

The Municipal World

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

Vol. 3. No. 5.

ST. THOMAS, ONTARIO, MAY, 1893.

Whole No. 29

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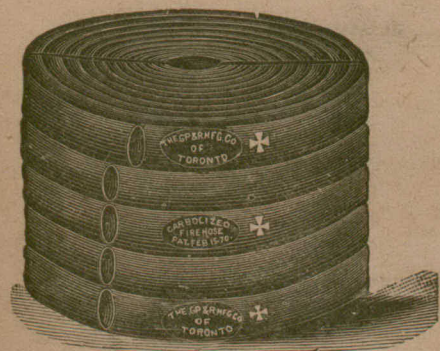
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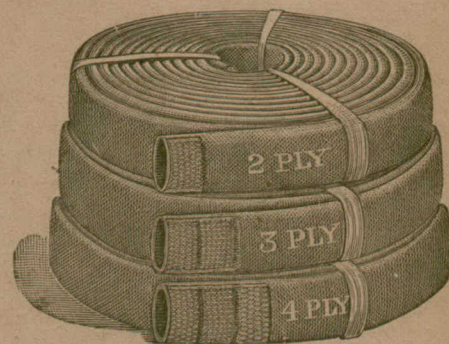
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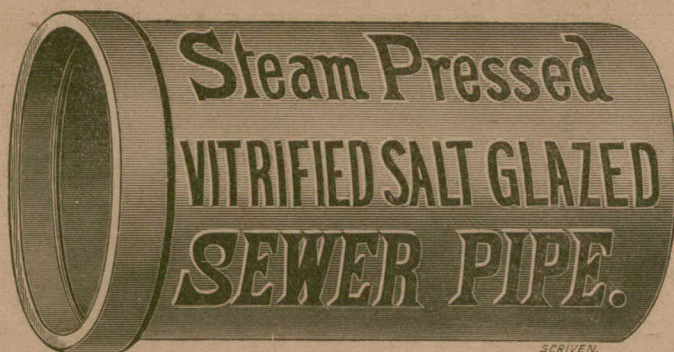
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CALENDAR FOR MAY AND JUNE, 1893

Legal, Educational, Municipal and Other Appointments.

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 Schools Act, Section 81.
- County Treasurers to complete and balance their books, charging lands with arrears of taxes.—Assessment Act, Section 152.
- Liquor Licenses to be dated from Liquor License Act, section 8.
5. Arbor Day.
15. Last day for issuing Tavern and Shop Licenses.—Liquor License Act, section 8.
- Contents of earth closets to be removed on or before this date.—Public Health Act, Schedule A., rule 2 of section 14.
24. Queen's Birthday.
31. Last day for issuing Wholesale Liquor Licenses.—Liquor License Act, section 8.

JUNE.

1. Public and Separate School Boards to appoint representatives on the High School Entrance Examination Board of Examiners.—H. S. Act, section 38 (2).
20. Earliest day upon which statute labor to be performed, in unincorporated Townships.—Assessment Act, section 113.

* NOTICE *

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

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This book should be on the Council table in every municipality in the Province. The notes and explanations in reference to all important sections of the Municipal Acts make it a valuable assistant to Councillors who desire to discharge the business of the municipality in accordance with the true intent and meaning of the various Acts, with which they have to deal. The numbers of the Sections of the Municipal and Assessment Acts are the same as in the Consolidated Acts of 1892. Price \$7.00. Address orders to THE MUNICIPAL WORLD, St. Thomas.

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Six copies, \$5.00. Additional copies, 75 cents each. All subscriptions to be paid in advance. The paper will be discontinued at expiration of term paid for, of which subscribers will receive notice. Prices for advertising on application.

Communications and advertisements for next issue should reach the office of publication on or before the 20th of this month.

Contributions of value to the persons in whose interests this journal is published, are cordially invited. Subscribers are also requested to forward items of interest from their respective localities.

Address all communications to

K. W. MCKAY, EDITOR,
Box 749, St. Thomas, Ont.

ST. THOMAS, MAY 1, 1893.

It is amusing to learn the peculiar ideas held by many municipal councillors and officers who are holding a public office for the first time, as to their relation to the public generally and to the municipal corporation in which they have been appointed or elected to serve. A municipal councillor is nearly always elected or appointed to his position or office on account of his fitness for the same, and afterwards he is supposed to look after the duties of his office as he may think best in the interests of the municipality, and not as individual ratepayers may suggest. Those who endeavor to please all of their constituents, or act on advice given off-hand by irresponsible persons, who, very often, do not know what they are talking about, will find it very difficult to justify their position to the satisfaction of electors on nomination day. There are those in every municipality who believe they know more than any of the council, who are not fit to occupy position of trust or responsibility, and who take great pleasure in misleading new and inexperienced officers. Councillors will find it a good rule to follow, to do what they think is right and in accordance with the meaning and intent of our Municipal Acts. They will then have no difficulty in placing any matter that may be in question clearly before their supporters when called upon, and also the satisfaction of knowing that their constituents did not expect more of them when elected.

* * *

The county of Essex and city of Windsor have had an arbitration to ascertain that the city should pay the county \$2,688.37 per year for expenses in connection with the administration of justice, etc., and besides, that the county is hereafter exempted from payment for crown witnesses, lunacy cases and coroners' inquests arising in Windsor. The arbitrators costs were \$2,433.62, one half to be paid by each. Solicitors were engaged on behalf of both the municipalities and when their costs are added to amount paid the arbitrators it would appear that proceedings of this kind are sometimes expensive. The city is not satisfied and will appeal against the award.

If one-man-one-vote is good liberal doctrine, and there is no question on that point, the Ontario government should do away with the present law, which gives a freeholder a vote on money by-laws in every ward in which he may happen to hold property. The absurdity of the ward system has been frequently pointed out, but nowhere is it more absurd than in the matter in question. Why, one man owning \$10,000 worth of property distributed over five wards, should have five votes, and another man having \$10,000 worth of property centered in one ward, should have but one vote, is one of the things for which no explanation is ever attempted. The wrong has existed many years, but that fact affords us good reason for its further perpetuation.—*Expositor.*

* * *

A member of a council in moving a resolution should put it in writing, and the municipality should provide suitable blank forms of resolutions for the use of members of the council.

Debenture Statement.

Form of debenture statement, showing debentures and coupons required to be issued to discharge \$1,000 in five equal annual payments at five per cent.:

		COUPONS.						
		5	4	3	2	1		
		1898	1897	1896	1895	1894		
DEBENTURES.	YEAR.							
	1894				9 05	9 50	9 98	10 47
	1895				9 50	9 98	10 47	11 00
	1896			9 98	9 98	10 47	11 00	11 00
	1897		10 47	10 47	10 47	11 00	11 00	11 00
1898								11 00
	Total.							\$1,000 00

When interest is payable half-yearly, two columns would be required for coupons, payable each year, instead as above.

This will be found to be a very convenient form of statement to keep on record, or to submit with debentures when offering them for sale.

Health Officers

The indications are that this current year there will be great danger of the introduction of cholera into this country. Hundreds of places in Europe were affected with cholera last year, and in many of them all through the cold weather of a severe winter, cases have been cropping out. What else, then, can we expect than that the warm season will again bring into life and activity the infection of this Asiatic scourge. If it does not gain a foothold in this country it will be a noteworthy result of public health work. If it does come, no man knows where it will strike first or subsequently. The town that receives it unprepared will be likely to be a sorry town; moreover, it would be a disgrace to the town and to the province.

To be prepared we must have an efficient local board of health in every municipality, one that does not wait to be galvanized into life by an epidemic shock. The board must be properly organized, must know its powers and duties, must bring its village or city into as cleanly a condition as possible, and finally must have a clear general idea what to do and how to do it promptly, if an outbreak of cholera or other infectious disease occurs. The means for learning all this are supplied by the bulletins of the provincial board.

Every local board should be prompt in holding its meetings for the purpose of arranging the plan for the sanitary improvement of its town during the current year.

Important matters that every board should determine how best they can effect, are:

The education of the people in public health matters. This is largely done through the press and provincial boards by the publication of health articles and circulars, and is necessary for the welfare of the people, and indirectly to make the work of the board less difficult and more efficient.

The securing of private and public water supplies that are free from pollution with pollution with human excreta. The great danger to wells comes from the privy or sink spout that discharges within the drainage area of the wells. If a public supply is unsafe it is because human excreta reaches it through sewers or otherwise.

The disposal of excreta in such ways as to avoid the pollution of water supplies, and the contamination of the air about dwelling houses and other inhabited places. The privies and water closets of factories, railway stations, hotels, schools, and tenement houses, should be inspected and got into good condition.

We would specially direct the attention of subscribers to the fact that all questions and communications must be in our hands not later than the 20th of the month to insure insertion in the next issue.

Courts of Revision.

The principal business of the majority of councils during the present month, will be the revision of the work of the assessor. In townships and villages the municipal council is the court of revision, but in towns and cities where the council consists of more than five members, the council is required to appoint five of its members to be the court of revision. It is the duty of the court to act only as they are authorized by statute, and to try all appeals in regard to persons wrongfully placed on, or omitted from the roll, or assessed too high or too low. Such complaints may be of, 1st. Any person complaining of an error or omission in regard to themselves, 2nd, Of a municipal elector thinking that any person has been assessed too low or too high; 3rd. Of the assessor where it appears there are payable errors. All appeals brought before the court must be decided one way or the other. The proceedings for the trial of appeals are that the assessor in assessing must leave for every person named on the roll as a resident, or having a place of business within the municipality, and transmit by post to every non-resident who shall have requested his name to be entered thereon and furnished his address to the assessor, a notice of the sum for which his real and personal property has been assessed. If the person receiving this notice finds an error or omission, or is not satisfied with the amount of the assessment, he must within fourteen days after the time fixed for the return of the roll, which in the majority of municipalities, is the first day of May, give notice thereof in writing to the clerk of the municipality. The roll is to be considered as returned only when in possession of the clerk, and the certificate properly signed and sworn to. This may be done on some day after the first of May, and the right to appeal extends fourteen days after the date the roll was returned to the clerk. It is the duty of the clerk to advertise in a newspaper the time on which the court will hold its first sittings, and cause to be left at the residence of the assessor a list of all complaints made against his roll, and notify all persons in respect of which a complaint has been made. In addition to this the clerk must post in some convenient public place within the municipality, a list of all the appeals against the assessor's returns, together with an announcement of the time when the court will be held. All this must be done at least six days before the sittings of the court, and no alterations shall be made in the roll unless under complaint formally made in accordance with the above provisions. In the case of palpable errors, the court may extend the time for making complaints ten days further. Sub-section eighteen of section sixty-four of the Assessment Act, provides, that, in such cases the assessor may be the complainant.

In this connection we would draw the attention of municipal councils to a matter that was recently referred to in the pro-

ceedings of the Ontario legislature, when the question was asked as to the reason for the decrease in the grants to the public schools of the county of Simcoe, and the decrease in the townships of Tecumseh and Orillia in particular, the Minister of Education in reply said that the school grants were based on the returns of population made by the county clerk. In 1891 the population returned for the county of Simcoe was 49,404, upon which a grant of \$6,028 was made. The population in 1892 was 43,930 and the grant \$5,375, the reduction arising from the reported decrease in the population of the whole county. For the township of Orillia the population returned in 1891 was 3,197, upon which a grant of \$398 was made. The population returned in 1892 was 1,544 and the grant made \$192, an amount which was subsequently increased to \$392 because the return of population was found to be incorrect. In the township of Tecumseh the population in 1891 was 4,236 and the grant \$526. The population in 1892 was 3,015 and the grant \$374.

In the cases above referred to the error was no doubt the work of the assessor, and might we think, be considered a palpable error.

The roll as finally passed by the court is to be valid and bind all parties, notwithstanding any defect or error committed in or with regard to the roll, except as to cases appealed and for which special provision is made.

Rules and Regulations for the Government of Common Gaols within the Province.

(Continued from March Number)

IV.—THE SHERIFF,

9. The Sheriff shall be the chief executive officer of the goal of his county, and he shall exercise a general oversight so as to ascertain that the goal rules and regulations are observed by all concerned.

10. He or, in case of his absence or leave, the deputy sheriff shall visit the goal at least once a fortnight, and inspect every portion of it, and examine the register and other books of record, so as to inform himself as to the condition of the building and the prisoners, and to see that the books are properly written up; he shall forthwith report to the inspector any neglect of duty or misconduct on the part of any goal officer; and in case he suspends from duty or dismisses a goal officer for gross negligence or misconduct, he shall report the facts at once to the inspector for inquiry.

11. He shall appoint the goaler (subject to the approval of the Lieutenant-Governor,) and shall, as hitherto, appoint the turnkeys, the matron and the female assistants, and shall see that all the officers and servants of the goal are careful, vigilant, and zealous in the performance of their duties, and that their habits and general conduct are in all respects exemplary.

12. He shall see that all requisitions made by the goaler for goal clothing, furnishings, and supplies, are promptly transmitted to the clerk of the council or to the

chairman of the committee of the council having charge of goal affairs, and that such clothing, furnishings and supplies are promptly delivered; and he shall see that all returns asked for by the government are promptly and correctly made out by the goaler, or by such other officer as he may direct, and that they are duly forwarded to the inspector, or such other officer as the law requires,

13. He shall see that the wards, cells and yards allotted to the female prisoners are secured by locks different from those in the male departments, and that they cannot be opened by the same keys.

V.—THE GOALER.

14. The goaler shall reside in the goal; he shall make himself thoroughly familiar with everything that pertains to the duties of his office; and when necessary he shall consult the sheriff and the inspector,

15. He shall have full charge at all times, of the goal and the prisoners; and he shall be responsible for the safe custody and general care of the prisoners, and for the state and condition of every part of the goal and its surroundings, and for the general administration of its affairs.

16. He shall conform to the rules and regulations himself, and shall see that they are strictly observed by the prisoners, and by the turnkeys, the matron, and all the servants employed in or about the goal.

17. When away from the goal on leave of absence or on account of sickness, his place shall be filled by the deputy goaler or chief turnkey, or where there is only one turnkey; and during the absence of the goaler, such deputy goaler, chief turnkey or turnkey shall have all the power, privileges, and duties of the goaler.

18. He shall pass through every part of the goal and see every prisoner at least once a day; and once at least in each week he shall go through the goal at uncertain hours at night; but neither he nor the deputy goaler nor any male turnkey or assistant shall at any time visit the wards in which the female prisoners are confined without being accompanied by the matron.

19. He shall see that the person of every male prisoner is searched before being admitted to the goal; he shall accompany the gaol surgeon on all his visits to the male prisoners, and call his attention to any prisoner whose state of body or mind appears to require attention, and he shall carry out the written instructions of the goal surgeon recorded in that officer's journal respecting change of diet, airing, and cessation from work, and all other orders in regard to the health of prisoners provided that such orders do not endanger the safe custody of the prisoner or prisoners affected thereby; he shall notify the gaol surgeon without delay of the illness of any male person; he shall, upon the death of a prisoner, forthwith notify the sheriff thereof, with a view to an inquest being held on the body; and he shall accompany the gaol surgeon and sheriff on all their periodical visits of inspection through the goal.

To be Continued.

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.

Who has a Good Method?

To the Editor of THE MUNICIPAL WORLD:

SIR,—In the last two numbers of your valuable paper, I see the above question asked. I think A. H. K. must have a good method in preparing the voters' list. I confess I cannot get up the copy in two days, as he can do; like township clerk, I would like if A. H. K. gave his method, so that his brother clerks might profit thereby.

My method in preparing the copy of voters' lists for publication is nearly the same as that given by "township clerk", only instead of pasting slips of paper in a printed list to receive corrections, I get a few extra copies of lists, with each alternate leaf left blank to enter necessary changes, always indicating where the alterations should be entered on the proper list.

I like the above plan better than any I have tried as it saves work, and the printer prefers the printed list as copy, to a written one.

Hoping to hear how others do the work,

I am yours truly,

A. S.

P. S.—I send you a list with a few changes made to show method.

Who Has a Good Method.

To the Editor of THE MUNICIPAL WORLD:

SIR,—At the suggestion of township clerk I shall give my method of making the voters' list, which I think is quite similar to that briefly outlined by him. By my "one mistake" I meant, of course, the only one discovered that was attributable to the clerk. Several amendments were made at the court of revision of the lists that were not due to any fault in the plan of making the lists.

With the assessment roll and a copy of the last revised list of voters, I exhaust the a's amending the list by checking the names of persons assessed the same as last year, changing or interlining those that are different in any respect, numbering them by the roll, and checking each name on the roll by a mark denoting which part of the list it goes to. If any other letter is encountered among the a's it is dealt with at once, so that the roll is finished page by page. When the roll is exhausted in this way the unchecked names on the list are struck out. Then, by counting the names in parts, one, two and three of the corrected list separately, and counting the peculiar check marks on the roll, a proof may be had that no name is omitted.

This list, if neatly done, makes good copy for the printer.

I cannot find in the act anything to convince me that a written voters' list must, as some clerks think, be placed on file.

Now, what are the objections to this short cut, if a written copy is not a necessity, and even if it be so, what better way is there of getting a correct basis for one?

A. H. K.

A Change Needed.

To the Editor of THE MUNICIPAL WORLD:

DEAR SIR,—Admirable as our school law is, in many respects, yet we think there is room for improvement, especially that part relating to non-resident pupils in rural districts. There are a number of sections in mostly every municipality in the Province, where children have to travel one, two and even three miles farther to reach their school, than they would to the one in the adjoining sections, and often the roads to their own school are next to impassible, when

there are good ones to the school in the neighboring section, and in some cases it is impossible for children to get to their own school at all. Now, in every instance, if children attend a school outside their own section, their parents let them be ever so poor, must pay the non-resident fee, and at the same time contribute to the maintenance of their own school, although receiving no benefit from it; you say, cannot the council remedy the wrong, by attaching them to the section, where their children can be educated, in some cases they are powerless to help. Here is a case in point. Last year on appeal, the county council of Grey appointed arbitrators to define the boundaries of a school section in our township. They made their award, no appeals being made thereon. Therefore no alterations can be made for five years. See chap. 225, [sec. 82, sub-sec. 2., R. S. O.

Now a majority of the ratepayers decided to build the school house in one corner of said section, by their action several families are cut off from school privileges, there being between four and five miles of bad roads to get to the school. They have two schools within two miles of them, where some of them have been sending their children, paying over twelve dollars a year of non-resident fees. Now it may be law, but is it justice for these parties to pay for the and maintaining of the school in their own building section, and at the same time pay for the education of their children in another section, and when they ask the council to help them they are told they must grin and bear it for at least five years before they can get help.

We hope those interested in free education will agitate the matter until non-resident fees are abolished and children can attend the school nearest their homes. Then councils will have rest from that most thankless part of municipal legislation, namely: Changing school section boundaries.

Yours respectfully,
S.

Statute Labor Abolished

To the Editor of THE MUNICIPAL WORLD:

SIR,—At their last meeting, the municipal council of the township of Malden passed a by-law abolishing statute labor. This was done in conformity with the wishes of the people expressed at the polls at the last municipal election. Last year they appointed a cattle bailiff with a salary in addition to fifty cents a head (this fee is charged to the owner of the stock), to impound all cattle, horses and hogs found running at large on the roads, and the plan worked so well that it has been adopted again this year.

Yours truly,
JAMES HOVER,
Clerk.

Road Making.

To the Editor of THE MUNICIPAL WORLD:

DEAR SIR,—As the commutation of statute labor has been rejected by nearly all of the townships where it was submitted to vote, the majority of farmers appear to be in favor of the old system.

There is plenty room for improvement in statute labor, and in this age of progress we should always endeavor to obtain the results, which are most in our interest.

To councillors I would recommend a plan which I adopted last year. It answered a good purpose. Each councillor in the fore part of May, before the road work commences, at some convenient place should hold a public meeting of the road overseers in his ward, to receive from them a report of the requirements of their different road divisions, and where grants are needed. This saves much work at the council board. Spend an evening in talking over road making by the best plans, and most improved

methods of doing work. In a large meeting there will be some with new ideas, who will point out where they have made failures.

The following suggestions will direct to the mistakes frequently made:

Turnpiking which is often made too narrow, should be not less than sixteen feet in width on top.

Ditches are not near enough to the fences. The bottom of the ditch is left uneven, full of hollows, so the water lays in them when it should run off. Culverts are often made too short for the width of the road. They should be covered with three inch plank to be safe for threshing machine engines. Deep ditches could often be avoided by putting in tile. When drawing gravel men will dump a full load in one spot, when much less would answer better. In putting on gravel it is much better to put on a light coat and renew often. A thick coat of gravel requires a long time to get packed down on roads that are not much traveled. Stones over two inches in diameter should be put in the bottom or picked out and put aside in small piles to fill holes in the future. Embankments should be made wide enough for two teams to pass and railing put up for guards. In expending grants for gravelling, October is the best time to do it.

THOS. ROBERTS,
Sparta.

Statute Labor in East Luther.

To the Editor of THE MUNICIPAL WORLD:

DEAR SIR,—In your April edition you ask for information regarding abolition of statute labor. In the year 1892 this municipality abolished statute labor and expended sixty cents per day in lieu thereof. We had something like 2,000 days road work under the statute labor system for which we expended \$1,200. We appointed a commissioner in each division, his pay was six per cent. for letting and inspecting jobs. In cases where a personal inspection, such as delivering gravel by the yard, he received ten cents per hour extra. His work was to spread the gravel and see there was a yard delivered. The whole system was a success doing twice the amount of work on the roads that the 2000 days' road work did. Gravel was delivered from seventeen cents to thirty-five, that cost allowing for man and team three days road work one dollar per yard, other contracts were in proportion. Last year was a bad year for road-making, being very wet during the month of June, the time most of our contracts were carried out. Had the season been favorable the showing would have been still better.

I had long considered that statute labor was a farce, and after one year's trial, I have no hesitation in stating that fifty cents per day let per contract will do double the amount of work on the roads when compared with the present system of road work.

There was fierce opposition to the scheme when it was introduced, petition after petition was presented to the council against it, but the majority of the members were satisfied that it was a right move and under the hope that after one year's trial it would not be repealed they passed the measure. It was left to a vote of the ratepayers in January last and although a number of the bitterest opponents of the system when it was introduced supported it, the usual picnic of road work without side questions raised by the opponents of last year's council, was defeated, but East Luther is composed of a people that often change their minds, and I would not be surprised to see the scheme introduced at no distant day.

Yours respectfully,
JOHN PARK, Reeve.

The Toronto city council by a vote of 14 to 8 decided to ask legislation to confer on married women holding property the same franchise as unmarried women and widows now enjoy.

ENGINEERING DEPARTMENT

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

Highway Culverts.

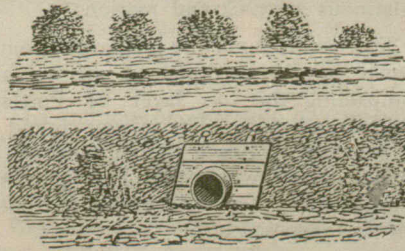
At this season of the year municipal authorities are actively engaged in examining the condition of public roads in the municipality to determine what repairs are necessary to put them in a proper state for the season's travel, and, as is usual, particularly after a severe winter, we find that a very large proportion of the estimates is for the repair and re-construction of timber culverts, which have only been in the ground for a short time, but which cannot under the varying conditions of wet and dry to which they are exposed last very long, the cost of this apparently small item in the affairs of the township, if closely examined will be found to enter largely into the outlay for the year, and is annual, the construction of these culverts in a permanent manner so as to get rid of the repeated demand of repairs and renewal is one worthy of immediate attention.

The use of sewer pipe for road culverts has now ceased to be an experiment, they are very generally and successfully used for the purpose, and the old box culverts of timber are now fast becoming a thing of the past. Although the cost of the sewer pipe is usually a little more than timber, the difference is soon made up in saving the cost of repairs. Timber culverts are continually getting out of order, requiring considerable watching and repairs in order to keep them in a serviceable condition, and, at best, their life is only a few years, while well burned vitrified pipe of a proper thickness, once properly laid needs no further repairs, and experience shows that it will last for a great number of years. It too frequently happens that when township councils order the construction of culverts under roadways the pipes are brought on the ground, the contract is let to the lowest bidder, who invariably has no experience in such work, and the ditch is dug to the required depth to carry the water from the channel above, and the workmen place the pipes, may be with the hub down grade or in some cases the centre of the ditch slightly lower than the outlet and in this slovenly way results are very unsatisfactory and certainly an unfair and unjust test.



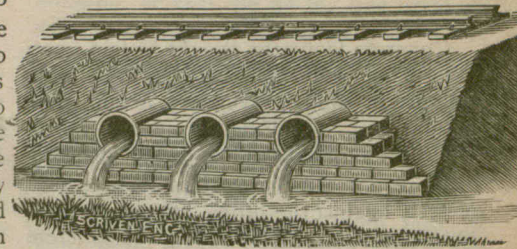
The bottom of the trench should be rounded out to fit as nearly as possible the curve

of the pipe from the lower surface up to the horizontal centre line; then cut little depressions in the bottom of the trench to fit the sockets so that when the pipe is laid its entire lower surface from end to end will rest solidly on the ground. If the ground is soft or sandy this cannot be done but the same result may be obtained by careful ramming the loose earth under and around the lower surface of each section of pipe up to its horizontal centre line after it is placed in position. In order to prevent the lodgement of the debris in a culvert or filling with water, or ice in winter, a culvert should be built with a low fall, the pipe should be laid with the hub or flange up grade or towards the inlet. When this is done properly it is a matter of no consequence how high the bank is above the pipe for it cannot be broken by the weight of the earth. If the bank is solid and not likely to cave or slide, the end of the pipes will not require to be protected, if not, then an abutment of some sort should be made to receive the end of the tile and the foundation of this should extend far enough into the ground to be below the influence of frost, as otherwise the alternate heaving and settling might throw the end of the pipe out of position.



These abutments should extend up high enough to protect the bank at times of heavy rains or overflows from undermining. When stone or brick abutments are too expensive a good and cheap substitute can be made of plank by setting them on end, deep enough in the ground to hold them in place and fitting them carefully about the pipe or still better by setting posts on each side of the pipe and spiking the planks on horizontally. When planks and posts are used it is advisable to set them with considerable inclination towards the road-bed to prevent the pressure of the embankment from crowding the planks outward. The joints of the pipe should be put together with good cement, care being taken that the inside of each joint is scrapped out when cemented, in order that no cement will be left projecting into the pipe, which, when it hardens, will help to check the discharge and collect debris.

The culvert should have a good fall when it is subjected to severe frost, and so constructed that it will drain itself, for, if the pipe is allowed to stand partly full of water, as would be the case when no proper outlet was made, the expansion of the water when freezing is liable to burst the pipe if the water rises in it more than enough to half fill it.



When required, two or more pipes may be laid side by side, should the capacity of one not be sufficient, or, if in case of altered circumstances the capacity of the culvert may require after a time to be increased, additional pipes may be laid to meet the increased demand. In such cases the pipes should be placed far enough apart to secure a solid bed for each. The best pipe should be used in the work and care should be exercised in putting them in, if this is observed the result will be satisfactory. It is a mistake to purchase second class or culled pipe for this purpose as is sometimes done.

ROAD REFORMER.—An eminently practical suggestion is offered in reference to the subject of road reform. There is only one way to get good roads, and that is to build them and then pay for them. This goes straight to the heart of the matter. There are, to be sure, different methods of road-building which may properly be weighed against one another, but the only practical test is that of use and wear. Everybody who uses a road the year round knows whether it is good or not. The question of good roads is a question of the willingness of the people to go to the expense of having them. Let them once be provided and the community enjoying the blessing would not soon cease to wonder how it managed to get along without them so long.

* * *

The fishermen readers of THE WORLD will be interested in the latest device to catch fish, it is an annealed flanged flint glass tube with a stopper that can be easily removed to receive live bait, including minnows, crabs, frogs, angle worms, etc. The tube is strong and not liable to be broken by the fish that are caught. At each end of the tube is a small aperture to allow sufficient water to pass through it to keep the bait alive, while the sides of the tube are so constructed as to magnify the contents. This device does away with the minnow pail, and its attendant annoyances as the bait is kept alive without injury and perfectly good for a whole day's fishing. The hooks are Limerick make, silver plated, with white swivel and white wire leader, so that nothing is seen passing through the water but the live bait attractively and proportionally magnified. Calvin V. Graves, Natural Bridge, Jefferson county, N. Y., is the proprietor and the prices are \$1, \$1.25 and \$1.50.

Concrete Footpaths.

Concrete footpaths should be laid upon a form of well compacted gravel, or a mixture of sand, gravel and loam. The natural soil, if sufficiently porous to provide thorough sub-drainage, will answer.

It is not usual to attempt to guard entirely against the lifting effects of frost, but to provide for it by laying the concrete in squares or rectangles, each containing from twelve to sixteen superficial feet, which will yield to upheaval individually, like flagging stones, without breaking and without producing extensive disturbance in the general surface. When a case arises, however, where it is deemed necessary to prevent any movement whatever, it can be done by underlying the pavement with a bed of broken stones, or a mixture of broken stone and gravel, or with ordinary pit gravel, containing just enough of detritus and loam to bind it together. In high latitudes this bed should be one foot and upwards in thickness, and should be so thoroughly sub-drained that it will always be free from standing water. It is formed in the usual manner of making broken stone or gravel roads, already described, and finished off on top with a layer of sand or fine gravel, about one inch in depth, for the concrete to rest on.

The concrete should not be less than three and one-half, and need rarely exceed four to four and one-half inches in thickness. The upper surface, to the depth of half an inch, should be composed of hydraulic cement and sand only. Portland cement is the best for the top layer, and for the rest natural Canadian cement of standard quality will answer. The following proportions are recommended for the bottom layer:

Queenston, or other Canadian cement	1	measure
Clean sharp sand	2½	"
Stone and gravel	5	"

It is mixed from time to time, as required for use, and is compacted with an iron-shod rammer, in a single layer, to a thickness less by one-half an inch than that of the required pavement.

As soon as this is done, and before the cement has had time to set, the surface is roughened by scratching, and the top layer, composed of one volume of Portland cement and two to two and one-half volumes of clean, fine sand, is spread over it to a uniform thickness of about one and one-half inches, and then compacted by rather light blows with an iron-shod rammer. By this means its thickness is diminished to half an inch. It is then smoothed off and polished with a mason's trowel, and covered with hay, grass, sand or other suitable material to protect it from the rays of the sun and prevent it drying too rapidly.

It should be kept damp and thus protected for at least ten days, and longer if circumstances will permit; and even after it is open to travel a layer of damp sand

should be kept upon it for two or three weeks to prevent wear while tender.

At the end of one month from the date of laying the Portland cement mixture forming the top surface it will have attained nearly one-half its ultimate strength and hardness and may be subjected to use by foot passengers without injury.

The rammers for compacting the concrete should weigh from ten to fifteen pounds; those used on the surface layer from ten to twelve pounds. They are made by attaching rectangular blocks of hardwood, shod with iron, with wood handles three feet long, and are plied in an upright position.

Certain precautions are necessary in mixing and ramming the materials, in order to secure the best results. Especial care should be taken to avoid the use of too much water in the manipulation. The mass of concrete, when ready for use, would appear quite incoherent, and not wet and plastic; containing water, however, in such quantities that a thorough ramming, with repeated though not hard blows, will produce a thin film of moisture upon the surface under the rammer without causing in the mass a gelatinous or quicksand motion.

The concrete may be prepared by hand. Equal care is essential in mixing and compacting the top layer of Portland cement and sand. The mixing should be so thorough that each grain of sand will be entirely coated with a thin film of plastic cement with very little excess of cement not thus disposed of.

The Portland cement and sand may be mixed together by hand on a mortar bed, but that process, to obtain thorough and uniform manipulation, would be tedious and expensive. The better method would be a cubical box. A kind of trituration or a grinding and rubbing process of mixing gives the best results. This may be easily and inexpensively secured by putting in the box with the cement, sand and water, several smooth rounded pebbles, weighing six or eight pounds each. After the box is emptied out on the platform these are taken out for further use.

In laying concrete footpaths in squares or rectangles, the material is spread and rammed between stout planks, set and firmly maintained on edge with their upper edge coincident with the surface of the path, every alternate square being omitted in the first instance to be subsequently filled in—say on the following day—after those first formed have become sufficiently hard to sustain, without injury, the ramming of the fresh concrete against them. To prevent adhesion between the square, the edge against which the new material is placed may be covered with whitewash or a coat of oil. A strip of muslin, felt or cardboard interposed between the squares will answer the same purpose.

Good Roads.

A NEW IDEA.

The money and work, or rather time, expended under the present want of system, should, if properly directed, put the main roads, at least, in a fair state of efficiency, and in process of time, owing to the increased prosperity and value of lands, it should be possible to construct turnpikes of the best class, money being raised by a tax on the whole valuable property of the district, including the towns and cities.

Before anything can be done, however, it is necessary that the public, or their representatives at least, be instructed in some way in regard to what is and what is not a good road and the advantage from a commercial standpoint of having the lines of communication improved.

This, in my opinion, can only be done by the government, as most of the members of councils, etc., are wedded to the opinion that what they do not know about roads and their care is not worth knowing and that any change means increased taxation.

I would, therefore, suggest that the provincial governments begin this process of education by appointing engineers to give instruction by lecture and direction in the field as to the most advantageous way of making use of money and material at present available for the purpose, and as to the value of good roads from the commercial stand point. The engineer instructor should, of course, be a man who has been specially trained in road engineering, and who is gifted with rather a larger share of common sense than is usual. He should thoroughly understand the requirements of the section of country in which he is giving instruction. He should have a knowledge of the nature and best use of the materials available, so that his audience would be at once impressed with the idea that better work can be done and that it will pay to improve present methods.

This method of instructing the public, as applied to the dairying industry, has met with great favor and success among farmers, and has been the means of vastly improving the quality of products and of increasing the revenue of parties engaged in the industry.

I am satisfied that when our farmers learn that they can have better roads without paying any more for them than at present, they will not be long in making improvements, and that when once the process is begun it will go on until we have as good roads in the fully settled communities as any country in the world.

W. F. VANBUSKIRK, A. M., C. S. C. E.,
In the *Canadian Engineering News*.

A little activity on the part of health officers stimulates citizens to make personal efforts in the proper direction, and the result is always advantageous to the general public.

Heating and Ventilation.

(By W. F. Vanbuskirk, A. M., C. S. C. E.)

Now that the cold weather appears to be about over and medical and fuel bills are about due, it may be of interest to enquire into some of the causes that necessitate this extraordinary expenditure. I am inclined to think that much money and bad language can be saved by the proper construction and management of heating and ventilating apparatuses in schools, churches and other buildings.

Many of our public buildings are not only decidedly uncomfortable in cold weather, but are veritable hot-beds of disease. When we consider that human beings require from 1,000 to 3,000 cubic feet of pure air per hour, and that in most public rooms only a small portion of the required amount is supplied, the occupants being forced to breathe a mixture of pure and foul air, containing various poisonous gases, etc., such as carbonic acid, organic nitrogenous poison, carbonic oxide, hydrogen sulphide, etc., not to mention the germs of common diseases, we wonder no longer at the prevalence of colds, etc., and the chorus of coughs in church.

The woeful ignorance of the public, in regard to scientific methods of heating and ventilating, etc., can only be accounted for by the inordinate conceit of the average number of councils, school and other boards, who have grasped and digested in one supreme mental effort, without practical investigation or study, all that there is to know of science, and whom the ballot box has endowed in some supernatural way with a knowledge of engineering and architecture.

In any system of ventilation, worthy of respect, the heating and ventilation are so intimately connected that it is difficult to consider them separately, and it is not desirable to do so. The following outline of requirements refer to what is known as the natural, as distinct from the forced or mechanical method of ventilation, as the latter method is generally too expensive in first cost and operation for the ordinary public buildings of small towns. To obtain an approximation and uniformity of temperature in a room, air should enter in a current, to prevent stagnation and stratification, and in cold weather some means of artificially heating the current of air before entering the room must be provided.

The proper temperature of air in public rooms is somewhere about sixty-five to sixty-eight degrees fahrenheit, and there should be but a few degrees difference in temperature between air near the floor and near the ceiling.

Uniformity of temperature in all parts of the room is desirable and can only be obtained by a proper rotation of the mass of air, which is more easily accomplished

when the incoming air is only moderately heated.

The immediate destination of warm air entering a room, is the ceiling. Therefore, it is desirable to get it there at once to preserve its purity and avoid inconvenience to occupants of the room. The inlet should be seven or eight feet from the floor on one of the inside walls, if possible, while the outlet should be immediately beneath, close to the floor.

By means of such location of vents a good draught is maintained in flues, since the inner walls are warmer and of more even temperature than the outer walls, and, as the warm air is lighter than that of the room, generally, it flows to the ceiling, outward to the cooler walls, falls slowly past windows and back across breathing line and floor to the outlet. Greater economy of heat is secured than if flues were in outer walls, and there is no chance of warm air escaping from the room until it has become somewhat cooled or vitiated.

Air should be conducted in large direct conduits from outside of building to heaters at base of warm air ducts supplying air to room, and so far as practicable, these conduits should be large chambers rather than cold air boxes, so that they will practically place the whole out-of-door atmosphere at the disposal of the heating and ventilating apparatus.

The columns of air should be controlled by valves between the heaters and rooms, rather than by dampers between heaters and outside air.

Warm air flues and inlet areas should be of such area as to allow a sufficient flow of air for ventilation when the outside air is at or near a temperature of fifty degrees fahrenheit, since they will be required for ventilating.

A ventilating apparatus should provide for the minimum difference of temperature between inside and outside air, and the heating apparatus for the maximum difference of temperature under which the systems are depended on. Means must, therefore, be provided for regulation of flow and temperature, according to condition of weather.

Diffusers should be provided at all inlets so that the centering current of air will be divided into several distinct parts, each having an independent direction, and allowing the fresh air to reach different parts of the room at once and reducing the draught effect of the solid column or current across the room.

The flues and outlet areas for discharging air must be larger than for supply, since the temperature is lower in cold weather and velocity of flow is correspondingly less, and since the work required to produce lost motion, caused by successive contraction and expansion of air channel, is considerable.

The system, as a whole, should be designed to suit the particular room or

building, as what will do for one building will prove entirely inadequate for another.

The ordinary house furnace is not, as a rule, well adapted to the work of heating a public room or building as it is very seldom that one can be found capable of allowing the large amount of air necessary to be passed through it.

If a furnace is used it should have a large grate area as possible to insure the complete combustion of fuel. The area of heating surface should be larger, in proportion to grate area, than is usual, and the cross-sectional area between jacket and heater should be sufficient to insure the heating and passage of a large amount of air for ventilating.

An intelligent comparison of the conditions of service required with those which usually obtain, will convince most people of the desirability of reform in matters of heating and ventilating, and may possibly assist some board of health in perpetrating an experiment on the unsuspecting public.

Ineligible for Office.

The Dominion Government has passed an order-in-council, prohibiting "all employees in the post office department, and the postmaster of incorporated towns," from seeking or accepting the municipal office of mayor, alderman, councillor or school trustees (public or separate).

The town council of Berlin has passed a by-law to stop the roaming dog nuisance in that municipality. By its provisions all dogs must be tied up and not permitted to run at large until Sept. 1st. Any one allowing his canine to run about is liable to have him destroyed by the town authorities. The intent of the by-law is to prevent gardens and lawns from being ruined by idle dogs.—*Exchange.*

* * *

In the good roads agitation the main points are the bringing farmers closer to markets, economizing time and saving wear and tear of wagons and horses and drawing the agricultural community into closer touch with urban life.

* * *

It may be of interest to our readers to know something of the Standard Drain Pipe Company. They have just increased their capital from \$150,000 to \$500,000. Notwithstanding the fact that they have enlarged yearly until now, and that after eight years' existence, the factory is eighteen times its original capacity, they are still unable to supply all demands, and purpose doubling its capacity, which will give them an output of nearly 3,000 car-loads per annum. The present factory covers an area of 46,000 feet, two stories high, and has ten large kilns which are burnt weekly, and some of which hold sixty-five to seventy tons of pipes.

Board of Health.

CHOLERA.

The report of the secretary of the Provincial Board of Health, as to what measures can be further taken by it to protect the province whose health interests are officially committed to its charge, contained the following:

"While it is true that our six hundred odd municipalities have nominal local boards of health, yet the varying character of the municipalities from large cities to sparsely settled townships marks gradations, both in the efficiency of and the need for extended operations. The local boards of our cities are, on the whole, well organized and efficient, and nothing better illustrates this than the extending interest in and importance of the Association of Executive Health Officers and their yearly improving reports printed in the annual report of this board. But during a time such as that of the Montreal smallpox epidemic, or like the present, when cholera casts a shadow over the future of the province, we have to recognize that there is a large number of local boards in our towns and villages almost all situated along lines of railways, which not only have no medical health officers, except nominally, but are not equipped in any degree whatever for dealing with cases of cholera should it appear within their borders.

"To have these organized and supplied with a regularly salaried medical health officer must then be our first task, and to see that some local conveniences, in the shape of tents or buildings for the reception of the sick and appliances for disinfecting be supplied, must be the next."

The following municipal measures were suggested as those which it is imperative all municipalities should attend to:

1. The protection of public water supplies. The severity of the Hamburg epidemic has been undoubtedly due to such pollution. Fortunately most of our supplies would ordinarily be safe, but vigilance in this particular should be exercised, and an investigation of the surroundings and condition of municipal water supply will most properly engage this board's attention.

2. There are the common municipal sources of organic filth to be dealt with. These are:

(a) Abolition of privy pits in all incorporated municipalities. The measure of their existence in any town in Ontario is for me the gauge of municipal progress in sanitation. Wherever their removal is rapidly going on, to be replaced by water closets or by dry earth boxes, we find an active local board of health and a good executive health officer. With plumbing reduced to a minimum of cost, and with ready municipal removal of excreta weekly from earth-closets at an annual cost per

household of say three dollars, any reasonable objection to their abolition is removed. I am of the opinion, that with several other matters, their abolition by an order-in-council, provided for under the clauses of the act, created during past cholera years, is the only way for properly dealing with them. Resolutions to this effect have been adopted unanimously by the Toronto Medical Society, and other recent meetings of prominent physicians, and the public are convinced that they must go. And it is important that they should be removed at the earliest moment when the spring opens. Special provision in an order-in-council should be made for this board being referee in case any difficulty should arise about the places for depositing night-soil. It is quite clear that such should be well removed from danger to any householder, but this renders it frequently necessary to go outside corporation limits.

(b) Disposal of garbage must be made a systematic thing, and this can be done either by a well organized scavenger department or by household inspection. Where crematories exist the problem is solved, but such are limited in Ontario, Garbage dumps, by intelligent supervision, may be made harmless, but ordinary experience proves them dangerous. For most of our towns some of the cheap devices for drying the materials, when fresh, on the kitchen stove, and subsequently burning them, should be adopted.

(c) Road and lane refuse may with greater ease be disposed of, and the same may be said of manure.

(d) A more important problem is the presence in many places of polluted creeks, bays and swamp areas, of which Ashbridge's Bay is a type.

Dr. J. Richardson, who has had experience in two cholera epidemics in Toronto, stated recently that the common observation was, that in 1849 and 1854, cholera prevailed mostly along the lines of the several creeks which ran across the city at that period, and such has been universal observation that cholera, whether Asiatica or Nostras, finds its congenial home where organic filth accumulates in a moist state and is exposed to heat.

Local inspection must, therefore, be specially devoted to having such conditions removed or cleansed during the winter and spring months; since it cannot be too strongly impressed on municipal authorities that the exposure to sun and air of excavated organic materials in embankments, etc., created dangers much greater than if the materials are left undisturbed, and especially if they are covered with water.

(e) Local board organization, with a medical health officer and sanitary inspectors, will be, of course, a necessary preliminary to the carrying out of all municipal work.

How Diphtheria Spreads.

A serious epidemic of diphtheria in Detroit, Mich., among school children was traced to the changing of lead pencils. At the close of school each day all pencils were deposited in one box, and the next day distributed among the pupils. The disease was spread by the habit of putting pencils in the mouth, as all children do. Thus an infected pupil will serve to infect several children. Such a rule in school should be abolished.

Better make your neighbor abate a nuisance than to let him make both himself and yourself unwilling hosts of death's great lieutenant—cholera.

The general distribution of cholera literature by the provincial board, both for the instruction of local boards and for the information of individuals will form a part of the board's preparations for efficient work during the next few months.

City rulers should be aware of the coming criterion by which they will be judged. Mere population will not give a city fame. Healthfulness is the first and indispensable requisite. Not numbers, but a low death rate, which signifies a high health rate.

The latest figures given by the Russian government for their cholera epidemic of 1892 are 551,473 cases and 266,200 deaths from that disease up to the end of November. This shows a death rate among the attacked of 48.2 per cent.

Local boards of health should have an eye not entirely single to the health interests of their own towns. They can often restrain indiscretions that would transmit infection to other towns. They should do so, hoping meanwhile that their neighbors will reciprocate in due time.

Facts like that given in the foregoing item should remind us that in diphtheria we have to contend with a disease more formidable than cholera. Cholera, if permitted, sweeps through a town, but its infectious principle is comparatively short lived, and the epidemic is usually brief. On the contrary the contagion of diphtheria persists and a place once infected often remains infected a long time.

In the cholera conference lately held by Russian health officers and physicians, it was reported that information is at hand as to how cholera was introduced, in twenty-eight governments of the empire. The general conclusion to be drawn was that pollution of the drinking water was in almost every case the channel by which the disease was spread.

One of these Russian doctors pointed out that wherever the sanitary condition of a town or district had been satisfactory, the cholera epidemic had either passed it by altogether or claimed but few victims.

LEGAL DEPARTMENT.

H. F. JELL, SOLICITOR,
EDITOR.

Municipal Councils.

THEIR POWERS AND JURISDICTION—BY-LAWS.

The drainage clause of the Municipal Act contains a number of important provisions applicable to cases, when, in order to obtain a sufficient and satisfactory outlet, it becomes necessary to continue drainage works from one municipality to another. The formalities precedent and subsequent to the passing of the necessary by-law should be strictly observed and followed. Negligence of such observance and the overlooking of important particulars have in time past given rise to bitter disputes between adjoining municipalities, resulting in litigation almost unlimited and involving vast expense to the several municipalities concerned in general and to the parties interested in or affected by the construction of the drainage works in particular—apparently the engineer appointed by the municipality undertaking the drainage works, is, in the first instance, to be the judge as to the necessity for continuing the drain into an adjoining municipality. He must so continue the drain, if he think it necessary in order to find sufficient fall to carry off the water, as no municipality or officer thereof has any power to drain water on the land of any owner and leave it there against the will of such owner.

If the engineer does not consider it necessary to continue the drain into an adjoining municipality, but finds that lands or roads therein will be benefitted he shall charge the lands to be benefitted, and the corporation, person or company whose road or roads are improved, with such proportion of the cost of the work as he may deem just. The engineer shall determine and report to the council by which he is employed, whether the drainage works shall be constructed and maintained solely at the expense of such municipality, or at the expense of both municipalities, and, if the latter, in what proportion. Sec. 579 makes it the duty of the municipality in which the drainage is commenced to serve the head of the council of the municipality into which the same is to be continued, or whose lands and roads are to be benefitted with a copy of the report, places, specifications, assessments and estimates of the engineer, and, unless appealed from as is in the Municipal Act provided, they shall be binding on the council of the latter municipality. The service, it will be observed, must be made on the head of the municipality into which the drain is to be continued, or whose lands and roads will be benefitted or improved thereby, and not on the head and clerk, as in the case of

the notice mentioned in sec. 571 of the said Act—"It is a condition precedent to the acquisition by one municipality of jurisdiction over lands situate in another, that a petition signed by a majority of the owners of the property to be benefitted situate in the municipality undertaking the work should first be presented."

A by-law should then be passed by the superior municipality (or the municipality in which the drainage works are commenced) in the form laid down in the said Act, with such changes and alterations as the circumstances of the case render necessary, providing for the construction of the drainage works, and the levying and collecting of that proportion of the cost chargeable against the lands and roads in such superior municipality.

The council of the inferior municipality must, within four months from the day of delivery to the head of such municipality of the report, etc., of the engineer, pass a by-law to raise such sums as may be mentioned in the report, or, in case of appeal, such sums as is awarded by the arbitrators in the same manner and with such other provisions as would have been proper if a majority of owners of the lands to be taxed had petitioned as provided in sec. 569 of the said Act. There seems to be no express remedy provided, if, in case after the money or proportion of the cost chargeable against the minor municipality has been raised and paid over by such minor municipality to the superior municipality if it is found that the drainage work has been improperly or insufficiently executed. But, if the work is not performed at all, the money so paid over may be recovered, as on a failure of consideration. Sec. 581 gives the minor municipality the right to appeal from the report of the engineer within twenty days from the day on which the same was served on the head of such municipality, this right is confined, however, to the report of the engineer. The sufficiency of the by-law and the petition on which it is founded can be left to the action of the courts on a proper application,—a written notice of appeal must, within the time above limited, be served on the head of the corporation from which the report was received.

If through misapprehension or mistake, the council served with the report, etc., fail to appeal therefrom within the twenty days, the judge of the county court of the county within which the municipality lies, may, upon application made at any time before drainage works have been commenced, or the contract let for the same, or the debentures actually issued under the by-law, after the said twenty days have expired, by order grant permission to appeal upon such terms and conditions as to costs otherwise, as he deems just and reasonable within a time to be limited by him.

RE OSTROM AND THE CORPORATION OF THE TOWNSHIP OF SIDNEY.

Sec. 584 of the Municipal Act, enacts, that no council shall pass a by-law for

establishing a public highway, until written or printed notices of the intended by-law have been posted up one month previously in six of the most public places in the neighborhood of such road.

The defendant corporation on the 29th of July, 1887, published notices of their intention to pass a by-law on the 29th of August, 1887, to open a road across nine lots in the first concession of the township. On that day the council met and passed a by-law, establishing a road across four only of the lots mentioned in the notice. The date of putting up the notice was recited in the by-law, and was admitted by the affidavits filed by the defendants in chancery, cause to the motion to quash the by-law. The by-law was moved against on several among others. 1st. That notice of intention to pass it was not given one month previous to the passing thereof; 2nd. That the notices posted up and published were on intention to establish and open up a longer and entirely different road from that described in the by-law; 3rd. That the by-law was passed to serve the private interests of some property holders in the locality, and not in good faith for the general benefit of the public. Nothing had been done under the by-law. It was held that the giving of the prescribed notice is a condition precedent to the right of the council to pass such a by-law. That the month is to be computed exclusive of the first and last days, and therefore that a notice on the 29th of July of intention to pass a by-law on the 29th of August was insufficient.

RE LUSKEY AND THE CORPORATION OF THE TOWNSHIP OF ROMNEY.

During the construction of a certain drain in the township of Romney, known as the "tunnel" drain, it was found that stone portals were needed for the work, and that the outlet to the lake had to be deepened, and other extras and alterations were discovered to be necessary which had not been provided for by the original by-law, under which the said drain was constructed. A by-law was passed by the council of the said township, to raise the sum of \$2,000 by assessment of owners of property benefitted, to complete the said drain and defray the cost of the extras and alterations found by the engineer to be necessary. This was an application to quash the last-mentioned by-law, on the ground that it was not a by-law amending a drainage by-law under section 573 of the Consolidated Municipal Act, 1892, "in order to fully carry out the intention thereof," but rather a new by-law which had not been passed with all the necessary formalities provided by the drainage clauses of the Municipal Act. It was held that the by-law attacked was an amending by-law, under section 573 of the Consolidated Municipal Act, 1892, and that the township council had power to pass it under that section.

QUESTION DRAWER

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

T. E. C.—Can a ratepayer be compelled to do his statute labor within the time appointed by law, during the year notified to do the same?

If your township is an incorporated one the only remedy would be to return the ratepayer as a defaulter, pursuant to the provisions of sec. 101, Consolidated Assessment Act, 1892. If unincorporated our correspondent will find the remedy against him, laid down in sec. 118 of the said act.

E. G. W.—A municipality issues debentures for \$354.00 to be paid in five equal annual instalments, amounting to \$70.80. Would that be legal according to sec. 414, Consolidated Municipal Act, 1892; seeing that the payments do not amount to \$100.00 each?

If the amount of each debenture issued is less than \$100, and the council had not received special authority so to do, when they issued them, they are void.

R. E. H.—1. Are farmer's sons liable to perform statute labor?

2. Who are liable for statute labor other than those assessed for property?

1. Yes, if assessed, rated, and entered as such on the assessment roll, see sub. sec. 1, of sec. 97, Consolidated Assessment Act, 1892. They are not so liable, is assessed and entered on the roll, as provided in sub-sec. 2 of sec. 2 of the Franchise Assessment Act, 1889, or if they come within the provisions of sub-sec. 2 of said sec. 97 of the Consolidated Assessment Act, 1892.

2. Every person between the ages of 21 and 60, in a township not mentioned as exempted in sec. 87 of said act, or in section 6, of chap. 188, R. S. O., 1887, shall be liable to perform one day's statute labor yearly.

J. H. M.—Can the instruments, switches and other apparatus of Telephone Companies be assessed, or are they liable for assessment to any amount? Also same concerning Telegraph Companies are they liable?

We see no reason why the articles mentioned by our correspondent should not be assessed in the same way as other personal and real estate.

TOWNSHIP CLERK.—1. A union public school section, the ratepayers being all Roman Catholics, two years ago formed themselves into a separate school section, making use of the public school house. A Protestant purchases a lot in said section. The councils are not petitioned to alter said section as per chapter 225, section 86, R. S. O., so the original public school by-law is still in force, and sub-section 9 of said section 86, states that no by-law shall take effect before the 25th day of December. Q. Where does his taxes for this year go or will he be exempt from school tax altogether? and where all parties concerned are agreed is it necessary to appoint arbitrators as per sub-section 1 of said section 86?

2. A farmer assessed for \$3,000 has a son who hires out for six or seven months each year but makes his father's house his home. Has he a vote as a farmer's son?

3. Can a council by by-law exempt all parties not assessed from performing statute labor and

make those not assessed perform it? (55 Vic., chapter 48, section 92.)

4. Can a council, by passing a by-law, compel parties through whose lands a river runs to clear it of brush, etc.? If not, can the council enter on their lands for that purpose? and if a municipality clear a river can they compel the municipality below them to prevent parties from dumping in logs in the winter which freezes and forms a dam?

1. Assuming that the union school section was properly formed into a union separate school section under the Separate School Act, we think the taxes referred to are properly payable to the Separate School Board for the purposes of the union public school. The arbitrators will have to be appointed in any event. See section 89 of the Public School Act, 1891, and following sections.

2. If the son, when hired out for the term mentioned, resides wholly, eats and sleeps with his employer, paying, probably, only an occasional visit to his father's residence, he is not entitled to a vote as a farmer's son; but if the son eats and sleeps, or eats or sleeps, and can be considered a resident on his father's farm during the time he is hired out, he is entitled to such a vote.

3. The section referred to by our correspondent gives to the council of every township the power to pass by-laws to *reduce* the amount of statute labor to be performed by the *ratepayers* or *others* within the township, or to *entirely abolish* such statute labor and the performance thereof by *all* persons within said township. There is no authority given the council of a township to assess one class of persons therein for statute labor and exempt another.

4. We know of no authority to a council to pass such a by-law; not if objection is made thereto. If a dam is formed by the dumping of logs, and damages occasioned injuring proprietors thereby, the question of damages is one between the parties dumping the logs and the persons injured.

TENANT—If a non-resident residing on the opposite side of the town line, and renting ninety acres of land in adjoining township for a period of five years, pays taxes and performs statute labor, is he entitled to vote for municipal purposes as owner under sub-sec. 5, of sec. 79, Municipal Act, 1892?

We do not think the non resident tenant is entitled to a municipal vote in the township in which the rented ninety acres lies, notwithstanding the provisions of the latter part of the sub-sec. referred to.

F. N. M.—1. Road allowance impassible; deviation by consent of parties concerned granted through lot A.; statute labor performed but road not established; present occupier threatens to close the same unless paid what the council consider an exorbitant price; has transpired that he cannot give a legal title to the road. What steps should be taken in the event of the said occupier closing the road?

2. Is a township in the Free Grants Districts entitled to timber dues on road allowances cut prior to organization?

1. We think the council should at once take the proceedings laid down in the Municipal Act to close and sell the

original road allowance and open up, acquire a title to, and establish the road used. This would remove all question as to whether the performance of statute labor and expenditure of public moneys on the road used was a sufficient dedication of the same to the public as a highway, with the consent of the parties. We do not think the present occupier has the right to close up or place obstructions on the road used, as in any event he does not appear to be the owner of the soil, and as against the municipality would be a trespasser.

1. No. The provisions of sec. 6 of chap. 28, R. S. O., 1887, as to payment of a percentage of timber dues, seem to apply to townships organized as municipalities or to county townships and relate to timber or saw-logs cut within the township or united townships under the authority of a license, during the existence of a by-law passed by the council of such township or united townships for preserving or selling the timber or trees on the government road allowances within such township or united townships and included in any license.

TOWNSHIP CLERK.—We have a settler living in this township that has never paid any rates here. He had a broken hand last fall; he stayed at home until the doctor refused to go to his place any more to dress his hand. Having no doctor in this township the council granted him \$10 to pay his board at the nearest village while getting doctor's attendance; the doctor then sent him to the hospital. Is this municipality responsible for any of his doctor's bills or hospital attendance?

The payments made by the Council were purely voluntary, and unless the council by resolution agreed to pay the doctor's bills or cost of hospital attendance, or instructed the doctor to attend the injured person, or send him to the hospital, the municipality is not liable.

W. G.—The crown issues a deed for a large tract of land to a company who sells same to another company. In the original deed from the crown to first named company, the words "so many acres, including so many acres set aside for roads," but the deed is also subject to the usual reservations, etc., contained in crown deed. These stipulations are also included in deed from first company to second company (who are the present owners). Please say are the present owners entitled to timber on road allowance?

We think the company first named entitled to the timber on the road allowance, and, such being the case, and the first company having conveyed all their interest to the second company, the second company would be similarly entitled, unless, possibly, the timber on the road allowance is piece timber.

DEPUTY REEVE.—Can members of a high school board remunerate themselves for services or expenses attending meetings of the board?

The members of a high school board are entitled to no remuneration for their loss of time or services as such members, but we are of opinion that they can legally claim and receive such sums as they actually and necessarily disburse in attending the meetings or looking after the business of the board.

COUNCILLOR.—One of the council was notified that there was a loose plank on the side walk, and that it was dangerous. A lady came along and tripped on the loose plank. She entered an action against the council, and it cost the corporation eight hundred dollars. The councillor notified, did not attend to the loose plank, nor did he report to the other members of the council, and he swore in court that he was notified. What I want to know is, will the councillor notified be personally responsible for the money, seeing it was through his neglect? Two witnesses swore that they notified him, and he swore that he was notified; he also swore that he never mentioned it to any of the other members of the council, and did not attend to it himself.

We do not consider the councillor personally liable for the amount of the judgment, under the circumstances mentioned by our correspondent.

ASSESSOR.—1. Are post masters', custom officers', and revenue officers' salaries exempt from taxation? I cannot see in my instructions to assessors, any mention of their exemption, only in that clause in which it says any pension, salary, gratuity, or stipend derived by any person from Her Majesty's imperial treasury. I don't see how that can be construed to mean our civil officers, as some try to convince me. That does not mean Dominion treasury.

2. Are steam pleasure launches or yachts exempt? It says steam boats, sailing vessels, tow barges and tugs. The Hamilton assessors claim that yachts are included in the word steam boats, but why does it mention tow barges and tugs, if it meant all kinds of steam boats? I take it only means steam boats that earn money and not mere pleasure boats, for it goes on to say: for the money earned by or derived through or from any such property, shall be liable to be assessed; therefore, if the boat property itself is not of the kind to earn income then the boat is assessable.

3. Is the money received by a person as a bequest, say a thousand or ten thousand dollars, from his father's will, assessable the year first following, then after that the income only derived from such moneys? I take it that such bequest money can be added to any other income as income for the year it is received in.

We do not think the salaries referred to by our correspondent are liable to assessment, as in the case of Leprotion against the city of Ottawa. It was decided that a provincial legislature cannot impose a tax on the official income of an officer of the Dominion government.

2. We think this point is well taken by our correspondent. We see no reason why pleasure yachts should not be assessed and liable to taxation in the same manner as other personal estate not especially exempted.

3. The amount of the bequest referred to, can be assessed as personal estate, in the same way as other personal property not exempt from taxation, the year first following or any subsequent year so long as it remains in the owner's possession as money. When invested, the income derived from the investment, will be assessable.

COM.—The reeve has sold all his property in the township and will remove to adjacent town, giving possession on 1st of May. The buyer will be assessed this year.

Can the reeve hold office till the end of the year? None of the ratepayers will, I think, find fault if he does. What we want to know is, will the transactions of the council be legal?

We would direct our correspondent's attention to section 73 of the Consolidated Municipal Act, 1892, which provides that

no person shall be qualified to be elected as reeve of any municipality unless he resides in such municipality or within two miles thereof. Our correspondent does not say how far from his intended residence the municipality of which the person referred to is reeve, will be however, in any event, the acts of the council will be legal, so long as the reeve mentioned retains his seat without objection being made, proceedings taken, and decision given to the effect that he has no right to occupy the same.

J. H.—A. and B. own two fifty-acre farm lots butting on the back end known as the blind line, said line has never been surveyed. B. claims a part of A's lot that he has chopped and cleared and fenced with a temporary fence, refuses to have said line surveyed, claiming that law gives him clear title to the land after having occupied same for fifteen years. B's tenant was told when chopping said land that he was trespassing on another man's land. Can B. legally claim said land?

It appears to be a dispute of a private nature between A. and B. only and we would suggest the propriety of our correspondent consulting his solicitor in the matter.

J. C.—Big creek runs through our township from north to south, and flows the whole year, the water being from one foot to eight feet deep. At its mouth the water gradually spreads out over a large tract of marsh lands, mostly owned by the Big Creek Shooting Company. About twenty-five years ago a company got a charter to dig a canal from the mouth of the Big Creek about 200 yards out into Long Point Bay, so that they could run logs through there and run up with small boats. This charter has expired a long time ago, and before the present company bought the marsh which they own on both sides of the canal.

Now, the trouble is here, this company has put a dam across the canal, which is about eighty feet wide, and they have left a gate in the centre of the dam, so that they can put in the gate, and back the water up and shoot it out all over their marsh lands, making good shooting and trapping for musk-rats.

The farmers that have low lands bordering on this marsh, claim that it overflows the flats and hurts the pasture. One or two farmers objected to the dam at the time it was put in, but the Shooting Company said if it was any damage to them, they would pay them that damage, so they were let go on. Now, then, about one dozen farmers have come to the council asking us to pass a by-law to have the dam removed. It does not damage only six or eight persons. What I want to know is, should the council take action and pass the by-law, or do you consider it a private matter for damages between the Shooting Company and these farmers that claim to be interested?

We do not think the council can legally interfere in this matter. If the parties who have complained to the council are injured by the action of the company in erecting the dam mentioned they have their remedy against the company in an action for damages.

X X X.—1. Two land sales for arrears of taxes were held in this township, the first sale in 1884 and the second in 1891. The treasurer of the township did not issue any of the list of lands liable to be sold for arrears of taxes until the year 1891, or just before the sale, seven years were missed, would the sale held in 1891 be legal?

2. Was it legal for the reeve of the township who issued warrant for the sale of lands in arrears for taxes held in 1891, to purchase in his own name land sold at that sale?

3. Was it legal for the treasurer, at the land sale in 1891, to sell to the reeve and cut off forty-four acres of the best end of the lot when issuing the deed?

1. We assume from the language used by our correspondent, that the municipality he refers to is one coming within the act respecting municipal institutions in districts. We think our correspondent has omitted an important item of information in this question, which would materially guide us in answering the same. It is this, as to whether the council of the municipality postponed the holding of the sale of lands in arrears after the regular time. We would like to have this information before answering.

2 and 3. We do not think the reeve could lawfully purchase at the sale of land in arrears. His personal interests would, in so doing, necessarily clash with the duties he owes to the public as reeve of the corporation, directing the sale, he cannot enter into a contract with such corporation, which would be the case were he to become a purchaser at a tax sale.

W. T. F.—Does section 50 Consolidated Assessment Act apply to municipalities in Algoma, or must a by-law be passed by the council, fixing the time for the assessment roll to be returned to the clerk, as per section 21 of the act respecting the establishment of municipal institutions in Algoma? My view is that section 21 applies to the first assessment only, Am I right?

A. We are of opinion that section 50 Consolidated Assessment Act, 1892, does not apply to Algoma. Section 21 of the act respecting municipal institutions in Algoma, refers to the first assessment, and also to the return of the roll on subsequent assessments as provided by by-law required to be passed under the provisions of section 29.

SUBSCRIBER.—1. What notice is required before a council can pass a by-law to locate a new road in the district of Algoma, where there is no road allowance on the concession lines or side lines; in place of that five per. cent of the land is reserved by Government for roads, so that roads may be built where it is most practicable. Is it legal for the council to appoint any one they may think competent to locate the road, or must it be a provincial land surveyor?

2. Council has passed by-law to dispense with dog tax. Can council pass by-law to have the money that was collected last year for dog tax put in the general fund and used for paying the general expenses of the municipality same as other local taxes, and refuse to pay for sheep that may be killed by dogs?

1. We would advise the council to communicate with the commissioner of crown lands in reference to this matter. The land reserved seems to be still vested in the government. It is probable there are orders in council relating to this matter, and it would be well to have the roads located and laid out by a government surveyor. See also sec. 38 of chap. 152, R. S. O., 1892.

2. The moneys to the credit of the dog fund of the municipality will be available for payment of claims for damages for sheep killed by dogs, until the same are exhausted.

A. M.—1. Can a reeve move or second a motion when the council is in session?

2. A non-resident having both real and personal property in a municipality, said personal property is locked up in the house, is the tax collector allowed to break open the house to seize the property for taxes?

3. Is two cents on the collar the highest rate a municipality can collect?

4. And does that include what poor school grants they make?

5. At court of revision, has court any authority to alter an assessment supposing no appeals are in?

1. No.
2. No.
3. Yes.
4. No.
5. No.

We notice from proceedings of various councils throughout the province, that when treasurers give new bonds the old bonds are generally cancelled and ordered to be given up. This is a mistake. The liability of bondsmen commences with the date of the bond, and if after the treasurer's bond is cancelled and given up, irregularities are discovered which took place, or were commenced previous to the date of the new bond, the council would have no claim on the security, whereas, if the old bond had been retained the council would then be in possession of securities covering the whole of the treasurer's term of office. A new bond may be accepted and the securities relieved, but the bonds should remain in the possession of the municipality. When the treasurer ceases to hold office, the bond should be filed as other documents belonging to the municipality.

Publications Received.

The Municipal Index by Mr. A. M. Dymond, Law Clerk to the Legislative Assembly. Carswell & Co., publishers.—When the Consolidated Municipal Act was issued last year in separate form, the only objection noticed was that the index should have been more complete. The Municipal Index, which is in reality, a digest of the enactments of our provincial legislature affecting in any way the powers and duties of municipal councils and their officers, is, we believe, so much of a necessity to municipalities, that the legislature should supply each clerk with at least one copy, and complete the good work commenced last year by the consolidation of the Municipal and Assessment Acts. The index has but to be seen to be appreciated, and we hope it will form a leading feature of future editions of the revised statutes of Ontario.

Consolidated By-Laws of the Village of Ailsa Craig. E. B. Smith, Clerk.—The consolidation consists of the passing of one by-law to amend and consolidate certain by-laws of the village. The new by-law which contains 192 sections neatly indexed, reflects great credit on the clerk to whom the duty of its preparation was entrusted.

Statement of Receipts and Expenditures, Township of Plympton, 1892.—This report is very neatly printed, and worthy of having the name of the treasurer printed in connection with it.

Financial Statement of the Corporation of the City of Brantford. James Wood-yatt, City Clerk.—In addition to the statement of the financial transactions of the municipality during the past year, a statement showing the progress of the municipality during the last sixteen years is included. The auditors seem to have given their work every attention, and we see no reason why the name of the gentleman who handles the finances for the city should not have been mentioned.

The Minutes, Reports and By-laws of the County of Lambton for January Session, 1893, with Auditor's Report on Accounts of E. A. Vidal, Treasurer for the year 1892.

Auditor's Report, Township of Sullivan, A. Stephen, clerk.

Minutes and Proceedings, January Session, County Council County Grey, also Auditor's Reports, 1892.

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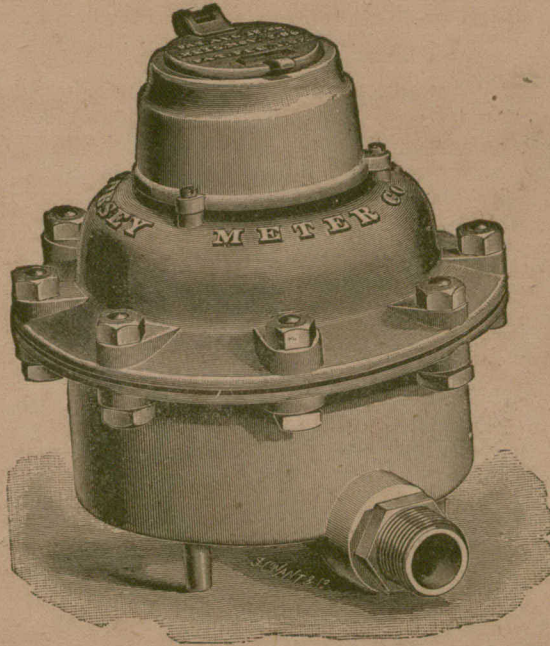
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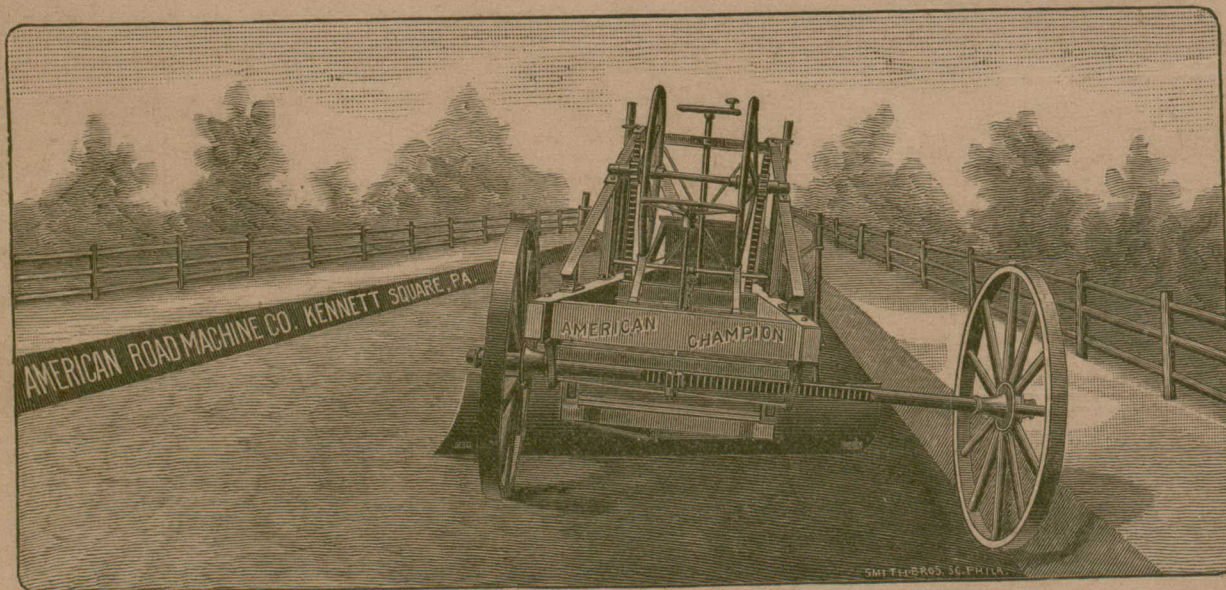
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