots returned to them for non-payment of taxes, to enable them to make intelligent entries in their books.

We remember one instance in which a return was sent to a county treasurer in which the land was described as part lot A, 1-5 of an acre, lot A, was sub-divided into village lots, and the county treasurer was unable to make the entry against the proper lot. The assessor had in the meantime left the municipality, and the clerk had considerable difficulty in procuring the necessary information. We admit that this information might have been furnished to the treasurer in the regular way under section 141 of the act.

We believe that county treasurers are not doing more than their duty, if on examination of returns received from the local clerks, it is found that any lots are imperfectly described, they should at once draw the attention of the local council to the matter, for the purpose of having a correct description furnished, with a view to entering up the taxes against a particular lot.

A reference of council proceedings published from time to time shows that this is a matter of general complaint, descriptions, which, owing to the lapse of time, cannot be corrected, causes local councils to order special enquiries to be made, and in many instances they find it necessary to remit the taxes. No authentic information being available. See sections 145 and 155, Consolidated Assessment Act.

R. M.—In the township of Tossoronto, the north-east portion of the township has been known as the Pine Plains. The timber is now removed leaving the land almost useless. The roads have in some places not been made on the proper road allowance, but where the road was difficult to build a deviation was made upon the adjoining land. Recently a lot of 100 acres where a deviation road has been in use was sold for \$50. The present owner has given notice to the council that he is going to build a fence around his farm and thereby close up the present road. The said owner offers to sell to the council that portion of said lot now in use as roadway, but wants as much money for less than one acre on the corner of said lot as he pays for fifty acres.

1. Can the present owner close the road now in use? Said roadway has been in use for five or six years.

2. Provided the council is willing to buy the roadway (which will only take a small strip of the corner of lot) can the owner collect more than the land is actually worth?

1. No.

2. No. In case of dispute, the amount should be determined by arbitration.

E. D. C.—A nominee for councillor resigns his candidahship the following day after nomination. Can he legally withdraw that resignation either within or after the time limit for resigning?

No.

G. S.—*Re* auditors duties. See section 263, subsection A, of 2. They shall report on treasurers' bonds, etc., and the report shall show what cash balance, if any, was due by the treasurer to the municipality at the date of the audit.

What does the date of the audit mean? Is it the 31st of December in the preceding year, or is it the actual day upon which the audit has been completed, say the 9th of February as was the case in this municipality this year.

Subsection 1, section 263, defines the date of audit of accounts as the 31st of December, preceding appointment of auditors. This means that their report must show the condition of the finances of that date, in order to be correct it is always advisable for auditors to check the treasurer's cash accounts up to the day on which they complete the audit.

H. M.—1. If a township board of health pass a resolution in accordance with 56 Vic., chapter 44, sub-section 2 of section 1, has a physician to affix placard free of charge? If he can charge how much can he charge?

2. The roads being blocked a traveller puts down a farmers fence, leaving it down, and others follow. The farmer applies to council for damages and requests the council to have fence put up in the spring. Are the council liable for damages, and have they to put up his fence? Where is the act to be found giving permission to put down a fence?

1. The attending physician is not entitled to remuneration.

2. Council not responsible for damages or for putting up fence.

R. C.—Sec. 118 of Public Schools Act, 1891, is as follows:—All sums levied and collected by the municipal council of any township for school purposes shall be paid over to the secretary-treasurer of the board of trustees, without any deduction whatever, on or before the 15th day of December in each year.

I notice that this section is placed among others under the heading of school debentures.

1. When the debentures are signed by the reeve and treasurer of the township has the money to pass through the hands of the secretary-treas. of the school section, or should the township treasurer pay them?

2. Does this section refer to all rates for school purposes?

3. On the 1st of August the trustees send in and estimate of money required to be raised by rates. A rate is struck sufficient to cover the amount asked for, but by the 15th December not more than one half is collected and the council extend the time until Feb. 1st. Must the council pay over on December 15th the whole amount levied or only so much as is collected?

1. The township treasurer pays debentures. The secretary-treasurer of school section does not handle the money.

2. Yes, except debenture rates or rate levied under section 120 for school house or site.

3. Only such sum as is collected.

SUBSCRIBER.—How much are clerks of municipalities allowed for recording births, marriages and deaths, and by whom should they be paid?

2. Have property owners who own property in different road beats power to group their assessments for the purpose of performing their statute labor on the road beat in which they live?

1. Ten cents each to be paid by municipal treasurer on certificate of inspector of the Registrar Generals department. See R. S. O. chapter 40, section 30.

2. Property to the extent of 200 acres belonging to one person may be grouped for statute labor purposes. See Assessment Act, section 100, subsection 2.

In addition to our answer to A. D. C. in the March number we wish to say that under section 109 of the School Act, the council is required to levy upon the property of the public school supporters of the whole township for the benefit of the public schools as therein provided. If there is no school in the section referred to, the ratepayers would not have to pay school rates, not having a public school to support.

M. D.—A ratepayer living over three miles from school, can he be forced to pay taxes.

In unorganized districts such ratepayer is exempt unless he sends a child to the school, but all lands within the three-mile limit are assessable. In organized townships, the trustees may exempt indigents and under section 172 trustees may remit school fees paid to neighboring section. With these exceptions ratepayers can be forced to pay school taxes.

J. R.—A township divided into four wards has in the past levied a general rate over the township to meet the annual appropriation for maintenance of roads in the township, the councillors for each ward being road commissioner in his ward, the council appropriating a sum annually for each ward out of the aforesaid general levy. It is now proposed to levy a special rate in each ward for the maintenance of the roads and bridges in each ward, which will likely require a different rate for each ward, the amount to be expended depending on the judgment of the councillor for each ward. Can a special rate be levied and collected in each ward, or must the ward appropriations be taken from a general levy by a uniform rate all over the township?

A special rate cannot be levied and collected in each ward of a township for road improvements. The ward appropriations must be taken from the general fund. This question appears to be the result of a suggestion contained in article on "the Township Council System" published in February, which reads: If the ward system is to be continued, the road expenditure of the whole township not including the cost of bridges should be raised annually, in the wards in which the money is expended. We believe that the ward system should be abolished, but until this is done the Municipal Act should be amended to allow road expenditure to be raised in each ward where the system is in force.

EXETER.—We have two churches here, Episcopal and Methodist, situated close by each other. The Methodist Church commences at 10.30 a. m. and at 6.30 p. m., the Episcopal commences at 11 o'clock a. m. and 7 p. m., the Episcopal Church has a chime of bells and they are kept ringing for half an hour before service to the great annoyance of the Methodists.

Can they be stopped so as not to interfere with the Methodist services? If so, what steps would you advise to be taken in order to do so?

Council may pass by-law under section 489 subsection 46, Consolidated Municipal Act, but in order to convict under by-law it is necessary to show by proper evidence that the particular case is calculated to disturb the inhabitants to such an extent as to be a nuisance.

S.—A blind line was opened over 30 years ago. According to the surveyed plan the line was straight, but in locating the road bed several small deviations were made to shun wet holes, etc. The by-law called for 66 feet of road allowance, but the settlers on each side while building their fences made it only 33 feet, most of the fences have been up since the road was opened.

The council has notified the owners on each side of road to move their fences 33 feet from the centre of the travelled road bed, that is to make the road allowance 66 feet wide, making the present roadwah the centre of said allowance.

1. Can the council claim the full 66 feet of road allowance as the by-law calls for? if so

2. Can they compel the owners on each side to move their fences 33 feet from centre of the present road bed? or

3. Can they only claim the straight line as shown on surveyed plan?

1. Yes.

2. No.

3. Yes.

C. P.—A. is landlord, B. tenant. A pays taxes on property, B. has a dog. Who pays dog tax, B. having nothing to seize? I find sometimes the assessor puts the dog down to the landlord, which I think is not right, and landlord pays for the dog, not knowing the rate and amount of his taxes.

B pays dog tax, or proceedings are taken under section 6 of chapter 214, R. S. O., to destroy the dog.

ENQUIRER.—Would a man who is carrying on business as a hotel keeper be qualified to act as councillor, the property being assessed in his wife's name, he having not sufficient property in his own name outside of the hotel business?

No. See section 77, Consolidated Municipal Act.

Z. R.—Referring to your opinion when a person is assessed for different parts of land in the same municipality all rated to the same party, and if the collector go to seize for all the taxes due on all the parts of land, can he seize on one part of the said land, goods and chattels for all the taxes due for all the different parts of land?

2. When a school section is formed have the council power to extend or alter the size of the section if the majority of the ratepayers of said section object to it?

1. Yes, if in same county.

2. Yes.

A. H.—Can a municipal council legally receive money tenders for the offices of assessors and collectors and then select the appointments to said offices from the said tenders?

No. It is not a proper procedure. See section 278, subsection 2 Consolidated Municipal Act.

W. W.—1. A. was formerly owner of farm but decided it to his son B., who gave A. a life lease of same, both are living on the farm. How must it be assessed?

2. C. is a single man and lives and works in a municipality, but does not own any property. Is owner of a farm of one hundred acres in an adjoining municipality, farm is leased for a term of years, tenant lives thereon. Is C. liable to pay a poll tax in the municipality which he resides?

1. B and A should be assessed jointly, and their names bracketed together on the roll; B as owner and A as tenant.

2. C is not liable to pay poll tax under the circumstances mentioned by our correspondent. If the municipality is a city, town, or village C should produce the certificate mentioned in section 90 of the Consolidated Assessment Act 1892 of his having performed statute labor or paid the tax elsewhere.

J. B. F.—In a town a number of young people are in the habit of congregating and standing on the sidewalk, at the corners of streets and in halls and doorways, adjacent to the sidewalk on Sundays while the people are going to and returning from church.

While the people are thus passing along these little congregations divide (apparently very reluctantly and at the last moment), some standing in a line or group on the inside of the sidewalk or leaning against the buildings adjacent thereto, while the others stand in line or group on the outside giving just sufficient room for the people passing along to push their way through.

These young men peer into the faces of ladies while thus passing them, often spit tobacco juice in front of them and in many other ways act in such a manner as to make ladies, thus passing, feel very uncomfortable and their male companions or escorts to feel like dubbing the offenders.

Has the municipal council power to pass by-laws to make these loiterers or loafers pass on or to, in any other way, remove the nuisance complained of? If they have, please give the statute.

Section 207 of the criminal code, every one is a loose, idle or disorderly person or vagrant who

(e) loiters on any street, road, highway or public place, and obstructs passengers by standing across the footpath, or by using insulting language or in any other way (Section 208); on summary conviction before two justices of the peace they are liable to a fine not exceeding fifty dollars, with or without hard labor, for any term not exceeding six months or both.

J. H.—Is it legal for a township council to pass a by law prohibiting cattle from running at large on the public highway, with the exception of those wearing tags, which have been purchased from the council for a specified sum. The funds of such sale of tags being used for the benefit of the township?

Yes.

T. H.—Can a motion that has been passed by the council at a meeting be objected to at the next meeting when the minutes of the former meeting are being read, at which said motion was passed?

Yes.

X. Y. Z.—Say a church has parsonage on lot 10, on Park avenue. Have church and lot on Green street, lot 4, and pay no taxes. Say they build a grand new church on avenue D and are exempted from taxes. The society vacate the old church on Green street and put it up for sale. It has ceased to be used for any church purpose. The assessor enters it as any other vacant property, having no connection only by ownership by several blocks to any worship purposes. Is it not taxable?

Yes.

W. F. B.—Is it legal for a municipal council of a town to employ a member to oversee work done on the streets, or do any other legitimate work for the council, at so much per day?

Yes. See section 479, subsection 2, Consolidated Municipal Act.

We will answer the other questions submitted in next issue.

Rules and Regulations for the Government of Common Gaols.

(Continued from March.)

The goal dietaries shall be divided into three scales, namely :

- (1) For adult male prisoners awaiting trial, or under sentence with hard labor for a term of thirty days or under, where the labor done is ordinary gaol work ;
- (2) For adult prisoners sentenced with hard labor for a term of over thirty days, and the labor consists of cutting wood, breaking stones, or is extra-mural ;
- (3) For women, and for boys under fourteen years of age.

The dietary, under the foregoing scales, shall be as follows :

SCALE NO. 1.

Breakfast—1 pint of gruel (made from oatmeal or Indian corn meal) and 8 oz. of bread, every morning.

Dinner—5 oz. of cooked meat (without bone), 8 oz. of bread, and 8 oz. of potatoes, on three days in the week.

8 oz. of bread, 1 lb. of potatoes, and 1 pint of gruel, on two days in the week.

1 pint of soup and 8 oz. of bread, on two days in the week.

Supper—1 pint of gruel and 8 oz. of bread, every night.

SCALE NO. 2.

Breakfast—1 pint of gruel, 8 oz. of bread, and 1 pint of pea coffee sweetened with molasses, every morning.

Dinner—6 oz. of cooked meat (without bone), 8 oz. of bread, and 8 oz. of potatoes, on each day that hard labor is performed; otherwise Scale No. 1 to be followed.

Supper—1 pint of gruel and 8 oz. of bread, every night.

SCALE NO. 3.

Breakfast—1 pint of gruel and 6 oz. of bread, every morning, and when women are engaged at hard labor, such as washing and scrubbing, 1 pint of pea coffee to be given when so engaged.

Dinner—4 oz. of cooked meat (without bone), 6 oz. of bread, and 8 oz. of potatoes, on three days in the week.

6 oz. of bread, 1 lb. of potatoes, and 1 pint of gruel, on two days in the week.

1 pint of soup and 6 oz. of bread, on two days in the week.

1 pint of gruel and 6 oz. of bread, every night.

The oatmeal gruel shall contain 2 oz. of oatmeal to every pint of water, and the Indian corn meal gruel $2\frac{1}{4}$ oz. to the pint; the soup shall contain 3 oz. of cooked meat to the pint, and the usual quantity of vegetables, with pepper and salt. Pork may be used once a week instead of beef, but 1 oz. less in weight must be given than is named in the different scales; fish may also be substituted for beef once a week, in which case 2 oz. more must be given than is named in the different scales; and all prisoners shall be allowed at their meals as much good water and salt as they desire.

Prisoners under the care of the gaol surgeon shall be allowed such diet as he may direct, his instructions in this respect to be entered in his journal, for the guidance of the gaoler.

The food supplies shall be carefully weighed or measured when delivered out for use, and the gaoler shall enter the weight or quantity in the account book, and he shall exercise the greatest care so as to ensure that all food supplied to the prisoners shall be of good quality and of proper weight or measure.

Every gaol shall contain a kitchen and a store room attached thereto, and the gaoler shall receive and examine all articles of food and other supplies, and shall carefully weigh or measure the same, and enter the weight or measurement and the price in the account book.

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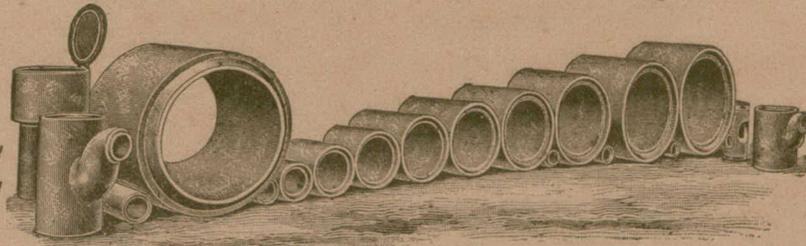
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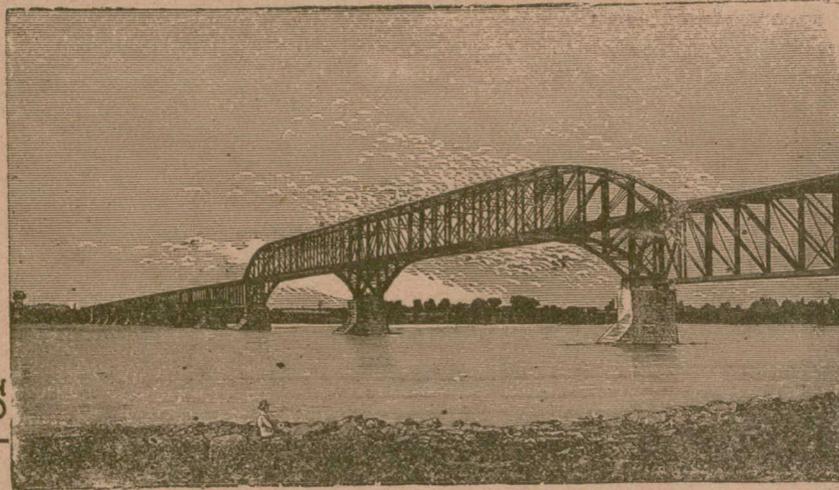
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