

# The Municipal World

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

Vol. 3. No. 10.

ST. THOMAS, ONTARIO, OCTOBER, 1893.

Whole No. 34

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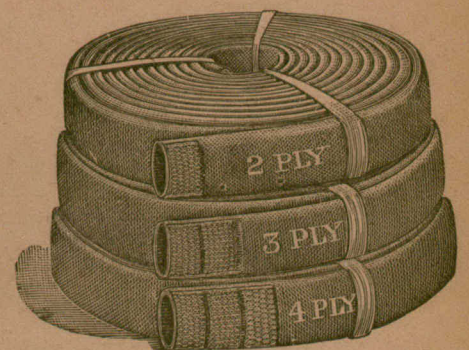
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## MUNICIPAL CLERKS.

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

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THE MUNICIPAL WORLD,  
ST. THOMAS, ONT.

## CALENDAR FOR OCTOBER AND NOVEMBER, 1893

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

#### OCTOBER.

2. Last day for returning Assessment Roll to Clerk, in Cities, Towns and Incorporated Villages, where Assessment is taken between 1st July and 30th September.—Assessment Act, section 52.
- Last day for delivery by Clerks of Municipality to Collectors of Collectors' Rolls, unless some other day be prescribed by by-law of the Local Municipality.—Assessment Act, section 120.
- Notice by Trustees of Cities, Towns, Incorporated Villages and Township Boards to Municipal Clerk to hold Trustee elections on same day as Municipal Elections due.—P. S. Act, section 103 (1).
- Night Schools open (Session 1893-94).
10. Selection of Jurors in every municipality.—Jurors Act, section 18.
15. First day on which quail may be killed.
30. Last day for passing by-laws for holding first election in Junior Township after separation.—Municipal Act, section 91.

#### NOVEMBER.

1. Last day for transmission by local Clerks to County Treasurer of taxes on lands of non-residents.—Assessment Act, section 121.
- Last day for transmission of tree Inspector's Report to Provincial Treasurer.—Tree Planting Act, section 6.
- The first day on which deer may be killed.
9. Last day for Collector to demand taxes on lands omitted from the roll.—Assessment Act, section 154.

### 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.

## Harrison's Municipal Manual—5th Edition.

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## The Municipal World.

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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, OCTOBER 2, 1893.

A well-governed municipality is quite as important as a well-governed province, and as candidates for councils of next year are now being talked about there should be a united effort on the part of all who feel interested to secure the best possible representatives. There are important matters that need regulating in nearly every municipality, and care should be taken to see that party feeling, which is greater, in view of the coming elections, is not allowed to interfere with the choice of good representatives. Capable men should be selected as candidates, who are possessed of sufficient firmness to resist the many influences that favor private at the expense of public interests. This is more necessary in cities, towns and villages, where the municipal representatives are constantly available to the greater majority of their constituents.

The wrong notions entertained by many citizens of their duties towards councillors are only equalled by the ideas of many of the latter of their duties towards the citizens. On the part of the former, the notion is that in voting for a candidate a personal favor is conferred. The elected takes the same view as the electors, and look upon the selection as a mark of personal favor, and generally, when one of those friends has an individual interest, to urge, he has no difficulty in inducing his representative to take charge of the matter. This is said to be the weakness of all municipal government.

The sort of representatives needed are those who are prepared under all circumstances to stand out for the municipality as against the individual interests. Besides being honest he should have backbone, and be prepared to say no, and say it often. In looking for desirable candidates for municipal honors, the young men should be considered and induced to take a larger share in the public business, than generally fall to their lot. The knowledge they gain and the development of their faculties for discussing municipal matters is of great importance to every community, and while it is not advisable that any council should be composed entirely of young or inexperienced men, still the more who can be induced to take

an interest in discharging the duties of representatives, the better, and more progressive will be the administration of affairs.

\* \* \*

The indications are, that, at the coming municipal elections, the question of reform in road making will be a prominent one. Many municipalities are already considering the matter, in a practical way. The township of Pushlinch proposes to submit a by-law to abolish the present system of statute labor. The amount to be raised in lieu thereof to be equivalent to, but not to exceed to aggregate of the statute labor commuted at sixty cents per day, together with the average of the yearly expenditure of monies on the roads and bridges, and in order to test the efficiency of the proposed new system, the by-law, if carried, will remain in force for five consecutive years.

In Colchester North a public meeting has been held. Some of the questions favorably discussed were the assuming of township lines as county roads, and the advisability of borrowing upon the credit of the whole county a sufficient amount to properly gravel all the county and leading roads, not now gravelled, and extend the debentures over fifty or sixty years and put all roads in good shape at once.

\* \* \*

The favor with which propositions for the construction of electric roads in different parts of the province meet, wherever introduced, leads us to believe that charters for construction of works of this description, will, in the future, be asked for from many municipalities. This is an important matter of interest to the whole community, and where it is at all possible, that next year's council deal with the question, an extra effort should be made to have the board composed of good men, as the promoters of these roads are generally far-seeing men with experience, who are not backward in taking advantage of a municipality, should the people's representative give them an opportunity of doing so.

### Assessment of Properties of Telephone Companies.

The question of the assessment of the poles, wire and instruments of telephone companies, has on several recent occasions, been considered and discussed by the provincial judiciary. A number of conflicting decisions and opinions have already been given, so that the points in issue have not been, as yet, definitely settled. We think it advisable, however, to call the attention of our readers to the cases that have come under our notice. The Bell Telephone Company, after the sittings of the court of revision for Owen Sound, in June last, appealed from the decision of said court to the county judge, His Honor Judge Creason. The company was assessed for \$3,000 for personalty and appealed, on

the ground that their plant, instruments, etc., are not in the nature of personal property. After hearing and considering the arguments for and against the company's contention, His Honor delivered the following judgment:

The company is incorporated by 43 V., cap. 67 (Canada), passed 29th April, 1880 (vol. 2, p. 99, of 1880 statutes of Canada); by section 5, the company is authorized to construct, erect and maintain its line or lines of telephone along the sides of and across or under any public highways, streets, etc., provided that the company shall not interfere with the public right of travelling or of using such highways, streets, etc. Under this act the company constructed its lines of telephone along the sides of highways in Owen Sound. The Municipal Amendment Act, 1883, of this province (56 V., ch. 35, section 286 A), after giving certain powers to municipalities as to telephone companies, provides in 286 A (2), as follows: "Nothing in the preceding subsection contained or done by virtue thereof, shall limit or prejudicially affect any existing rights of any telephone company with respect to the use of streets or lanes for the purposes aforesaid." Under its act of incorporation, confirmed, as I think, by the Ontario act, above mentioned, in regard to the right to use streets, the company is entitled to occupy and use the highways for its lines of telephone, subject to the limitations in section 3 of its charter. It appears to me that the lines of telephone planted on the highways are, and are intended to be, as much permanent structures as a building erected by the owner on his lands. Upon a careful consideration of the authorities and the statutes above referred to, I am of opinion that the poles planted on the highways and wires attached to them, come under the words, "other things erected upon or affixed to the land," in S. 2 (9) of the Assessment Act. The telephone instruments are an essential part of the lines of telephone, and are, when attached to the wires, a part of the whole system, and thereby fixtures. As the highways are exempt from assessment, all things erected upon or affixed to them are also exempt from assessment. (Williams v. Pritchard, 4 T. R. 2—2 Revised Reports 310, and the Toronto St. R. Co. v. Fleming.) I hold then, that the company's telephone system is really erected on the highways, and not personal property in respect of any part of its lines in the town, and is, therefore, not assessable, and order that the assessment roll be amended by striking out the assessment against the company for personal property, and substituting an assessment against it of \$1,368 for income. I may add that in my examination of authorities cited, I did not consider the cases, such as Hawtry v. Buttin, coming under the English Bills of Sale Act, applicable to this matter. His Honor Judge Morrison permits me to say that he concurs in this judgment.

His Honor Judge Woods, of Perth, has given a decision in the appeal of the telephone company in the town of Mitchell, which is in terms confirmatory of the judgment above quoted, while His Honor Judge Thomas, of Goderich, came to the conclusion, in a similar appeal, that all the plant and poles of the telephone company in the town of Clinton were assessable. It is possible that variation in the circumstances and the mode of bringing the appeals before the court are the causes of these differences of opinion. No doubt the matter will be further fought out in our courts, or finally settled by legislative enactment before many months go by. On pages 62 and 76 of THE WORLD will be found answers to questions on this subject, which seem to be substantially in accord with Judge Creason's decision.

### Selection of Jurors.

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

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

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

This may be made before any justice of the peace, having jurisdiction in the municipality.

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

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

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

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

returned during the then current year.

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

### Protection of Sheep.

The act respecting the protection of sheep was amended at last session of the legislature, by providing that, where dog tax is not paid, the dog may be killed by a constable, on order of the justice of the peace, to whom the collector reports, and by substituting the following for section 6 which has been repealed;

Any person may kill (a) any dog which he sees pursuing, worrying or wounding any sheep or lamb, or (b) any dog without lawful permission in any enclosed field on any farm which the owner or occupant thereof or his servant finds giving tongue and terrifying any sheep or lamb on such farm, or (c) any dog which any person finds straying between sunrise and sunset whereon sheep are kept. Provided always that no dog so straying and which belongs to or is kept or harbored by the occupant of any premises next adjoining the said farm or next adjoining that part of any highway or lane which abuts on said farm, nor any dog so straying either when securely muzzled or when accompanied by or being within reasonable call or control of any person owning or possessing or having the charge or care of said dog, shall be so killed unless there is reasonable apprehension that such dog if not killed is likely to pursue, worry, wound or terrify sheep or lambs then on the said farm.

It is surprising to notice the space devoted by the provincial press to council proceedings, especially when the language used is far from polite and contrary to what should be used in meetings of the people's representatives. Many men, no matter what position they occupy, will do anything to appear as champions of the particular section or party they represent, but when they find it necessary to use language unbecoming to a municipal councillor it is an evidence that they are not capable, and should never have been elected to the position. Our municipal institutions are supposed to be one of the greatest and best educational institutions, and it is the election of incapable men who, when they have an opportunity, turn the meetings into a bedlam that disgusts those who are capable, but who will not accept office when they have to associate with those who are continually making use of ungentlemanly language.

### Voters Lists in Cities.

The proceedings before the assessor or assessment commissioner, as provided in section 9 of the act of this year, shall be the same as nearly as may be in the case of appeals to the court of revision. No person on the alphabetical list shall be struck off without notice of an intended application to the assessment commissioner for that purpose. In order to have a name added to the list, or correct an error in the names on the list, it shall not be necessary to give any previous notice to the assessment commissioner for that purpose. In order to have a name added it shall be necessary for the person whose name is to be added, to make an affidavit as provided by the 9th section of the Manhood Suffrage Act, and by the act respecting oaths under the Manhood Suffrage Act, and such affidavit on being produced to the assessment commissioner, and filed, shall, for the purpose of the commissioner's report, be sufficient *prima facie* evidence of the deponent's right to vote subject to appeals to the judge. When the assessment commissioner make no changes he shall report to the clerk in the form provided in the act. This report is to be posted up and advertised. Appeals to the judge must then be filed with the clerk, within 30 days from date of report. Where changes are made he is required to prepare two lists setting forth therein in alphabetical order, first, the names to be added to the list in the several wards, sub-division and parts of the original list to which the said names are to be added, and second, the names to be struck off the several wards, sub-divisions, and parts of the original list. Each of the two lists shall be in parts, one for each polling sub-divisions in the city. The list so prepared shall be delivered to the clerk with a report as given in form 9 of the schedule of the act. This report should be sworn to by the commissioner.

The penalties mentioned in sections 34, 35 and 36 of the Voters' List Act of 1889, are made applicable to the assessment commissioner or assessors for non-compliance with the provisions of this act. After the clerk receives the report with list of changes, he is required to print a supplementary list, which shall be posted up and transmitted to the same persons as required by law in the case of the original list. The proceedings in reference to the revision of the supplementary and original voters' list by the judge, are the same, and for that purpose they are to be considered as one list.

After the voters' list has been revised, corrected and certified to by the judge, and before the nomination day at any election, the judge shall have the power to strike from the list the names of any persons who have died since the list was revised, and the certificate of the registrar-general or division registrar shall be sufficient evidence.

This, we consider, is a very good provi-

sion which should be extended to the ordinary voters' list in every municipality, as by the removal of the names, the personation of dead men at elections would be prevented.

### Collector's and their Duties.

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

The attention of municipal councils in villages and townships is directed to section 123, sub-section 2, of the Consolidated Assessment Act, which provides that collectors in these municipalities shall call at least once on the person taxed, or at the place of his usual residence or domicile, or place of business, if within the local municipality, in and for which such collector has been appointed, and shall demand payment of the taxes payable by such person. Or, if so empowered by by-law of the municipality, he shall leave with the person taxed, or at his residence or domicile, or place of business, a written or printed notice specifying the amount of such taxes, and shall at the time of such demand or notice, as the case may be, or immediately thereafter, enter the date thereof on his collection roll opposite the name of the person taxed, and such entry shall be *prima facie* evidence of such demand or notice.

A by-law, passed in accordance with this section last year, will, if properly worded be sufficient until repealed. This is an important matter, and unless the by-law referred to is passed, the only valid notice would be that mentioned in the first part of the section, which requires the collector to call once on the person taxed and demand payment of the taxes, whereas, if the by-law

is passed he may either call and demand the taxes, or leave with the person taxed, or at his residence or domicile or place of business, a written or printed notice, specifying the amount of such taxes.

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

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

(To be Continued.)

A large number of towns and cities are laying in a supply of stone, which they expect to have broken by tramps in return for food and lodging during the coming winter. The closing of mines and factories in the United States has materially increased the number of these gentry, and if the towns would provide hard work for all comers they would soon be warned to give the province a wide berth.

\* \* \*

If Hamilton could get rid of the telegraph and other poles that disfigure its streets and inconvenience its people, it would be the most beautiful city in Canada. The other day the United States supreme court decided that municipal corporations might tax telegraph poles. If Hamilton were to levy a tax on all poles erected in its streets, exempting from taxation all poles put down alleys and in backyards, we think that the companies would soon find it convenient to rid the streets of those abominations. In Brighton, England, there is not a pole to be seen in any of the streets. The wires for all the electrical services are carried from the houses or strung on poles in the yards.—

Dundas Star.

**ENGINEERING DEPARTMENT.**

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

**Engineering.**

The great object of the engineering profession of to day appears to be to build monumental works, and it is to be regretted that such is the case, and that more attention is not paid by the profession to the ordinary works of the municipality. No work is too great or too difficult for the engineer to undertake and carry to successful completion, provided he knows that there is sufficient capital behind him to complete the enterprise. Where the care, skill and judgment of the engineer is mostly needed is not in the erection of great works, where material and capital may be used with a lavish hand, but in matters of less magnitude, found in every day municipal practice. Where a certain work is to be done with a limited amount of capital, in this the designs must be carefully prepared, and every detail closely and carefully calculated, so that no unnecessary material will be used, and the work performed to answer all requirements. In building the useful appliances of to-day, the engineer must remember that it is not merely in the conception of designs, but in the general features, that skill must be shown. He must always remember that the whole is never stronger than its weakest point, and that weakness is more often found in the details than anywhere else. Never pass anything over because it seems to be small, but give to each detail the most careful attention that you would give to a larger feature. Remember also that the works that you build will generally supersede those which someone has built before, and are liable to be superseded by those which a future generation will build, but do not on this account neglect your work, or endeavor to make simple the least costly substitute. The users of small works learn quickly that the cheapest work is seldom a good investment. The users of large works are gradually learning the same thing, and the constant demand is for better engineering structures. Above all things, make your structures simple. Skill is required to work out complicated details, but is a much higher skill which makes complication unnecessary. The best teacher I ever saw, used to say that if he had but three minutes to solve a problem, he would spend two minutes in finding the shortest way to do it. It is said of many bridges which cross the Manchester ship canal all built at once there are no two alike. This is not the way the engineer would make his work.

If you have chosen the engineering profession simply to make money, you had better leave it before you begin. The conscientious engineer must take an interest in his work because he loves it. His first idea must be to do good, thorough

work. The pecuniary compensation must be considered simply in the light of compensation, and not as the main object of his work.

**Roads and Road Making**

The growl of discontent which has been going on because of the misery, and cost of bad roads, for several years past is beginning to crystalize. The newspapers in all the populous counties are taking up the subject, and in every corner of the province you can find public men holding their wet fingers in the air, to discover which way the political wind blows on the road question. If they will only have patience for a little while the breeze will be strong enough and they will have to seek a harbor, or travel under double reefed sails.

For a time, the farmers, who are the class most interested in the condition of country roads, were inclined to feel annoyance at the agitation in favor of improvement of roads which has sprung up. They suspected it was merely a demand from dudes on bicycles. But the farmers are coming to perceive, we think, that their own welfare is as much considered in the good roads as the pleasure, or profit of any class of city residents. The question is one of travel, and traffic between town and country. To make this travel, and traffic more easy is to benefit the nation materially, socially and intellectually, the rural population included.

The legislature ought to take hold of this vital question, and do something, require the people elsewhere to do something towards getting good roads, and city councils ought to start brick paving of streets in cities. It is the coming road, brick is, the bare idea of a town having no bottom, and requiring four horses to pull an empty wagon. Could thriftlessness and inbecility go farther.

The main thing is to secure a practical demonstration by examples of durable and solid roads. When such roads can be found in every county, the farmers will very soon convert their opposition into an urgent demand for the universal extension of such highways. Without doubt many of the road overseers intend to render full value for the money they receive. A large number evidently do not commit themselves to that extent. Irrespective of results of a law that permits the same individual to be treasurer and auditor of public funds, to audit his own account, draw warrants upon himself, present them to himself, and receive the amount from himself, may suit that individual, but is hardly in keeping with other laws for the production of public good. On the inefficiency of the present system there can be no honest disagreement, nor any on the deplorable condition of our highways in consequence. A thorough

consideration of the matter in the direction of reform will, without doubt, bring relief from this legislature.

Sometimes it seems to be a common notion among farmers that a dirt road when dried by the summer sun, and worn into fairly good condition by passing vehicles is as good a wagon road as can be had for the purpose of farm traffic. This is a stupendous mistake. Every dirt road sinks more or less at the point of contact with the wheels of a heavy wagon. If the road is composed of soft material the depression is, of course, greater, but, whether of soft gravel or clay, it always exists in some degree. Many years ago a kind of instrument was made, a kind of spring balance by which could be ascertained exactly what power was necessary to haul a loaded wagon over roadway, made of different kinds of materials. This instrument has since been made in different forms and used on hundreds of different occasions so that its results are proven to be of great value. It was found by these experiments that a horizontal force required to draw a wagon, and load of twenty-one hundred weight over a Telford road was only forty-six pounds, showing that the load was fifty-one times greater than the power required to haul it. To haul the same load over a gravel road, (laid on earth) required a power of 147 pounds or three times that found necessary on the Telford road. These results show that the hauling of loads upon gravel roads, which are commonly believed by the farmers to be as good as any, cost about three times as much, as upon a well made Telford road. The experiments which I have been telling you about, were somewhat extended, and their results were so interesting that they might well be studied by every person interested in the improvement of country roads.

To simplify the whole statement, that system would seem to be the best, which has well defined and rigidly framed laws of the general government where by long lines of important highways may be well made and permanently maintained in good condition, and which also includes local laws and local roads having relation to the parent law, and to the main highways as branches as to a main trunk. Every law therefore which provides for the construction of good roads, unless it be so awkwardly drawn as to interfere with auxiliary legislation should have the public aid and encouragement.

**ROADS.**

The steepest grade that should be allowed on a public road is one in twelve, and the length of such a steep hill should not be more than one hundred feet, in order that a horse may not be over worked before reaching the top with a heavy load; such a grade, however, should not be permitted except on roads of little importance. In fixing the steepest allowable grade, it

should be remembered that the better the road surface is, the better and flatter should be the grades, or else the benefit arising from the good road surface can not be fully realized.

If hills are not too long to tire out a horse and use up his reserved strength, it may be assumed that he can exert an extra pull on a hill, at least double his regular pull on the level; more than this should not be counted on except for very short slopes.

On a very good macadamized road in first class order the required tractive force due to the road bed is about one-fiftieth of the load, the tractive force to overcome gravity on a grade of one in fifty is equal to this, so that the last mentioned grade should be the maximum of such a road.

The distance apart of sub-drains when required, must be governed by the nature of the soil. When this is gravelly and pervious to water, the open ditches on each side of the road, even if sixty-six feet wide, are sufficient for draining the road-bed, as they will act from twenty-five to thirty feet on each side under such conditions, but if there be any springs under the road, especially if they rise under an impervious soil, a sub-drain leading directly to the side ditches will be required. Again, should the road be on the hill side, a deep open ditch on its upper side, and none on the lower side may be sufficient to keep the road-bed dry. In such a case the surface water from the water table on the lower side of the road, should, unless there were ditches at proper distances on the lower side, have to be conducted across and under the road by ordinary dry stone culvert at suitable intervals depending on the grade of the road.

We do not allow ourselves to be rattled by the lunacies, mistakes or frauds of a period of general confusion. These are simply calculated to try men's souls, as well at their roads, and show the stuff whereof both are made. What we want is an easy and permanent wheeling. This depends first; on the material of the road, the way it is put together, and how it is supported. But if roads are to be treated originally, merely as a basis for repairs-patches, and continual taxation for maintenance—the everlasting presence of a standing army of pottering road-menders—we neither want them or their work. Both are nuisances to be avoided, rather than necessary evils to be endured.

The infinite pains, care and cost given to the maintenance of surface on stone roads whose bottoms are continually settling may be likened to the expense and trouble of putting and plastering cracks in the walls of edifices whose foundations are constantly sinking. Who can take pride in either?

Those who would have the substance of a road essay reduced to the brevity of a telegram or a newspaper scrap to stick in

their hats, will find the gist of this one in the following sentence:

"The best roads will have thorough drainage, and a bottom impermeable to clay, covered with a smooth water-shedding, floor roof of pure hard crushed rock, rolled solid by broad tired carts, delivering stone fine enough to fill its own interstices and large enough to endure travel."

#### Bridges.

Take a wooden Howe truss span 105 feet long, over all, or one hundred feet between half blocks, and an iron Platt truss 100 feet long between centres of end pins. The Howe truss of 105 feet over all at \$23.24 per lineal foot, in place, amounts to \$2,441.25. Siding and covering with corrugated iron, painting and whitewashing \$700, making a total cost of \$3,141.25. An iron span 100 feet from centre to centre of end pins, would weigh about 114,000 pounds which at 5.1 per pound, in place, amounts to \$5,814; painting \$65, making a total of \$5,879, or \$2,737.25 more than the Howe truss. This \$2,737.25 at 4 per cent. interest would, in 19½ years amount to \$5,882, or enough to rebuild the Howe truss, and have the same balance on hand to place at interest as at first or in other words, if a Howe truss span will last 19½ years, the money necessary to put in an iron span will build the Howe truss and rebuild it as often as necessary.

\* \* \*

A bridge properly located is half constructed. There are no infallible rules for determining what constitutes a proper location. I would suggest that more time be spent in determining this question. View the size from up stream and from down, from the right bank and from the left. Locate your bridge in different situations, and note the objections and advantages of each. Do not build in a certain situation just because the old one was that position.

\* \* \*

A matter which requires care is the selection of the length of the span. In order to reduce the cost of a bridge it is frequently shortened till there is not sufficient opening left in case of high water, causing damage to the foundations and approaches if not a complete destruction of the bridge. A safe rule is to get the area of the opening required for the highest water known and then add at least 33⅓ per cent. as a matter of safety, and with swift current I would add even more. It is better to make a bridge ten feet too long than five feet too short. In some cases the amount saved by shortening the bridge is more than over-balanced by the additional cost of the approaches.

\* \* \*

An important step to decide, is, what kind of a structure shall be adopted. This, of course, must depend somewhat upon the amount of money that is available for the purpose, but more particularly upon the

length of spans, and the character of the surroundings. For example, I would not think of putting in the same kind of foundation and superstructure over a stream with high steep banks and a swift current that I would over a sluggish stream and low banks in a level prairie. The engineer must acquaint himself not merely with the surface indications but with sounding bar and auger.

\* \* \*

Plans adopted without thorough investigation of all the details are frequently found to be impracticable after the work is commenced, and have to be abandoned. This always proves to be an expensive procedure, and should never occur in the practice of an engineer. Examine minutely the character of all the surroundings, work out your plans to their remotest detail, and when the contract is once let and the work commenced fight it out on that line if it takes all summer.

\* \* \*

When a road is carried, with a structure over a valley in which a water-way plays little or no part, the structure is called a viaduct. These structures differ from bridges only in this particular. In bridges the necessity of leaving the water-way unimpeded, frequently makes long spans necessary; while in viaducts the supports being usually built to withstand only the strain brought down upon them by the superstructure, can be made more cheaply and hence shorter spans can be used. We may state more briefly that bridges are built where filling in is impossible, and viaducts where it is undesirable. The most of that which follows will apply to either bridges or viaducts.

\* \* \*

There are many factors which must be taken into account in the selection of these structures. Local and constitutional circumstances must largely decide the choice of material and method of construction in each particular case.

\* \* \*

The element of durability must be taken into consideration. No material will render a structure indestructible, but materials vary greatly in durability. Iron, conditions being favorable, is reduced to an oxide, and loses its valuable physical properties. Wood, likewise undergoes slow combustion and becomes useless. Certain mineral constituents of rock undergo like changes, causing disintegration. The principal physical agencies are, the expansive power of ice; the dissolving power of water, increased by the presence of acids in solution the atmospheric agencies as aqueous and acid vapours, wind, sunheat and cold. Moreover the actual physical work which the structure does, must also be taken into account. A structure then depends for its length of existence upon, first, the material, and second, the design.



### Drainage.

The most obvious mode of getting rid of surface water is to cut a ditch on the surface to a lower place and let it run. So, if the only object were to drain a piece of land merely for temporary purposes, as where land is too wet to ditch properly in the first instance, and it is necessary to draw off part of the surplus water before systematic operations are commenced, an open ditch is perhaps the cheapest method to be adopted.

Again, where land to be drained, is a part of a large sloping tract, the water runs down at certain seasons in large quantities upon the surface, an open catch-water ditch may be absolutely necessary. This condition of circumstances is very common in mountainous districts, where the rain which falls on the hills, flows down either on the visible surface or on the rock formation under the soil and breaks out at the foot, causing swamps often high up on the hill-sides. Often, too, in clay districts, where sand and loam two or three feet deep, rests on tough clay, we see broad sloping tracts which form our best grass fields.

If we were attempting to drain the lower part of such a slope, we shall find that the water from the upper part flows down in large quantities upon us, and an open ditch may be most economical as a header to cut off the down-flowing water, although, in many cases, a covered drain may be sufficient.

At the outlets, too, of our tile or stone drains, when we come down nearly to the level of the stream which receives our drainage water, we find it convenient, often, and indeed necessary, to use open ditches, perhaps only a foot or two deep, to carry off the water discharged. These ditches are of great importance and should be finished with care, because, if they become obstructed, they cause back-water in the drains and may ruin the whole work. Open drains are thus essential auxiliaries to the best plans of thorough drainage, and whatever opinion may be expressed as to their economy, many farmers are so situated that they feel obliged to resort to them for the present or abandon all idea of draining their wet lands. We will, therefore, give some hints as to the best manner of constructing open drains, and then suggest in the form of objections to them, such considerations as should lead the proprietor who adopts this mode to consider carefully his plans of operations in the outset with a view to obviate as much as possible the manifest embarrassments occasioned by them.

As to the location of drains in swamps and peculiarly wet places, directions have been given in a previous article. We propose only to treat of the mode of forming open drains after their location is fixed. The worst of all drains is an open ditch of equal width from top to bottom. It cannot stand a single season in any

climate or soil without being seriously impaired by the frosts or heavy rains. All open drains should be sloping, and it is ascertained by experiment what is the best, or, as it is sometimes expressed, the natural slope on different kinds of soil. If earth be tipped from a cart down a bank and be left exposed to the action of the weather, it will rest and finally remain at a regular angle or inclination, varying from twenty-one degrees to fifty-five degrees with the horizon, according to the nature of the soil. The natural slope of common earth is found to be about thirty-three degrees, forty-two minutes, and this is the inclination usually adopted by railroad engineers for their embankments.

If the banks of the open ditch are thus sloped they will have the least possible tendency to wash away or break down by frost. Again, where open ditches are adopted in mowing fields, they may, if not very deep, be sloped still lower than the natural slope and seeded down at the bottom, so that no land will be lost and so that teams may pass across them.

The objections to open drains, as compared with under-drains, may be briefly stated thus:

1. They are expensive. The excavation of a sloping drain is much greater than that of an upright drain. An open drain must have a width of one or two feet at the bottom, to receive the earth that always must, to some extent, wash into it. An open drain requires to be cleaned out once a year to keep it in good order. There is a large quantity of earth from an open drain to be disposed of, either by spreading or hauling away. Thus, a drain of this kind is costly at the outset and requires constant labor and care to preserve it in working condition.

2. They are not permanent. A properly laid under-drain will last half a century or more, but an open drain, especially if deep, has a constant tendency to fill up. Besides the action of frost and vegetation has a continual operation to obstruct open ditches. Rushes and water-grass spring up luxurantly in the wet and slimy bottom, and often in a single season retard the flow of water, so that it will stand many inches deep, where the fall is slight. The slightest accident, as the treading of cattle, the track of a loaded wagon, the burrowing of animals, dams up the water and lessens the effect of the drain.

Hence, we often see meadows which have been drained in this way, going back in a few years into wild grass and rushes.

3. They obstruct good farming. We will suggest in another issue in detail, the hindrances open ditches present to the convenient cultivation of the land, and especially how they obstruct the farmer in his plowing, his mowing, his raking, and the general laying out of his land for convenient cultivation.

4. They occupy too much land. If a ditch have an upright bank it is so soft that horses will not step within several

feet of it in plowing, and thus a strip is lost for culture or must be broken up by hand. If, indeed we can get the plow near it, there being no land to rest against, the last furrow cannot be turned from the ditch, and if it be turned into, it must be thrown out by the hand. If the banks be sloped to the bottom, and the land be thus laid into beds or ridges, the appearance of the field may indeed be improved, but there is still a loss of soil, for the soil is all removed from the furrow, which will always produce rushes and water-grass, and carried to the ridge where it doubles the depth of the natural soil. Thus, instead of a field of uniform condition as to moisture and temperature and fertility, we have strips of wet, cold and poor soil, alternating with dry, warm and rich soil, establishing a sort of grid iron system, neither beautiful, convenient or profitable.

In addition to the above reasons for preferring covered drains it has been asserted by one of the most skillful drainers of the world, that proper covered drains of the same depth as an open ditch, will drain a greater breadth of land than the ditch can effect. The sides of the ditch become dry and plastered and covered with vegetation; and even while they are free from vegetation their absorptive power is inferior to the covered drain.

### Hints for the Roadmaster.

The perpetual advantage of an easy grade should be secured at the beginning. Straight lines are best and on like grades are cheapest; it is economy, however, to secure easy grades at the expense of straight lines where such grade is otherwise unobtainable, because the perpetual advantage to all users of the road more than offsets the disadvantage to the land owner from ill-shaped fields.

Capacious middle blind drains in all roads will dry the soil in summer and minimize the damage by frost in winter.

Side drains should never be omitted. If natural soil of road be arched at centre, its drainage will be easier.

All stone liable to disintegrate the road surface should be rejected.

Comparatively large cost is unavoidable. Cheaply made roads will prove the most expensive.

### Good Road Gospel.

Good roads cannot be made without considerable expenditure. There ought to be no shirking that fact. Improved streets in a city cost the owners of the abutting property a good deal of money, but it is recognized as a good investment, the increased value of the property because of the convenience very quickly making up for the cost. The people in a section where the roads are now bad cannot have roads that are really good without paying for them, and the expense will seem heavy to farmers.—*Cleveland Plain Dealer.*

### Street Railways.

A street railway, as almost universally constructed, consists of rolled iron rails, laid upon longitudinal timbers or stringers, resting upon timber cross ties. The top of the rails should be set flush with the surface of the street and they should, preferably, be of such patterns, and laid to such gauge as will least incommode the ordinary traffic conducted with the vehicles of the neighborhood, for it will rarely occur that the interests of the railway, and those of the truck, cart, and express wagon will be other than identical. Upon crowded streets in particular, and generally in the business portion of cities and large towns, every device calculated to keep the current of affairs moving and prevent blockades, is a benefit alike to all.

It is desirable that the car wheels should bear upon the rail, directly over the centre line of the stringers, or as nearly so as possible, in order to obviate any tendency of the rail to cant on one side, when the wood begins to come soft and weak from decay. This condition, however, would exclude the rail with a single rib, raised on one side only, and having a broad, flat surface occupying the rest of its width, which is really the form offering the least interference with the traffic conducted on ordinary carriages; for the broader the surface upon which such carriages can track, the less will be the difficulty, and the less the wrench upon the wheels as well as upon the rails, in taking and leaving it.

In some cities the pattern of the rail as well as a gauge of track is prescribed by municipal authorities, with special references to obtaining such a railway as will not only reduce to a minimum the annoyance occasioned by the rails, to promiscuous traffic but will enable them even to contribute to its promotion and convenience.

A grooved rail as a general rule is not the most desirable, either for a railway company or the ordinary vehicles upon the street. It collects the dust and mud, and, in cold weather gets filled with ice and snow, thus greatly augmenting the tractive force of the car; while the wheels of waggons and hacks, and especially of all lighter and frailer of carriages having once entered into the grooves, experience a severe strain, and are not unfrequently twisted off in leaving them, while the rails themselves are more or less disturbed, and in time loosened at their fastenings.

On a well built street railroad, the force required to move a car upon the level rail at a speed of five miles per hour is not far from 1-230 to 1-250, of the total weight of the car and load varying within these limits with the state of the rail, with respect to moisture and dryness.

The following rule is the one in common use for obtaining this resistance;

Multiply the weight in gross tons by 6.

The product regarded as pounds will be the fraction.

Multiply the weight by the velocity in miles per hour, and divide by 3. The quotient will be the allowance to be made for concussion in pounds. Square the velocity in miles per hour, and multiply the square by the frontage in feet, and divide the product by 400, for the resistance of the atmosphere in pounds.

The sum of these three results is the total resistance in pounds.

Upon street railway lines in consequence of the presence at all times, of more or less dust and stiff mud upon the rails, the tractive force is comparatively large. In the average condition of the road it may be best. To set down as fully one-hundred and twentieth of the loaded car, so that a car weighing 4,000 pounds, carrying twenty-eight passengers, each weighing one-hundred and fifty pounds—total 8,200 pounds—would require the exertion of a force of sixty-eight and one-third pounds to move it on a level rail at low speed. Upon descending grades of one in sixty-eight and one third, the brakes would not therefore have to be applied.

In practice, the grades must conform to those of the street, and for short lengths may be even steeper than would be suitable for ordinary vehicles upon a good street surface. The question of grades therefore, for street railways, except in special cases, resolves itself into the adoption of those already existing.

Upon streets suitably provided with paved carriage ways, and sidewalks, and with sewers, there is no occasion to make special or additional provision for the drainage of the street railways, but for lines located upon country or suburban roads, the same precaution must be taken to procure a thorough surface, and sub-drainage that have already been described as necessary for ordinary roads.

The making of good roads is a matter in which both the town and country are interested. The country is interested in the question because they have so much teaming to do in bringing the products of their farms to market and the merchants and townspeople in general are concerned in the making of good roads, because, other things being equal, farmers will draw their produce to the town that has the best roads leading to it. In this connection it will be interesting to mention that one of the most interesting features of the Interstate Fair at Elmira, New York, and at the Syracuse State Fair in the same state, will be the road improvement exhibits. At each fair a stretch of road will be laid out showing dirt, tile-drained, gravel, Macadam and Telford roads in sections. Over this road narrow-tire and broad-tire wagons will be kept going, an indicator recording the amount of tractive power required on the various roadways and the

effect of each style of tire on the road surface. Implements, machines and materials used in road construction and sectional exhibits showing the method and construction will also be on view. There will also be a bureau of information to answer all questions and distribute literature on road making. The exhibits will be arranged by J. A. C. Wright, state secretary of the National League for good roads, and Mr. Davison of the New York State Agricultural Society. The sole object of the Road League is to further the cause of good roads. All the officers serve without salary. Their motto is, "There is no more common interest than the common roads."

The question of making good roads has been for some time engaging the attention of the Ontario government, and all the municipalities in Ontario ought to take a live interest in the question as there is profit, pleasure and comfort in having good highways.—*Ex.*

### Inspection of Buildings.

There is one matter of very great importance to all towns and cities, which, as a general thing, is overlooked, and that is the supervision of buildings. Where so many fires occur from defective flues, and so much damage results from improper and unsafe buildings, it is proper that all buildings in a town, or at any rate within certain limits, should be passed upon by somebody competent to decide on the general safety of a structure. Every city, or town of any size should have an officer whose duty it should be to inspect all plans and all buildings in course of erection and see that they are put up on correct principles, and copies should be kept and filed of all plans for buildings erected within his jurisdiction, for further reference.

### The Farmer's Disadvantage.

Roads belong to that unappreciated class of blessings of which the value and importance are not fully felt. Bad roads make it difficult for the farmer to market his grain, except during a fractional part of the year, the consequence of which is the crowding down of prices by the plethora of supply. The farmer having no choice of times for disposing of his produce must force it upon the market while prices are lowest.—*St. Joseph Herald.*

### Penurious, Slovenly and Expensive.

There could be no wiser, no more economical use of public money than spending it in the making of good, permanent public roads. There is no man who would fail to be benefited by good, solid roads far more than the construction of such roads would cost him. The old road system of Georgia is penurious, slovenly, expensive and discreditable. It is a disgrace to the civilization of the age.—*Sparta (Ga.) Ishmaelite.*

## LEGAL DEPARTMENT.

H. F. JELL, SOLICITOR,

EDITOR.

## Municipal Councils.

THEIR POWERS AND JURISDICTION—  
HIGHWAYS.

It is a well-known fact that a large proportion of the moneys levied and collected in a municipality is annually paid and devoted to the maintenance and keeping in repair the different roads and highways therein, therefore the extent and nature of the liability and responsibility of the council of a municipal corporation for the maintaining and keeping in repair of the public highways within its limits are all important questions. It is a very difficult matter—in fact, an impossibility—to define with any degree of certainty what, in the eyes of the law, constitutes non-repair of a highway. In determining the question of non-repair, the nature of the country, the character of the roads, and the care usually exercised by municipalities in reference to such roads, must all be taken into account, a new side line or a concession line opened in a sparsely-settled, rural municipality, could scarcely be expected to be found in as perfect a condition as an old highway in a well-settled township. In general terms, non-repair may be said to be any defect in a highway which renders it unsafe for ordinary travel. The obligation expressed by the phrase “keep in repair,” is satisfied by keeping the road in such a state as is reasonably safe and sufficient for the requirements of the particular locality, and in deciding whether any municipal council is chargeable with default, regard must be had to such considerations as the means at the command of the council and the nature of the ordinary traffic of the locality. Mr. Dillon, in his excellent work on “Municipal Corporations,” says: “A municipal corporation is not an insurer against accidents upon the streets and sidewalks, nor is every defect therein, though it may cause the injury sued for, actionable. It is sufficient, we think, if the streets (which include the sidewalks thereon) are in a reasonably safe condition for travel in the ordinary modes, by night as well as by day, and whether they are so or not is a practical question, to be determined in each case by its particular circumstances.” In determining the question, the season of the year, the place of the accident, the hour of the day or night, the manner and nature must be all taken into consideration. It is a question of fact depending on the evidence, whether the municipality has been guilty of negligence or failed in their reasonable duty. The question of non-repair may be raised unless by reason of a structural defect in the highway or inert matter left either upon or over the road. But it is not every obstruction upon a highway having the effect of

hindering or delaying travellers, or impeding traffic thereon, which constitutes non-repair of the highway, a traveller may be obstructed by a crowd of people or vehicles, his horse may be frightened by the explosion of fireworks, or other sudden and unusual noise, by the falling of a signboard, or by the presence of wild animals, and yet the highway may not be, in any legal sense, out of repair. In a recent New York case it was laid down that, as a general rule, the public are entitled, not only to a free passage along the streets, but to a free passage over each and every portion of every street, and this would seem to be a safe rule to follow. The primary object of the street is for the free passage of the public, and anything which, without necessity, impedes that free passage is a nuisance. The right of any person, lawfully, to use the street is subject to the right of any other person to make a corresponding use of it. For example, no man has a right to throw wood or stone in a street at pleasure. But, as fuel is necessary, a man may throw wood into the street, for the purpose of having it carried into his house, and it may lie there a reasonable time; so, as building is necessary, stones, bricks, lime and other materials may be placed on the street, provided it is done in a most convenient manner.

## Legal Decisions.

WILLIAMS VS. RICHARDS.

In this case the Queen's bench division of the high court of justice, for Ontario, recently decided, that, that cannot be called a defined channel or watercourse which has no visible banks or margins within which the water can be confined. And an occupant or owner of land has no right to drain into his neighbor's land the surface water, from his own land not flowing in a defined channel. The rule of the civil law, that the lower of two adjoining estates owes a servitude to the upper to reverse all natural drainage, has not been adopted in this province.

There seems to be trouble developing a nice question of procedure, brewing on the Windsor board of education. A contemporary contains the following: The Windsor board of education, by a vote of 9 to 4, last night expelled trustee McNee, he having contravened section 46 of the High School Act. Mr. McNee is a member of the firm of McNee & McKay, printers, which firm has had contracts from the board, and thus Mr. McNee was charged with being financially benefited from work done by the board, it being illegal for any member to derive any benefit from the board of which he is a member. McNee said that the board had no authority to deal with the matter and he will take it before the county judge.

The section of the High School Act quoted in the above article is as follows: No high school trustee shall enter into any contract, agreement, engagement, or promise of any kind, either in his own name or in the name of another, and either alone or jointly with pecuniary interest, profit, or promised or expected benefit, with the corporation of which he is a member, or have any pecuniary claim upon, or receive compensation from such corporation, for any work, engagement, employment, or duty on behalf of such corporation, and every such contract, agreement, engagement or promise shall be null and void, and *such trustee shall also ipso facto vacate his seat, and a majority of the other trustees shall declare the same vacant forthwith*, and notify the clerk of the municipality, or board of trustees having authority to appoint such trustee accordingly.

In view of the language used in the above section, the course pursued by the Windsor board in expelling Mr. McNee, seems to say the least very questionable, admitting that Mr. McNee's firm had contracts with the board, this fact itself rendered Mr. McNee's seat vacant under the statute, and the only step to be taken by the board was to declare it so.

One of the worst forms of nuisance which local boards of health have to deal with is an ill-cared for slaughter-house or one where it ought not to be. This kind of nuisance very often outrages all sense of decency and ought not to be tolerated twenty-four hours by a local board of health, or by any of the residents whose houses or places of business are made unhealthful or unpleasant by reason of foul emanations and air pollution.

\* \* \*

Another way in which these filthy slaughter houses are probably detrimental to health is this: Fresh meat is very absorbent of foul odors, and is quickly tainted in an atmosphere laden with the germs and the stenches of putrefaction. Tainted meat often gives rise to dangerous and sometimes fatal poisoning among those who have eaten such food. The whole idea is revolting, eating meat that has been dressed, and perhaps left to cool from six to twenty-four hours in a building which an ordinary person can hardly enter without suspended respiration and gastric insurrection.

\* \* \*

So great an evil had these small and unkempt slaughter houses become in England that a society was formed a few years ago, whose object is to call the attention of the public to their dangers, and to secure improvements in the arrangement and care of such places. The society under the presidency of the well known sanitarian, Dr. B. W. Richardson, has been doing good work in that country, and it would seem that some such effort is needed in this country where the people are too forbearing.

### Development of Municipal Institutions in Ontario.

The origin of municipal institutions in this country is due to the people who first came from England to America. They were dissatisfied with the way church affairs were carried on in the old country, and were desirous of establishing a reform, whereby members of the congregation should have more voice than formerly in the church government. It was owing to their inability to secure a reform of this nature that they crossed the ocean, settled in groups, and built their houses near together, so that they could all go to the same church. Thus, a parish, which, for municipal purposes, is called a township, was formed, and consisted of as many farms as were within convenient distance from the meeting house, and around the meeting house a village gradually sprung up, with the customary tavern, store and town hall.

A township, taken as a whole, and in relation to the government of the country, may be looked upon as an individual who obeys the government, not because he is inferior to or that he is less capable than his neighbor for governing matters, but because he acknowledges the utility of an association with his fellowmen, and because he knows that no such association can exist without a regulating force. As the townships increased in number, they became a part of larger districts called counties, without which a system of united self-government would be far from complete.

In 1635, the first county was established in Massachusetts as a judicial district, with its court house, goal and sheriff. The early English settlers were used to a county as a district for the administration of justice, and they brought with coroners, sheriffs and quarter sessions. In Virginia a different county system was introduced. There was an unsurmountable distinction between the owners of plantations, and the men and women who had been indentured "white service." An aristocratic type of society was largely developed in Virginia, as readily as the democratic type was developed in New England. In Virginia, the system was that of the English parish with its church warden and clerk, and the vestry composed of twelve chosen men elected by the people of the parish. The difference between the New England township and the Virginia parish in respect of self-government was quite plain; in New England the township was the unit of the representation of the Colonial legislature, in Virginia, not the parish, but the county was the unit of representation. The conditions which made the New England town meeting were absent, the only alternative was a kind of representative government, and for this the county was a small enough area. There were usually, in each county, eight justices of the peace, and their court was a counterpart of the quarter sessions. In addition

to the administration of justice, these courts superintended the construction and repairs of highways and bridges, and for this purpose divided the county into precincts, appointing annually for each precinct, a highway surveyor.

To trace the development of these municipal institutions in Ontario, I do not propose to refer to the municipal laws that may have been in operation in Quebec, but will commence in 1760, when Canada came into the hands of the British. During the first three years, the government was purely military, when, by proclamation of George III., in 1763, the ancient French customs and civil laws were restored, but in all cases of a criminal nature the laws of England were to be in force.

This continued until 1774, when the Quebec Act was passed, which provided for the appointment by His Majesty George III. of a council for the affairs of the province, consisting of not more than twenty-three, nor less than seventeen, which council, with the government, had the power to make ordinances for the peace, well-fare and good government of the province. Every ordinance passed had to be transmitted to His Majesty for approval. In 1788, under the authority of the two acts passed by the governor and council, Guy Lord Dorchester, captain-general and governor, divided Quebec into districts.

In July, 1792, Governor Simcoe, by proclamation, issued from the government house at Kingstown, divided the province into nineteen counties. In this division of the province into counties, but very little attention seems to have been paid to the boundaries of the four districts into which the province was already divided.

The first session of the first Provincial Parliament was convened at Niagara on the 17th day of September, 1792. The session lasted twenty-eight days. Eight acts were passed: The first, "To introduce English law as the rule for decision for all matters of controversy relative to law and civil rights;" the second, "To establish trials by jury;" the third, "To establish the use of the Winchester measure and a standard for other weights and measures;" the fourth, "To abolish all summary proceedings in courts of common pleas in actions under ten pounds sterling;" the fifth, "An act to prevent accidents by fire;" sixth, "For the more easy and speedy recovery of small debts;" seventh, "To regulate the toll to be taken in mills;" and the eighth, "For building a jail and court house in every district within the province and for altering the names of the districts." The second session of the parliament was held at Niagara, commencing on the 31st day of May, and ending on the 9th day of July, 1793. The second act of this session was to provide for the nomination appointment of parish and town officers within the province, and the system of

county government then introduced was that which was already established in the State of Virginia. Chapter 4 of the act of this session was to regulate the laying out and mending and keeping in repair the roads and highways in the province.

Chapter 6 was to fix the times and places of holding the courts of general quarter sessions of the peace within the several districts of the province.

In 1801, in addition to the appointment of constables, poundkeepers, and other officers, the magistrates were empowered to erect jails, court houses, etc., and the control, alteration, construction and repairs of highways was one of the general duties. The principal duty of the quarter sessions courts was the changing of road allowances as laid out in the early surveys, so that roads could be constructed with less expense than if on the original allowance.

Up to the year 1834, the justices in session managed all local matters pretty much as they pleased, and in that year an act was passed which provided that the inhabitant householders, at their annual township meetings, should appoint not less than three nor more than eighteen persons to be fence viewers. The meetings were also authorized to determine what should be considered a lawful fence, and the act provided at great length what the powers, duties and remuneration of fence-viewers should be, and how their decisions should be enforced. By this act also provision was made for opening ditches and watercourses and for apportioning said ditch or watercourse among the several persons interested, as the fence-viewers might decide.

In 1835, an important change was made. Several acts previously passed, respecting town meetings, were repealed, and it was provided that the township clerk should assemble the inhabitants of the township, being householders and freeholders, at a place agreed upon at the previous yearly meeting. This meeting was empowered to choose the following township officers: The clerk, three commissioners, one assessor, one collector, and any number of persons they thought proper to serve as overseers of highways, roads and bridges, and as poundkeepers. The collectors gave bonds to the district treasurer to whom they paid the proceeds of the rates levied, and the township clerks gave bonds to the commissioners. The most important change was the election of commissioners, to whom were now transferred many of the powers respecting the construction and repairs of bridges and roads previously held and exercised by the justices in quarter session. The board of commissioners was required to meet three times at the place to which the last township meeting was held, and were authorized to hold as many other meetings as they thought best at any place they chose. They were to receive from

*To be Continued.*

## 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.

A. M.—A lot in our municipality was sold at a tax sale over six years ago. The party that purchased said lot has never been assessed for it. How many years back can we go to collect taxes? Can we return lot for sale again, provided party refuses to pay the taxes? and when could we return same?

The particulars furnished by our correspondent are meagre. Has the land in question been on the non-resident roll each year since the purchase at the tax sale? if so it should have been offered for sale again as provided in section 160 of the Consolidated Assessment Act *et seq.*, unless the council extended the time for such sale, pursuant to section 161 of said act. If the latter has been done, the land may be offered for sale at the expiration of the extended time, observing the statutory rules governing such sales.

J. W. K.—The scale of statute labor in the municipality is the same as the Consolidated Assessment Act, 1892, calls for on page 349 and 350. Will send you the question again, would like the answer in a few days, to settle a dispute. A man is assessed for three lots in different road divisions, 100 acres in each, respectively, \$950, \$1,150.00, \$125.00. How many days road work has he?

For the purpose of determining the number of days, the average assessment or \$742 for each 100 acres should be used. This, at the scale mentioned in the act, would be twelve days, to be divided among the three divisions in proportion to assessment, say six days, five days, one day.

E. B.—1. A owns a village lot, he sells part of it to B, and part of it to C, but does not have it surveyed or sub-divided into lots. The parts so sold are not aliquot parts of the whole lot, such as the north half, the south-west quarter, etc. The assessor in assessing, finds it impossible to give a description of said parts of the lot—in a few words, sufficient to indicate the part of the lot intended to be described. A description by metes and bounds would be too long for insertion in the assessment roll. Can A be compelled to file a plan of said lot in the registry office? and if not how is the assessor to define the separate parts of the lot?

2. D owns two village lots, he erects a factory on same. Part of said factory is on one lot and part on the other. Should the assessor put a separate value on each of these lots, including therewith a portion of the factory on each of said lots, or should he put one valuation on the whole property?

3. Brown, Jones & Robertson (a firm) appear on the assessment roll as owners of property, sufficient to qualify each as a municipal voter. Their christian names or initials are not given on the roll. Should all or any of them be placed on voters' list, and how should the names be placed thereon, as a firm or each separately?

1. It is not essential to the validity of the assessment that a perfectly accurate description of the property be set down in the assessment roll. The north part in south-west part of the village lot in question, as the case may be, would be sufficient. The quantity of land in the respective parts should be furnished the

assessor by the owners. A cannot be compelled to file a plan, nor is there any necessity for his so doing.

2. If both lots and the factory thereon are owned by D, one valuation on the whole property is sufficient.

3. Although these names have not been properly entered on the roll by the assessor, we see no objections to your placing them on the voters' list separately, since they each possess the requisite qualification as voters. If there be any error in, or omission of the christian names, they can be corrected or supplied at the court of revision.

W. J.—A owns a farm in North Dumfries, assessor assesses A as owner, and in the enumeration of children between certain ages, put A's son down as under 21 years of age. Said son came of age when the road work was performed in June, and will be put on voters' list at judge's court as joint owner. Is he legally bound to do road work?

According to a strictly literal construction of section 91 of the Consolidated Assessment Act, 1892, A's son would be legally liable to perform one day's statute labor in his municipality.

SUBSCRIBER.—There is a party living in one township, and he owns land in another township, and he is assessed in both townships, high enough to run for reeve in the one he is not living in, and he sold the property to another party since he was assessed. Now, what I want to know, is whether he can run for reeve, and if he gets it can he hold the office, having sold his property? but he holds a mortgage on said property for his pay, he claims he can run for the office, and hold it if he gets it, and can take the proper oath on said property.

The party referred to must reside within the municipality of which he is elected reeve, or within two miles thereof, see section 73 of the Municipal Act. We do not think he can run for and hold the office in question, having disposed of his property, unless he is in a position to qualify under sub-sections 2 and 3 of the said section of the Municipal Act. Our correspondent has not furnished us with sufficient particulars to enable us to judge as to this.

J. B., M. C., N. P.—About three-fourths of the ratepayers of a public school section have formed a separate school last January, and even two of the trustees of the public school have given their notices, and are supporters of the R. C. separate school. Now, the trustees of the public school have kept the school going as in the past, while the trustees of the separate school have done nothing, and every one, who has children able to attend school, attend the public school, as the year previous. The trustees of the public school have filed their requisition for school moneys but none of the trustees of the separate school. I would like to know:

1. Can the trustees of the public school charge every supporter of the separate school as non-residents?

2. Can they refuse children of separate school supporters to attend the public school?

3. Is it the duty of the township clerk to extend the levy required by the public school trustees to the whole rateable property, the same as before it was divided? or to leave out those that became supporters of the separate school?

4. If accepted as non-residents, where will the supporters of separate school that have no children to attend school pay their school taxes?

We think we can answer all your questions at once. It is certainly not the intention of the Separate Schools Act that persons giving notice under section 40 could thereby secure exemption from payment of school taxes altogether, as would be the case in the instance mentioned by our correspondent. Since there is no separate school to support, and the separate school trustees have taken no action in the matter, we think that all parties should contribute to the support and maintenance of the public school in the usual way. See also section 42 of the Separate Schools Act.

## The Rights of the Wheelman.

His honor Judge Elliott of London, recently delivered a judgment, which, if the newspaper accounts be correct, is somewhat severe on the rider of the silent steed. The facts seem to have been that a bicycle ridden by a Mr. Hardy collided with a wagon driven by one of the aldermen, at the corner of Wellington and King streets, in the city of London. As a result the bicycle was badly broken, and Mr. Hardy sustained severe bruises. The driver of the wagon appears to have been on the wrong side of the curb, and Mr. Hardy sued him for damages. The decision was given against Mr. Hardy, and the newspaper reports say that the learned judge ventured the remark that bicyclists were entitled to no sympathy. This seems strange in view of the fact that the bicycle has ceased to be a play-thing, has gradually taken its place amongst other vehicles ordinarily passing along a highway, and occupies the same place in the lives of a large number of men as does the horse and buggy, in those of others. We are inclined to think that the learned judge had other reasons for his decision in this case, than those given in the accounts referred. Probably the question of contributory negligence was a material factor.

An exchange refers to a system adopted in Toronto—or Toronto Junction: When a street is to be opened up or widened, the council passes a by-law, assessing the cost thereof to the lands and premises, more or less benefited thereby. The assessor or engineer makes a report, naming the sum payable by each owner of land considered benefited, and a day is fixed for hearing appeals, by the court of revision, from those to be assessed. This is the only reasonable way of opening out new streets where land owners do not do their duty in laying out their property.

Section 612 of the Municipal Act refers to the proceedings necessary to assess the costs of the work in this way, and it is only justice to the majority of the ratepayers in any municipality that many works now paid for out of the general fund should be assessed against the property improved or benefited.

## County Debentures.

The county council of Oxford is apparently in trouble, over the sale of the \$155,000 worth of debentures, issued to raise money to pay for the court house, and poor house, recently erected in that county. The intending purchasers refuse to take the debentures, their solicitors having expressed the opinion, that the issue is illegal. The difficulty seems to have been occasioned by the passing of a by-law by the county council, providing for the issue of these debentures, without having first submitted such by-law to the vote of the ratepayers. This proceeding, it is claimed, does not fill the requirements of the following section, and sub-sections of the Municipal Act.

344. (1) Every by-law, except for drainage, as provided for under section 569 of this act, or for a work payable entirely by local assessment, for raising, upon the credit of the municipality, any money not required for its ordinary expenditure, and not payable within the same municipal year, shall, before the final passing thereof, receive the assent of the electors of the municipality in the same manner provided for in section 293, and following sections of this act; except that in counties the county council may raise, by by-law or by-laws, without submitting the same for the assent of the electors of such county or counties, for contracting debts or loans, any sum or sums not exceeding in any one year \$20,000, over and above the sums required for its ordinary expenditure.

Provided always, that where a county and city are united for judicial purposes, the council of the county or city may, by by-law or by-laws passed at any meeting of such council, without submitting the same for the assent of the electors of such county or city, as the case may be, for contracting such debt, raise such sums of money as may be required for erecting, building and furnishing a court house and offices, to be used in connection therewith, and for acquiring such land as may be necessary or convenient for the purposes of such court house and offices.

And provided always, that a city or town heretofore or hereafter withdrawn from the county and continuing so withdrawn pursuant to the provisions hereof, or of a city heretofore or hereafter erected, may, by by-law or by-laws passed at any meeting of such council, without submitting the same for the assent of the electors of such town or cities, as the case may be, raise such sums of money as may be required to liquidate their share of the county debt as awarded or agreed upon pursuant to this act, and to issue debentures for that purpose at such rates, for such times and upon such terms as they may therefore have done, or be entitled to do for meeting any other liability of said town or city, as the case may be. R. S. O. c 184, s 344.

345. No such by-law of a county council for contracting any such debt or loan for an amount not exceeding in any one year \$20,000 over and above the sum required for its ordinary expenditure, other than a by-law to raise money for erecting, building and furnishing a court house, and offices aforesaid, or for acquiring land as provided in subsection 2 of the last preceding section, shall be valid, unless the same is passed at a meeting of the council specially called for the purpose of considering the same, and held not less than three months after a copy of the by-law, as the same is ultimately passed, together with a notice of the day appointed for the meeting, has been published in some newspaper issued weekly or oftener within the county, as constituted for judicial purposes, or if there is no such public newspaper, then in a public newspaper published nearest to the county.

These sub-sections are interpreted as applying to Toronto, Hamilton, London

and similar municipalities. When they are joined for judicial purposes with the county, and the weight of opinion and authority seem to be against the legality of the by-law as passed, and the debentures issued pursuant thereto. The only alternatives on the part of the council seem to be to either to prepare a by-law for the issue of the debentures, and submit the same to the rate-payers now, or apply to the legislature for such legislation, as will legalize the debentures already issued. At a recent session the council are said to have deliberated the question in all its phases, and finally, as the safest course, decided to apply to parliament for relief. As to this a contemporary says: All the same the statutes were framed to afford protection to the people of a county who were to be consulted and asked to vote yea or nay when any such expenditure as this was contemplated. It is a judicious enactment, and to allow its provisions to be set aside deliberately, and put the people at defiance and say they must submit and pay whether they like it or not, is far from being in the public interests. Oxford county is in a fix and to ease its residents, where there is only one harsh alternative, the legislation will be granted, but it might be granted with the warning to all other counties that it was only granted because of the dilemma which has arisen, perhaps out of a mistake or unsound legal advice, and that for the future no such relief would be given, but that if county councillors chose to disregard the statutes they must suffer the consequences.

Another difficulty appears to be, that the council have used the sinking fund of the Credit Valley Railway debentures, which mature in October next, for the purposes of paying for the court house, and the money now required is to supply the deficiency. This money having been raised for a certain purpose, it could not, at any rate without an order in council, be appropriated to another purpose. The following is the section of the act:

373—1. If, after paying the interest of a debt and appropriating the necessary sum to the sinking fund of such debt, or in payment of any instalment or principal, for any financial year, there is a surplus at the credit of the special rate account of such debt, such surplus shall so remain, and may be applied, if necessary, towards the next year's interest; the excess shall be carried to the credit of the sinking fund account, or in payment of principal of such debt, R. S. O. c. 184, s. 373.

2. Provided always that any moneys levied and collected for the purpose of a sinking fund, shall not in any case be applied towards paying any portion of the current or other expenditures of the municipality, save as may be otherwise authorized by this or any other act.

3. In the event of the council in any municipality diverting any of the said moneys for such current or any other expenditure, save as aforesaid, the members who vote for the diverting of said moneys shall be personally liable for the amount so diverted, and the said amount may be recovered in any court of competent jurisdiction; and the members who may have voted for the same, shall be disqualified for holding any municipal office for a period of two years, 54 V. c. 42, s. 12.

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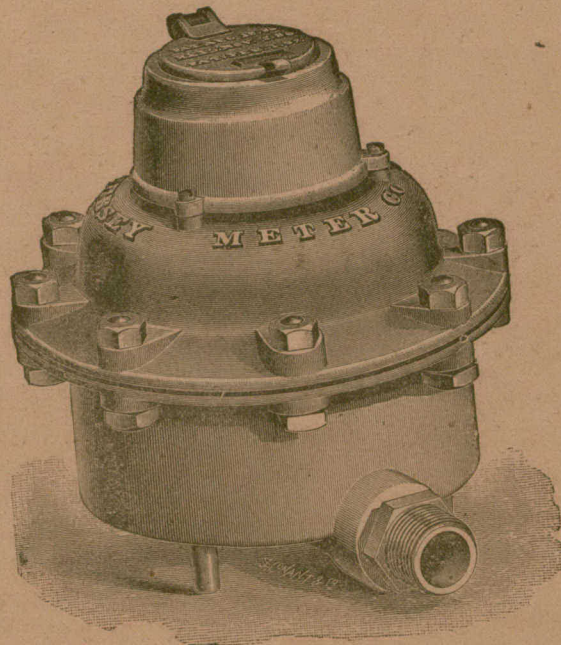
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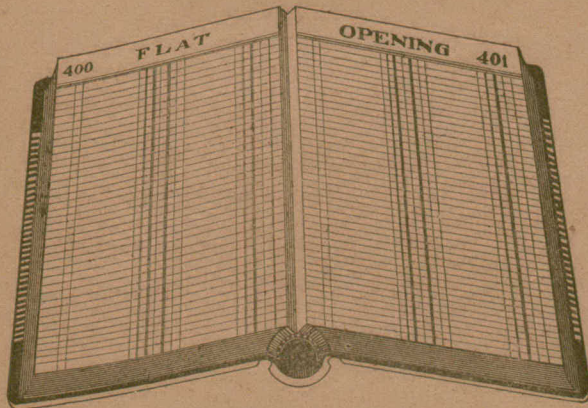
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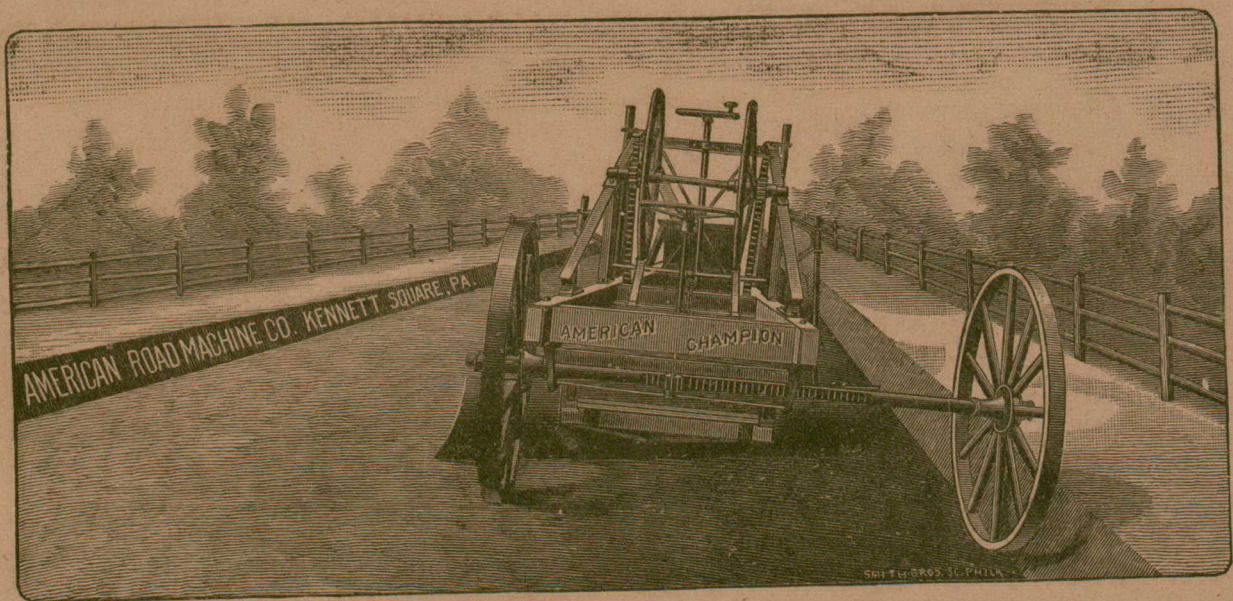
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