## The Bthmicinal ©iclorld

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

Vol. 2. No. 12.

## CONTBNTS.

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## Address -

The Municipal World,
St. Thomas, Ont.

## CALENDAR FOR DECEMBER, 1892

Legal, Educational, Municipal and Other Appointments.

## Degembler

Chairman of Board of Health to reprort to the Council on or before this date. -Public Health Act Schedule A, Section 3.
Last day for appointment of School Auditors by Public and Separate School Trustees. Public School Act, Section: ${ }^{7}$ (1) : Separave School Act, Section 28 (5).
Municipal Clerk to transmit to County Inspector statement showing whether or not any county rate for Public School purposes has been placed upon Collector's Roll against any Separate School supporter.--Public Sehool Aot, Section II3, Separate School Act, rection JU.
Sabscriptions to Munictipal Worto due
That flai for Conmeils to hegr and dotermine appeals where persons added to Collector's Roll by Clerk of Mumieipality.-Assursment Act, Section 154.
13. Last day ior Publro and Separate School Trustees to fix places for nomination of

Prnatees. - Public Schorl Act, Section 102 (2) : Separate School Act, Section 31 (5).
14. Last day for payment of Taxes by Voters in Local Municipalifies passing By-laws for that purpose. Murnicipal Act, Section 489.
Last day for Collectors to return their Rolls and pay over proceeds, unless later time appointed by Council-Assessment Act, Section 132
Gounty Treasmed to pay Township Trensmrer rates collocted in Township. -Pnblic Schout lot, Section imn 81 .
Local Assessment to be paid Separate School Tristees. - Separate Sehool Act, Seetion 55
15. Nuricipal Council to pay Secretary-Treasurer Public School Boarls all sums levied and
collected in Township.-Public School Act, Section 118.
County Commeils to pay Treaturer High School-High School Act, Section 30
Hioh \&chnol Treasurer to receive 1 moneys due and raised uncer High Sohools Act.High Schools Act, Section 36 (1).
Collectons in Mumicipalitie which have passed by-laws requiring taxes to bo paid before lfth December to retim to Trensurer names of all persons who have not paid their municipal taxes.- Manicipal Aet. section 254.
Contcils of Towne, Townshins and Villages to hold meeting.-Municipal Act, section 263.
20. Last day for a Treasurer to send Clerk list of all who hare not peid their taxes. - Municipal Act, Section 251.
Last day for giving notice of Nominations.
22. Himh Sihnols close, first teun.-H. S. Act, Section 42.

Public and Separate Schools close.-P.S. Act, section 173, (1) ; S. S. Act, section 79 (1). Last day for notice of formation of new school sections to be posted up by Township Clenk.-P. S. Act, section 29.
24. Tast day for posting up Anmal SEatement of Assets and Liabilities in Townships, Towns 25. amt Villnges. - VinicipaliAct, spction 263 hristmas Day (Smelay).
New Schools go into operation.-P. S. Act, section $81(3)$; section $82(3)$; sec. $87(10)$; Alteration of schoal boundaries in unorganized Townships takes effect.-P.S. Act, sec. 41 (2).
26. Nomination Day for Mumicipal Councilors and also Publiu School Trustees where school hoards have required the lataer to be elected at same time as Manicipal Councils.
28. Anmaal Public and Separate School meetings.-P. S. Aot, Section 5 ; Section 102 (d) Last day for submitting by-law for establishing Township Boards.-P. S. Act, Section 54.

Auditors to examine and report upon accounts ete., for year ending on the 30 th December, preceding their appointment.-Mumcipal Act, Section 263.
Roll to be finally revised by Juige when assessment taken between Ist July and 31 st September.-Assessment Act, Section 52.
Road Commissioners to cease to hold office.-Assessment Act, Section 111.
Ricense Commissioners cease to hold astice. -Liquor License Act, Section 3.
31. Protestant Separate school Trustees to transmit to County Inspector names and attendance during the last preceding six months,-S. S. Act, Section 12.
Rural Trustees to report average attendance of pupils to Inspector.-P. S. Act, Section
Semi-Annual Reports of Public School Trustees to Inspector, due.-P. S. Act, Section 40 (13).
Semi-Aunual Reports of Separate Schools to Department, due.-S. S. Act, Section 28 (18) ; Section 62

Trustees' Report to Truant Officer, due.-Truancy Act, Section 12 .
-P. S. Act, Section 107 (12).

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Address all communications to
K. W. McKAY, Editor,

Box 749, St. Thomas, Ont
Communications and advertisements for next issue must be in on or before the zoth of this month.

## ST. THOMAS, DECEMBER 1, 1892.

With this number, volume 2 of THe Municipal World is completed. Judgng from the numerous letters received, we believe that the efforts of the present management have been appreciated. With the experience gained during the past year, and the continued support of municipal councillors and officers, we purpose to still further improve the paper, and hope that all whose subscriptions expire with this issue will send in their orders so that the January number may be received at the usual time. Those who are members of councils during next year will have an opportunity of assisting us by taking advantage of our club rates for a copy for each member and officer.

Section 489 , sub-section 2 , of the Consolidated Assessment Act, gives the councils of every local municipality authority to pass by-laws disqualifying any elector from voting at municipal elections, who has not paid all the municipal taxes due by him on or before the 14th day of December next preceding the election. A by-law under this sub-section should be passed a sufficient time before the election to give persons in default an opportunity to obtain the restoration of their franchise under the provision of section 8 I of the said Act. Where a by-law has been passed under this section the treasurer is required by section ${ }^{251}$ of the Consolidated Municipal Act to prepare, on or before the 20th December in each year, and transmit to the clerk, a list of all persons who have not paid their municipal taxes on or before the 14th day of the said month of December. Section 8I provides that any who may be included in the defaulters' list required under the provisionsof the above-mentioned sections, or of section 119 , may put in their vote, by depositing with the deputy returning -officer a receipt from the treasurer of the
municipality showing that they have paid their taxes.

The question of the reduction of members of county councils leads us to consider whether the interests of the municipalities would not be just as well served if the number of members of township and village councils was reduced to three, who would be elected for a term of three years, to retire in rotation the same as school trustees, the senior member to be chairman or reeve. The present system of electing councillors for one year has a bad tendency, which is most noticeable on our roads. They are not at any time sure of re-election, and the consequence is they endeavor to make a small amount of money go as far as possible, without much thought as to what they or others may decide to do the following year. If, on the other hand, they were elected for a term of years, uniformity and a continuance of the work would be provided for.

Under the provisions of sec. 263 , subsec. 3 , the council of every town, township, or incorporated village is required to hold a meeting on the $15^{\text {th }}$ day of December, and shall immediately thereafter publish a detailed statement of receipts and expenditures for the portion of the year ending on the day of said meeting, together with a statement of the assets and liabilities and uncollected taxes, and a similar statement in detail is required to be attached thereto respecting the last fifteen days of the preceding year. The statement should be signed by the mayor or reeve and by the treasurer, and published torthwith in such newspapers as the council may direct. Instead of publishing the statement in the newspaper the council may cause the same to be posted up not later than the 24 th day of December in the offices of the clerk and treasurer, as well as the post offices in the municipality, and not less thantwelve otherconspicuous places therein. The clerk is required to procure not less than 100 additional copies of said statement and deliver or transmit by post to the electors who first request him to do so, one of such copies not later than the 24 th day of December, and shall also produce copies of the said statement at the nomination. This section does not apply to East or West Algoma, North Renfrew, Muskoka, Parry Sound, or Haliburton. The statement is thought by many to be unnecessary, and we are aware that in some
municipalities the council has published only an abstract statement of their receipts and expenditures, assets and liabilities, together with a note explaining that if any ratepayer wishes to procure a detailed statement he can do so free of charge on application to the clerk. Where this is done the council have to pay the clerk tor extra work in connection therewith. This is not in accordance with the wording of the section, and should only be resorted to where, by some unavoidable cause, the council is unable to furnish a detailed statement in time.

On or before the ${ }^{*}{ }_{5}$ th $^{*}$ day of December township councils are required by section 118 of the Public Schools Act to pay to the secretary-treasurer of the board of trustees of each section, without any deduction whatever, all sums levied and collected for public school purposes in said section. To secure correctness in this matter the clerk should mail each secretary-treasurer an order filled in with the correct amount due the section, to be signed by at least a majority of the trustees and sealed before being presented to the council or treasurer. The amounts to be paid to the trustees as above referred to are those mentioned in section 109 of the Public Schools Act.

A meeting of the municipal clerks of the county of Grey was held recently at Owen Sound. A. Stephen, Desboro, was appointed president, and G. G. Albery, of Meaford, secretary. Several questions of interest were discussed and the meeting adjourned to meet again during the month of January.

A wrong opinion has been formed of the proposed organization of clerks in each county. It is not for the purpose of meeting in hostility against the various councils, but rather the contrary. Such an association will prove beneficial to the clerks in discussing the various duties of the office, and the intricate Municipal Act. That a municipality will also be benefited by the more extensive information of the clerk is without doubt; for councils generally resort to clerks to find the law relative to the different points brought up at the meetings, and much of the township businessoutside of the meetings is left tothem.

The government of a municipalityshould not be for a ring, or for a faction, but truly and absolutely for the people.

## Municipal Candidates and Politics.

Municipal government is closer to the people than any other. It interferes more in the business and social relations and for the reason that it has more to do, it is more expensive. In all countries the municipal government is the most extravagant, because of the indifference of those who should have an influence and control. It is not only the duty of good citizens to take an interest in municipal politics, but to accept offices when their fellow citizens request them to do so. No man should be adverse to performing the duties he owes to the public of serving them in an official capacity, even, if, by so doing, he has to sacrifice personal feeling and interest. It is sometimes difficult to induce the most desirable men to accept offices. The time was when the office sought the man, and when defeat was almost certain if the candidate solicited votes for himself. There has been a change, and candidates are expected to exert themselves for their own election. It may be as well that such is the case, as it offers a better opportunity for the people to judge of the man they are called upon to support. That the man must exert himself in his own behalf constitutes no good reason why he should not accept or seek an office of which he is worthy. The present method simply involves a question of modesty, and a good and capable citizen will waive that for the public interest. The fact is, the office should be sought for the honor it confers, and honor can only be derived from the excellency of the services rendered.

The business man will apply himself to his private pursuits year in and year out, with unflagging industry, but when he is called upon to give a day to the public he will falter, and retire at the mere shadow of what is not quite in accord with his tastes, while, on the contrary, he should endeavor to secure the greatest possible excellence of government for the public good, because in it his pecuniary interests are involved. It is not enough that an honest citizen should cast his vote on election day; he should begin further back and see to it that the proper men are brought forward as candidates. To obtain this end, party organizations are useful and necessary. This had been much condemned and, perhaps, wrongfully, but in local affairs there is distinctly another side to thequestion. Good and capable men.will not interest themselves in municipal matters, did not the careful and honest discharge of the duties there imposed, open an entrance to provincial and dominion politics. There is no class of capable men who are either willing or financially able to administer the affairs of a municpality for the little honor that at taches to such offices. Men do these things for the reward they promise either directly or indirectly, and there is no greater inducement that we can hold out
than the hope of rising high in the estimation of party and country. In no municipality is it possible to get together a council of competent men unless some of them are men of strong party feelings and convictions. All, of course, cannot rise to great importance, but in the minor and much more numerous positions party enthusiasm calls out talent and ability which would not otherwise be reached.

## Reduction of Members of County Councils.

Copies of the bill introduced by Mr. Rorke at the rast session of the legislative assembly to amend the Municipal Act, by increasing the number of votes required in a municipality for a deputy reeve, have been forwarded to the clerks of the different municipalities, no doubt to draw the attention of councils to this method of reducing the number of members of county councils. The amendment would principally effect the representation of township municipalities. A very small percentage of the villages in the province have more than one representative in the county council. The proposed amendment would make no alteration in that, whereas, in almust every township one deputy reeve would be dropped. The comp aint at the present time is that the villages are increasing, and that village and town representatives almost out number those from townships in some counties. A comparison as to population, equalized value, or number of voters, shows that this is not an equitable arrangement, and, if the qualification for deputy reeve is fixed as proposed, this inequality of representation would be still greater.
Separate existence as a village and separate representation in the county council under our present system go together, so that to make it necessary for a village to have a larger population before it can obtain the right to return a member to the county council is not practicable because this would require these vlllages to be retained as a part of the township until they had a population beyond all reasonable bounds.
7he Newwarket Era says, that, if the principle of Mr. Hardy's bill is to obtain, and the county council be created an independent body, havirg no connection with local councils through reeves or otherwise, then we should favor the proposition of The Municipal Wokld, that is, to divide each county into districts, composed of polling sub divisions of local municipalities, so that each district will contain about the same number of votes, and each of these districts to elect a county councillor. In this way the constituency of a member would not be much greater in area than a township and it would give an equitable representation.

Of course a good many people think the creation of another municipal taxing body, independent of the present organizations and without connection with local
councils who have to deal with townline roads, bridges, etc., is a mistake. By this class of thinkers the notion is entertained, that the true principle would be to continue the existing method, but raise the standard of municipality qualification so that only one deputy be sent for every 800 or 1,000 on the roll, instead of one for every 500 as at present, and thereby, avoid the disturbing of a system withwhich the people are familiar, and, apart. from the expense increasing numbers entail, has worked reasonably well for about half a century, The whole question calls for serious consideration, especially in view of the fact that upon the knowledge of county councillors depends the equitable equalization of municipal assessments. for all county rates. We have our fears. that the charge to districts will work disadvantageously to weak municipalities and the more sparcely settled sections of counties ; but we present these thoughts in the hope that in some measure we may help. in arriving at the wisest conclusion.
The Whitby Chronicle referring to the reorganization of county councils and the proposition to give a representative from. each municipality votes in the council in proportion to population or assessment, says: Let us have cumulative districts, but never cumulative votes. That would be going back a hundred years. It seems to us that this, (Ontario) county could be split up into five or six divisions and a commissioner elected to represent each one, to attend to the business. The great trouble is, that people have it in their heads that the old county and township lines, which were marked out through the woods a hundred years ago when no person knew what system of government was to prevail during the future, should be preserved as dividing lines for all time.

Narrow-tire vehicles are so destructive to roads that the suggestion has been made that some effort should be put forth in Ontario to encourage the use of broad tires. In Chicago this method of saving the pavements is being adopted. It is proposed to license every wheeled vehicle, and to grade the fees so that the highest figure shall be paid for the use of narrow tires. Waggons carrying four tons are to be assessed $\$ 50$ if the tires are $21 / 2$ inches or less, $\$ 30$ if the tires are $3^{1 / 4}$ inches, and $\$ 10$ if they reach four inches in width. The minimum fee is $\$ \mathrm{r}$ for vehicles having tires of $4^{1 / 4}$ inches. We have plenty of taxation in one shape or another at the present time, but here is an instance in which taxes should tend to reduce the burden of taxation.

A Hamilton bicyclist got a verdict for $\$ 25$ damages before Judge Muir, against a gentleman who drove into his wheel on the highway. The wheelman got into a rut and could not get out in time to escape the buggy, the driver of which failed to. turn out.

## Municipal Elections

The electors in every municipality, except countres, are required to elect annually on the first Monday in January the members of the council of the municipality, except such as have been elected at the nomination by acclamation. The municipal council should, at its December session, pass a by-law, appointing a returning officer, deputy-returning officers, and fix the places at which the nominations and polls will be held. Section 88 and the following sections of the Municipal Act refer to the powers of councils in regard to this matter. In the case of corporations which have been newly erected, and the first election under the proclamation or by-law, by which the change was effected, shall take place on first Monday in January, next after the date of the proclamation or of the passing of the by-law by which the change was made, the nomination shall be proceeded with at the same time and in same manner as if such change had gone into effect on the last Monday in December, the date fixed for the nomination, and any returning officer, appointed to bold the first election, is required to perform the same duties as the returning officer of any other municipality.

Where the council of a county has passed a by-law before the 3 ist October, in accordance with the provisions of section 91 of the Consolidated Municipal Act, making provision for a first election in the junior township of a union, the returning officer appointed is also required to act in accordance with the provisions of tife section referring to the duties of that office. In the case of separation of union townships, the first election of councillors is required to be by general vote. In townships and incorporated villages, not divided into wards, the election shall be by general vote ; when divided into wards the election is required to be held at the place or places where the last meeting of the council was held, or in such other place as may be from time to time fixed by by-law. No election of township councillors can be held in any city, town or incorporated village, nor can the election for any municipality be held in a tavern or house licensed to sell spirituous liquors.

In a municipality where the election is to be made by wards or polling sub-divisiors, the councll is required by by-law to appoint places for holding nominations for each ward, and returning officers who shall hold the same, the places at which the polls shall be opened if required, and the deputy returning officers who shall preside thereat. The clerk of the municipality is always the returning officer for the whole municipality. Where the election is not by wards or polling sub-divisions the clerk is required to act as returning officer and also to perform the duties of deputyreturning officer at the polls.

On or before the 20 th December, the
clerk or other returning officer is required to give notice of the meeting for the nomination of candidates. In cities the nomination of candidates for the office of mayor is required to be held at the hall of the municipality at io o'clock in the forenoon, and for the nomination of aldermen at noon of the same day. This may be changed to half past seven in the evening, if the council pass a by-law to that effect. In towns nominations for mayor, reeve and deputy reeves are required to be held in the hall of the municipality at 10 o'clock in the forenoon, and the council of any incorporated town divided into wards may pass a by-law providing that the nomination of councillors for the several wards may be held at the same time. Where no such by-law has been passed, the meeting for the nomination of councillors in towns shall be held at noon. The council of a town also has the authority to decide that the nomination of mayor, reeve, deputy reeve or reeves and councillors may be held at half past seven in the evening instead of the above hour mentioned. The councils of villages also have this power. In villages and in townships not divided into wards, the meeting for the nomination of reeves, deputy reeves and councillors is required to be held at noon. In townships divided into wards the nomination of candidates for the office of reeve shall be held at 10 o'clock in the forenoon, and the nomination of candidates for the office of councillor to be elected for each ward shall take place at noon at the township hall or at such place in each ward as may be fixed by by-law. When a township adjoins the limits of any city, town or incorporated village the nomination meeting may be held at such place therein as may be designated by by-law of the council, As we said before, the nomination is to be held on the 26 th of December, but in counties where the county council has passed a bylaw to that effect on or before the first day of July, and of which the clerks of the local municipalities have received notice, the nomination will be held on the igth December. The returning officer appointed for each ward, or the clerk as the case may be, is required to preside at the nomination meeting. When he is "absent, the meeting may choose a chairman. Nominations may be received for one hour from the time fixed for holding the meeting. Where there has been a delay in opening the meeting, it is sometimes advisable to extend the time, and allow a full hour to expire before closing the meeting. A nomination is required to be moved and seconded. After the nominations have been received, and there is more than one candidate for the same office, the candidates themselves or any elector should demand a poll on behalf of the candidates. The returning officer or chairman should then adjourn the meeting until the first Monday in January, and state when and where the polls will be opened.

Any person proposed for one or more offices may resign at the nomination meeting or the following day or elect for whichoffice he is to remain nominated, and failing to do this, he is to be taken to be nominated for the office in respect of which he was first proposed and seconded. Any person who wishes to resign after the nomination meeting, is required to do so in writing signed by him and attested by a witness. This is required to be delivered to the clerk not later than the day following the nomination. It is distinctly stated in section 117 of this Act, that if a resig. tion is not received at latest on the day following the nomination, the clerk or the returning officer has no alternative but to go on and hold the election.

After the nomination meeting the clerk's duty is to see that the ballots are prepared, and that the ballot boxes and other supplies required are furnished to the deputy returning officers, the list of defaulters who have not paid their income tax, required under the provisions of section 119 , must not be forgotten. Sections 120 to 141 states very fully the clerk's and returning officer's duties in regard to the preparation necessary for the election. In performing these duties he is not to take instruction from members of the council if they interfere in any way with these provisions, as he alone is liable if they are not carried out. The poll will be held on Monday the 2nd January, from 9 a. m. to 5 p. m. Sections 142 to 160 refer to the duties of the deputy returning officers and others, in regard to the taking of the votes, and casting up the number given for each candidate. The deputy returning officers should be furnished with a copy of the Municipal Ballot Act for their information and reference in the performance of their duties.

The attention of clerks is directed to the fact that it is only now necessary to furnish deputy returning officers with a certified copy of the printed voters' list for the war or polling sub-division, a blank poll book must be supplied, to be used in accordance with sub-section 2 of section 143 . This sub-section seems to direct the work to be done by the poll clerk. The members of the council must not forget that when fixing the amount to be paid deputy returning officers, as it should also include the amount to be paid the poll clerk.

After all the returns of the votes have been received, the clerk is required at noon on the day following, to publicly declare the names of the candidate or candidates having the highest number of votes.

This should be done at the town hall or at someother publicplace or places wherethe nomination meeting was held, or where the council usually hold their meeting, would be considered sufficient. In case of a tie, the clerk or other person appointed to discharge the duties of returning officer is required to give the casting vote. This is a duty which places them in an unpleasant position, so much so that we think the Act
should be amended by making provision for a decision in case of a tie in some other way. However, as the law is the clerk should do his duty fearlessly and without partiality, irrespective of results.

## Tax on Dogs for the Protection of Sheep.

A great many complaints are being made from time to time by parties interested that the sheep industry is being affected by the neglect of municipal councils to take advantage of the powers conferred on them by section 489 of the Municipal Act, sub-section 15, and by chapter 214 of the Revised Statutes of Ontario. In nearly all municipalities a large sum, derived from the tax on dogs, is applied every year to the general purposes of the municipality, and is looked upon by councils as one of the sources of revenue for general purposes, and but little attention paid to that for which this special tax is levied. Section 489 of the Municipal Act gives township councils power to pass by-laws for restraining and regulating the running at large of dogs and of imposing a tax on the owners, possessors or harborers of dots, and for killing dogs running at large contrary to by-laws, so that if chapter 214 of the Revised Statutes does not deal with the matter to the satisfaction of members of the council they may pass by-laws imposing their own regulations within the limits of the powers referred to in the section mentioned. The act respecting tax on dogs provides that he may kill any dog which he sees pursuing, worrying or wounding any sheep or lamb, or any dog which he finds straying between sunrise and sunset on any farm 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 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 withın reasonable call or control of any person owning or possessing or having the charge of said dog, shall be so killed unless there is reasonable apprehension that such dog, if not killed, is likely to pursue, worry or wound sheep or lambs then on the said farm.

## The Thornbury Bridge Arbitration.

This was an arbitration to decide the percentage the county of Grey should contribute towards the construction and maintenance of the Thornbury bridge, under the provisions of section 533 (a) of the Municipal Act, which provides that in case a municipality of less than 4,000 population should require, for the convenience of the public, the construction and maintenance of bridges of 100 feet in length or more, such municipality shall be entitled to a percentage of the costs of the works from the county council, when
the cost of such bridge creates greatly disproportionate expenditure by such local municipality. In this case application was made to the county council, who refused to appoint an arbitrator or take any action in the matter. The town made a successful application to the lieutenant-governor for the appointment of an arbitrator under the provisions of the act, and the arbitration was proceeded with. Statistics, covering the expenditure of each municipality in the county for ten years, were laid before the arbitrators, to show the proportionate expenditure of the local municipalities, and the award of the arbitrators was as follows: rst, That the county of Grey shall contribute towards the construction and maintenance of the bridge in question, fifty-five per cent. for a period of ten years, including the present year, 1892. 2nd, That the county shall pay to the town fifty-five per cent. of the town's costs of the reference and the arbitrators' fees. In all other respects, each party to pay its own costs.

## Use of Streets by Telephone Companies.

In the June number we stated that the Bell Telephone Company had been made to pay handsomely in many municipalities for the use of the streets for placing the poles on which they string their wires, and that other municipalities similarly should consider this when telephones were required for police stations, fire halls and fire alarm purposes. We notice that the town of Woodstock recently made what we would consider a very satisfactory agreement with this company, whereby the night fire alarm service, which heretofore cost $\$ 200$ annually, is to be given the town free of cost ; the telephone company is to pay the town $\$ 200$ annually for five years for the streets; the company is to give the town the use of three telephones free of charge ; the cost of the telephone service to subscribers is not to be increased above present rates ; the telephone poles on Dundas street are to be raised to a height of fifty-five feet, and the wires carried up to such a height as not to interfere or obstruct the firemen ; the poles are to be painted and the top arm to be reserved for the exclusive use of the town, the poles are not to be sublet without the permission of the council. This agreement is made for five years and effects a saving to the town annually of $\$ 525$.

A decree has gone forth that post-office employees must not act as school trustees. If it is intended to be general it will affect not only the public school board of Toronto, but of Yamilton, London and other places. Evidently the intention is that Dominion officials should not meddle in municipal affairs. This is a decided rebuke to the wirepullers in Toronto, who are panting for a municipal contest on political lines. If Government employees
are to refrain from acting in a public capacity they will not feel like doing the drudgery of a campaign at the command of the party managers. They could very well refrain from both kinds of work.Mail.

The town of Brockville has spent $\$ 5,000$. to ascertain that they will have to pay the Brockville water company $\$ 139,454$ for their waterworks. The town now pays $\$ 5,000$ per year for water for fire purposes.

It is rarely corporate bodies take the initiative in abolishing themselves, yet many municipalities are strongly in favor of such a move, as they believe it would be in the best interests of all concerned. For small counties and cities it seems absurd to think that it requires so many councillors to govern them, especially when we know that the controllable expenditure is very small, and, from appearances, may be less. To this may be added the fact that in reality the finance and board of works committees are the only controlling powers over what we have to spend, and surely their work could be done better with fewer members.

## Publications Received.

During the past year we have been pleased to receive many copies of proceedings, auditurs' reports, etc., from municipal officers. Want of space has prevented us. from noticing these as we had intended. In future a column will be devoted to publications received and special items of interest contained therein.

A Century of Municipal History, County of Welland, part 1, 1792-1841, compiled by Ernest Cruikshank, and published by the county council, contains a short description of the origin of municipal government and legislation in Canada and the county. Early township records, commencing with the present century, are included, together with other information that must be not only valuable but interesting to residents of the county.

An Island Paradise, and reminiscences of travel, by H. Spencer Howell (Hart \&Riddell, publishers, Ioronto), is an interesting account of a visit to "The Sandwich Islands," "the Paradise of the Pacific," together with entertaining reminiscences of the author's voyage around, or rather, " twice around the world." These are exceptionally valuable present day opinions, with numerous illustrations of the different countries and people. By reading this handsome volume all can participate in many of the pleasures and surprises that are in store for an observant traveller in every part of the globe. As a high-class publication, by a Canadian author, it should meet with a large demand, and we predict that in this the publishers, who have paid every attention to the printing and binding, will not be disappointed.

## engineering department.

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

## Municipal Engineering.

It is one of the most important things in the wide world to supervise the construction of public works, and provide for the public safety with regard to its health, drainage and so on. And the words of the article do not apply so much to the engineer who in his office plans large and important works, the details of which are to be carried out by others, or to the subordinate who with little thought of responsibility lays out the work of another, as to that large class of engineers scattered broad cast over our land, found in every county and town of any considerable size, who have both to devise and supervise, to plan and to execute, and that of every variety of work, whether it be to survey a town lot, an acre of ground or a farm ; to improve streets and roads, build bridges, lay out systems of drainage for rural districts, or sanitary works for towns and cities, in short to that class of engineers who are called upon in every county to plan and carry out in detail every needed improvement.

Now this engineer in his capacity as a public servant sustains relations to himself, to the public which he represents, to the contractor whose work he superintends, and to the individuals whose private interests are affected by the work in progress. And as to himself, aside from pecuniary necessities, he must maintain himself as a man of honor, one who can be trusted as an honorable citizens, and as an expert whose work will do him honor. Then he, in the management of public works, stands as a representative of the public and to him are committed matters of great public importance. Important as to cost, important as to their adaptability to the end designed and also to the manner of their execution, and so he is expected to see that the means are suited to the end sought, and . that the public get value received for every dollar expended. While he thus looks to the interest of the public he should as far as possible maintain amicable relations with the contractor, and in insisting that the contract should be fulfilled, it should be done in the spirit of "right is right." While temporarily placed in a position of authority it should not be exercised in an arbitrary way, but rather in a spirit of stewardship. While the interest of the public are well subserved, those of the contractor should not be lost sight of, and he unnecessarily and arbitrarily burdened with things not really essential. He should be a man of good judgment, able to see the end to be accomplished, and ready in the adaptation of means to that end. He should not be visionary, chimerical-such a man may be useful somehow or somewhere perhaps,
but I do not think in the ordinary affairs of life. While not deficient in theory, he should be eminently a practical man. He should be a man of tact, ready to adjust himself to circumstances as they come up. Without this a man is liable to frequent collisions of more or less disastrous consequences, while by a little dextrous sidetracking these are avoided and he moves forward in an open and unobstructed way. In short, the common every-day engineer need not be a genius, but he does need to be largely endowed with that very uncommon thing commonly called common sense.

## Roads and Roadmaking.

If several depressionsare found very near each other, cover the worst andattend to the nextafter the first has become solid. Theruts which are formed should not be filled with loose stone, for this would make longitudional ridges of harder material, but "the laborer should work the rake backwards and forwards on each side of the rut and across it ; and if he do it with his eyes shut he will do more good than by taking pains to gather all the stones he can find to place in it."
The number of men required by this system of constant watchfulness may at first seem an objection to it, but the expenses will be amply repaid by the advantages obtained. Each laborer should have a certain length of road assigned to his special care, and the most intelligent and trustworthy among them should be made inspectors over the others for a certain distance. At times unfavorable for work on the road they should be employed in breaking stone. The labor of one man will keep in repair three miles of well made and well drained road for the first two years after its formation, and four miles for the next two years, by constantly spreading loose stones in the hollows raking them from the middle to the sides, opening the ditches, etc.

The friction or resistance to draught on a road with deep ruts and thick mud is four times as great as on one in good order. This shows the importance of very perfectly "keeping up" the road. An incidental advantage is that the prompt removal of the mud after every shower will prevent the annoyance of dust, so generally an objection to McAdam roads, but not at all their necessary concomitant.

Where the materials of the road are very brittle stone they wear away very rapidly in dry weather, and their consump.
tion $n$ road judiciously, notsolittle astotorma crust which adheres to the whee! nor so much as to make the draught heavy. A moderate use of the watering cart preserves the material from pulverization and keeps them settled in their places at the same time that the comfort of the traveller is greatly enhanced. This is particularly necessary on roads in this country during our hot and dry summers ; for after a long
drought the crust of the road sometimes becomes to dried out that it ceases to bind and permits loose stones to be detatched from it to the great injury to the surface. An excess of moisture must, however, be avoided since it increases the grinding power of the pulverised stones, as marble is sawn and jewels are cut by their own powder combined with water.

The queston may arise whether the materials thus gradually added to the road for alimentation rather than reparation, are sufficient to make up for its annual loss, and diminution of depth, which is too small for direct measurement. Experiments on this point indicate that the amount of materials annually consumed and therefore to be replaced, is one cubic yard per mile for each dollar or beast of burden passing over it.

A road properly kept up by daily attention needs no repairs, but if it be put in order only at intervals the injuries to it which have been increasing in geometrical progression which render very serious repairs necessary. It will be found cut into ruts, deep holes and irregular projections; and often lower in the middle than at the sides. It must be put into shape and restored to its proper cross-section by cutting down the sides and filling up the middle parts. Only a single thin coat of stone should be applied at one time, not more than a cubic yard to a rod superficial. The surface of the old road may be lightly picked or lifted with strong, short picks, merely burying the point of the pick one or two inches deep, so that the new materials may be more easily united to the old ones. This is especially necessary on declivities to prevent the stones rolling down the slopes.

When the road to be repaired is one which has been originally tormed of large stones, and of superfluous thickness no new materials should be brought upon it, but the old stones should be loosened with picks gathered by strong rakes to the side of the road and there broken to the proper size. The surface of the road having been put in proper shape the broken stones are to be returned to it being scattered uniformly and thinly over the surface. Only a small piece of road should be thus broken up at once, say six or eight feet in length, but the whole width. The old plan of repairing would be to fill up the holes with an additional supply of the same large materials. But the methods here recommended makes more work for men and less for horses, and produces a great saving in expense.

The best season for repairing broken stone roads is in the spring or early summer when the weather is neither very wet or very dry, for either of these extremes prevents the materials from consolidating and therefore produces either a heavy or dusty road. If made at this season the roads are left in a good state for the summer and become consolidated and hard so as to be in a condition to resist the work of the ensuing winter.

## Rolling.

The use of a very heavy roller will much facilitate the consolidation of the road. A plan highly recommended is to have a roller made of a hollow cylinder of cast iron, or covered with iron bands seven feet in diameter, and five feet long. A strong axle passes through its length. Its ends are closed and two interior partitions perpendicular to the axles divided into three equal chambers. A longitudinal band of the surface a foot wide can be detached so as to give access to the interior spaces which are filled with gravel, one or all of them, according to the weight desired. The empty cylinder weighs 7000 pounds, each compartment filled with gravel adds 4000 pounds to the weight ; so that the entire weight may be made successively 7000 pounds, 11000 pounds, 15000 pounds and 19000 pounds. To compress a new road, tour to six horses should be attached on a wet day in summer to empty roller and draw it several times over every part of the road till the materials have been so far compressed as not to form a ridge in front of the roller. Then the middle division is to be filled with gravel, moistened to give it solidity, and the rolling resumed till the draft is so much lessened that the end divisions can be filled, the middle one being emptied at frrst if necessary. There should be an excess of power in the horses so that they may do less injury by the violent pressures of their feet. Every part of the road should be passed over from 10 to 15 times. To increase the stability of the compression, an inch of gravel should be spread over the surface and passed over by the roller a few times. If the weather be dry the surface should be watered. The season should be summer, that the road-bed may be dry, and the day be wet to ensure a moist surface which facilitates the binding of the materials. When the roller has finished the compression the road is still very different from one which has borne the traffic for many years ; for although the materials are strongly pressed against one another and have taken a stable position they have not acquired the adhesion which takes place after a series of years, The new road therefore needs for some time careful attention. The travel must finish it by being forced to pass over every part of it uniformly, heaps of pebbles being placed very irregularly so as to direct the vehicles successively on all points of the road. Every rut and the slightest hollows and elevations must be promptly removed by a liberal supply of laborers, whose work will, however, have been greatly lessened by the previous rolling. They must rake over every inequality of surface the moment it is formed.

## KEEPING UP A ROAD

This is a very different thing from repairing a road, though the two are often confounded. A due attention to the former will greatly lessen the necessity for the latter. The former keeps the road always
in good condition ; the latter makes it so only occasionally after intervals of various length during which it is continually deteriorating in a geometrical ratio, so that the better the state in which the road is kept the less are the injuries to it and therefore the less the expense of keeping it in this excellent condition.

Keeping up the road requires the daily attention of a permanent corps of laborers. Supposing the road to be already in good condition, that is, in proper shape and free from holes, ruts, mud and dust, to keep it so requires two fundamental operations: r. The conditional removal of the daily wear of the materials, whether in the shape of mud or dust: 2. The employment of materials to replace those removed.

The first operation requires hoes and brooms. The hoes should be three feet long and of wood, as iron ones would be most likely to loosen the stones. The lighter dust and more liquid mud must be swept off by birch brooms. The detritus between the little projections of the stones should not be removed by too thorough sweeping as it protects them from immediate crushing and preserves their stability. The broom is also necessary to remove every trace of wheels the moment they have passed so as to oppose that habit cr instinct of horses which leads them to follow in the track of the preceding vehicle, and which would soon convert unremoved tracks into ruts. The broom and hoe have then a double end to be accomplished by the same operation, viz. : effacing tracks and removing detritus. Very effective machines have also been constructed for accomplishing these purposes.

The second operation of applying nèw materials demands several precautions. To prevent a weak place from being neglected because the materials are not at hand they should be kept in depots, never more than a quarter of a mile apart and carried thence in barrows. They should be applied after rain, as then they will more easily unite and no coat thicker that one inch should ever be applied at any one time. A cubic yard to a superficial rod will be quite enough at once. They will then soon become incorporated without having their angles worn out by motion and will be of such service as double the thickness applied at once. To avoid retarding the travel and increasing the draught too much a new coat should not be put on any continuous space larger than six or seven square yards.

## Water.

In order to have a clear idea of the nature of water, we must take a view of its chemical construction.

Water was long considered as one of the natural elements and consequently was supposed to be simple, and incapable of being decomposed, or separated into other substances. The discoveries of chemistry however have proved that this fluid is in
fact a chemical combination of two kinds of gases which of themselves are invisible.

The two gases of which water is composed are oxygen and hydrogen. But water is not a mere mechanical mixture of these two kinds of gas, for, if a portion of each be merely introduced into a vessel, water will not be the result. In order to produce water these gases must be united in what is termed a chemical mode, that is by a particular and intimate union very different from simple mixture. The fact of the composition of water was first shown by Mr. Cavendish, who demonstrated it by exploding oxygen and hydrogen gases in a dry glass vessel, by which a quantity of pure water was generated.

By ingenious experiments water can be separated to its elementry constitutents oxygen and hydrogen; and by another process these very constituents may be made to unite and form the same quantity of water as was decomposed.

There is therefore no opinion in natural philosophy better established than that water is a compound body, and consequently that it cannot be ranked among the elements.

When we speak of the general properties of water as a body we allude only to water which is absolutely pure, and unmixed with any other matter whatever. Although pure water is composed of two gaseous bodies, yet there is no variety in its composition ; that is, a given quantity of water has not at one time more hydrogen and at another more oxygen, but the proportion of these constituents is always precisely the same, namely, eight parts by weight of oxygen and one of hydrogen.
Neither is pure water in itself liable to any change whatever, when its elements have once fairly united to form a liquid they cannot be separated or altered in any manner without the liquid entirely loosing all its properties, and no longer existing as water. Why, then, it may be asked, do we hear of different kinds of water ? If water be unchangeable, what distinctions can be made or how can various specimens of water have different qualities, as hard, soft, and so on? In answer to these questions we will first describe the properties of water as a body independently of any kind of mixture with any other substance, or contaminations of any kind.

Water is volatile, that is, it is capable of being converted into vapor. If a vessel containing water is exposed to the air, the water gradually lessens in quantity and at length disappears altogether into invisible vapor. This is called evaporation ; not a particle of the water is lost, but the whole has dissolved into air to return one day in the form of rain. Water boils, or is converted into steam, when it is heated to 212 deg . in the ordinary pressures of the atmosphere, that is, when the barometer stands at 30 inches ; water cannot be made any hotter in open vessels because the steam carries off the heat. If salt is added to the water it is capable of being heated
higher than 212 deg . in proportion to the strenght of the brine. But water may be heated to a much higher degree in closed vessels where the steam is confined so as to exert a pressure upon the surface of the water. Water is so bad a conductor of heat that it was supposed by Count Rumford to be absolutely a non-conductor. And although late experiments have shown that this is not actually the case yet water conducts heat so imperfectly that the Count's conclusion may be taken as true for practice in the greater number of ordinary cases. A vessel of water when put upon the fire is heated by the lower stratum of water expanding, and becoming specifically lighter, hence it ascends through the rest to the top, causing another layer to take its place, this becomes heated in its turn and so the various particles of water transport or carry the heat upwards by their motion. Water becomes solid or is converted into ice when it is cooled down to 32 deg. and the ice begins to be formed, appearing like needles crossing each other. In freezing, the air contained in water is excluded, but the bulk of the ice being expanded is greater than that of the water before being frozen. Ice is specifically lighter than water. The specific gravity of ice is about 0.94 ; that is, it is $6-100$ lighter than water. Water assumes the solid form not only when it becomes ice but likewise in many cases where it combines chemically with other bodies ; for instance when salts crystallize from their solutions in water, a certain portion of this fluid becomes fixed, and is called the water of crystallization; a familiar example of this may be given in the slacking of lime, where the water becomes united to the lime and a dry powder called slacked lime is the result, and which always contains some water in a state of solidity ; this kınd of union of a substance with water is called by chemists a hydrate. That all water which has been exposed to the atmosphere contains a portion of air which it has absorbed may be shown by placing this fluid under the receiver of an air pump and exhausting it ; the air will be seen coming out of the water in numerous bubbles, but this air may also be driven out by boiling ; and if such boiled water is again exposed it will absorb the air as before. About 100 cubical inches of spring water afford two cubical inches of air, which consists of io per cent. of carbonic acid, and the rest atmospheric air, that is oxygen and hydrogen ; but different springs vary considerably in the quantity of air they contain. Rain water contains usually 3.5 per cent. and one per cent. of carbonic acid gas. Snow water when fresh has no air. Water absorbs various gases in different proportions. Of some of the acid gases it takes up several times its own volume. Water is susceptible of compression though in a very small degree. It was formerly thought to be absolutely incomMressable, but it was shown long ago by Mr. Perkins that it can be compressed in a very small degree, by applying great force ;
it has been calculated that by a pressure equal to 2.000 atmospheres it may be diminished one-twelfth part of its bulk. Water is the most convenient material to serve as a standard for comparing the weights of other substances. And their weight compared with an equal bulk of water is termed their specific gravity ; therefore in the tables of specific gravity of various substances water stands as 1.000 . As water expands with heat, and contracts with cold, the weight of a cubic foot or any other measure of water must be somewhat less in warm weather than in cold; and on this account when it is spoken of as a standard it is always supposed to be a certain fixed temperature, it has been ascertained that a cubic inch of distilled water at the temperature of 62 degrees barometer 30 inches, weighs 252.458 grains. Any water heavier than this must contain some other substance, and consequently be less pure. Water is 816 times heavier than atmospheric air.

Water is a powerful solvent, hence it is a very important factor, both as natural agent and in a great number of processes. Substances are contra-distinguished, as they are soluble or not in water.

Water, absolutely pure, is, perhaps, never found in nature. It is nearly so in many instances, but in consequence of its being a powerful solvent, it soon becomes contaminated, more or less, by foreign substar.ces. The purest water that can be found in a natural state is obtained by melting snow, that has just fallen, in a clean vessel, at a distance from houses. But the chemist finds that even then t! e water is not absolutely pure ; it has received some adventitious matter in falling through the atmosphere. All of the varieties of water which are formed on the surface of the earth, or rising in the form of springs are, as we might expect, still more impure, containing various substances which the water has dissolved. It is by art alone that we can obtain the purest water ; to procure it we must employ distillation.

The process of distillation effects no change whatever in the water itself; it merely separates the pure fluid from its impurities. Water, when distilled, is quite discolorless, beautifully transparent, entirely void of taste and smell, and it is lighter than any other water. It is perfectly soft ; soap dissolves in it completely, presenting an opaline appearance. Notwithstanding its purity, however, it is little used, except for medical purposes, or in experiments, partly on account of the trouble in preparing it, and partly because the process of distillation deprives it of the air which water always has in it in a natural state, and which is essential to its being an agreeable beverage; for want of this air the taste of distilled water is vapid.

Water in the ordinary state contains, besides common air, a small quantity of another gas, namely, carbonic acid gas. This gas, which assists in giving a brisk taste to spring water, distillation drives off,
but it is likewise restored by exposure for a short time to the atmosphere.
The origin of rain water, which is evaporated from the sea and land, by the heat of the sun, this liquid rises in vapor, and after aseending to the higher regions of the atmosphere where constant cold prevails, it is cordensed into mist, which appears to us as clouds; these float in the air as long as the temperature remains the same, but when they enter currents of colder air or are effected by electricity, they are further condensed into minute drops of water, which ultimately unite together and descend as rain. One might expect that rain water falling immediately from the clouds should be absolutely pure and entirely free from any other matter. This, however is not the case ; from its purity its solvent powers are greater than those of any other natural water, and also as the atmosphere is burdened with a mass of lifeless part1cles, pulverised into transparency. The respiration of all animate beings, the combustions of all hearth stones and furnaces, and the decaying dead animals and vegetables, continually evolve acids, chloride and ammonia. These are all soluible in water and the mists and showers absorb them freely. Hence the so-called pure waters of heaven are fouled before they reach the earth with the solids and gases of the earth.

Spring water.-The oritginal source of all spring water is rain, which, falling upon high ground filters through the soil and the strata of the earth so long as they are porous, until it is stopped by some impervious substance, as rock or tough clay ; it will then find its way along the surface of this rock or bed until it arrives at some crevice or opening through which it forces its way out to the surface. From this description of springs it is obwious that the water which they afford would be equally pure with rain water, provided it did not meet with any substances in its passage through the earth which it can dissolve.

If it should come in contact with limestones and chalks, it would impart qualities objectionable to potable waters, and troublesome in the household uses and in processes of art and manufacture.

The salts most frequently found in the waters of springs are sulphate of lime and carbonate of lime; but besides these there occur occasionally sulphate of magnesia or epsom salts, sulphate of soda or glauber's salt, or common salt, which is chloride of sodium. Alum is sometimes found and salts of iron are extremely common, besides occasionally other substances.

The chief practical distinction in water is its being what is called hard or soft; what is called the hardness of water is owing to its containing a small quantity of certain neutral salts in solution which have been derived from the passage of the water through the earth. These salts, as have been stated, vary in their nature and proportions according to the nature of the earth through which the water is passed ;
but all these salts which have been enum erated consist of an acid united to some other substance. Sulphate of lime consists of sulphuric acid and lime ; carbonate of lime, of carbonic acid and lime; sulphate of magnesia, sulphate of soda, of sulphuric acid of soda; muriate of soda, of muriatic acid and soda, etc.

Sulphate of lime is by far the most general cause of the hardness of ordinary spring water, carbonate of lime is another substance very commonly dissolved in water, and which occasions hardness as well as being otherwise inconvenient and prejudicial. Common carbonate of lime not being soluable in water, it is natural that one should enquire how it can be occasionally held in solution in that fluid? That some kind of carbonate of lime in hard water is dissolved is evident since water of this kind having the lime in it perfectly transparent, and not cloudy. It is perhaps explained in this way. Every kind of limestone or carbonate of lime, of which chalk is one, is insoluible in pure water; therefore pure water running over chalk or other limestone rocks cannot be impregnated with lime. Were not this the case we should have no water free from this earth as it is so abundant in nature ; nor should we have springs of water issuing so pure as they frequently do from chalk rocks. But springs of natural water are often impregnated with carbonic acid, which they receive in the earth by means not well understood ; the fact, however, is certain ; and when such water is exposed to the air, but still more when boiled, the acid gas passes off and leaves the water free. Now, for instance, the substance chalk, which is lime in combination with a certain determinate quantity of carbonic acid, and no more, making it the common carbonate of lime, and insoluible in water as above said; if this common carbonate should come in contact with water holding free carbonic acid without any lime, the lime of the carbonate will then take up an additional quantity of the acid gas, and thus become doubly carbonated, or what is called a bi-carbonate, and this bi-carbonate of lime is soluible in water.

Upon these facts the explanation of the phenomenon in question depends. In order that water should have bi-carbonate of lime in solution, it must first have been impregnated by some means or other with carbonic acid; how that has happened we annot always say; we know this gas issues in abundance from the interior of the earth. Water greedily absorbs this gas and by its means in the way just mentioned it is rendered capable of holding abundance of lime in solution. But what will be the natural consequences of exposing such water now impregnated with lime to the air, and, still more, of boiling it? We have said that carbonic acid will be driven off by exposure, that is, so much carbonic acid as was sufficient to convert the common carbonate of lime into bi-carbonate
of lime, but no more. By boiling, therefore, the bi-carbonate is reduced to common carbonate. Now what must follow? Bi-carbonate of lime is a soluble substance and the solution of it in water is transparent; but common carbonate is not soluible, that is, water cannot retain it in solution, consequently the new formed carbonate falls down as a cloudy precipitate. Everyone knows that if a common carbonate of lime, as powdered chalk or limestone of any kind, reduced to the state of powder, be mixed with water it will not dissolve; but after causing at first the fluid to be turbid, will, after some time, settle to the bottom as a powder or pasty mass, leaving the water quite free. This is exactly what happens in the case we have mentioned, with this difference, that the precipitated carbonate does not fall down in the state of a loose powder or soft pasty substance, but forms a hard crust ; and it is this crust which is called incrustation or scale in steam boilers.

## The Abolition of Statute Labor.

The agitation for better roads commenced by the various Associations of bicyclists, has been taken up by the Provincial press, and every week valuable suggestions are published, which will in time be instrumental in bringing about a reform of the greatest public interest.

To secure a uniform system of good roads Counties should assume a leading road in each township, making a connecting system throughout the county. These roads should be improved under the supervision of the county engineer, and if the county roads could be made a connecting system throughout the province the benefit to be derived therefrom would be increased. Members of councils in incorporated villages, towns and cities can hardly appreciate the benefit they would derive from the improvement of our roads. it can be shown in many ways that the business interests of all would be increased, that the farming community, which is in general the main stay of the province, would have more ready money which fact cannot but help to benefit unban communities.
We would strongly urge upon every member of a municipal council to consider this question, and if the people are not unanimous or the council decided in the matter, to at least make an effort to secure the vote of the people in reference thereto at the coming municipal elections by making this great reform the leading question at that time. The following is copy of an address presented to the ratepayers of Yarmouth by the township council, who will submit a by-law providing for the commutation of Statute Labor to the ratepayers at the coming municipal elections.

The question of the improvements ot our roads has become one of great importance. The Statue Labor system which has been in operation for the last fifty years has been a good one, and has done much towards making and improving the highways of the township. During the last few years the matter has been considered by the various councils, and it has been thought advisable if the ratepayers so decide, to change the present system, for one under which the roads and highways will still continue to improve at a faster rate than they have in former years. The Champion Road Machine, purchased this year, will in future du all the grading required for the roads in the township, and will leave the taxes collected for Statute Labor to be expended for drawing gravel. Pathmasters will be raquired to be appointed as formerly, to act as commissioners in the expenditure of the commutaton tax and to cause obstructions to be removed and bridges to be repaired at any time during the year, for which he has been appointed. The provisions of the Act respecting noxious weeds also requires the appointment of Pathmasters to see that the Act is carried out within their respective highway divisions. For the purpose of securing uniformity in the construction and repairs of roads in the township, simple instructions and specifications will be issued to each Pathmaster to which he will be required to conform in carrying out the work under his charge, and it will be the duty of the council or other officer appointed by them to see that the Pathmasters comply with the specifications. Gravel pits will be opened in different parts of the township, wherever they can be found, and every effort will be made to secure more, and a better quality of gravel for the roads in the township.

The by-law as published provides for the payment of seventy-five cents per day for the number of days required to be performed under the present system. The money to be expended by Pathmasters under direction of the council in the Statute Labor divisions which are to be those now existing, or the same as they may be hereafter modified, and such new ones as may from time to time be established.

## Measurement of Builders' Work.

## FXCAVATOR.

Digging is measured by the yard cube of twenty-seven feet. Extra depths, methods of removing whether by barrow, basket or cart. If by barrow and the distance is over twenty yards (called one run), should be accurately described; also the final disposal of the materials should be given whether carted away, filled into trenches and rammed, filled in, leveled and rammed to receive tile or other pavings, or disposed of in terraces.

## LEGAL DEPARTMENT.

H. F. JELL, Solicitor,

Editor.

## Legal Decisions.

## HODGINS V. CITY OF TORONTO ET AL.

The plaintiff was the owner of lands in the city of Toronto, fronting on a street which was an original road allowance. The Bell Telephone Company (who were party defendants in this action) with the assent, but, without any express resolution or by-law of the city, or any notice or compensation to the plaintiff, cut off branches over-hanging the street from trees growing within the plaintiffs grounds, and also branches off trees growing on the street in tront of the plaintiff's grounds, stating that the branches interfered with the use of the wires of a telephone system which they had contracted with the city to maintain. Sec. 3 of the Ontario Tree Planting Act, R. S. O., Chap. 20, had not been brought into torce in Toronto. It was held that section 479 of chap. 184, R.S.O., 1887 , sub-sec. 20 , (see also same section and sub-section of the Consolidated Municipal Act, 1892 ), applies only when sec. 3 of the Tree Planting Act (R.S.O., 1887, chap. 20I) is in force, and that the plaintiff had no title to, nor interest in the street sufficient to put him in a position to complain of the cutting. It was also held that, as the overhanging branches of the trees growing in the plaintiff's grounds were not a nuisance and in no way interfered with the use of the highway, the defendants had no right to cut them. The judgment of the junior judge of the county of York was therefore partly affirmed. Damages awarded plaintiff being reduced by $\$ 10.00$
GOODERHAM FT AL VS. CITY OF TORONTO.
Section 62 , of R. S. O., chap. 152 , providing that all allowances for streets surveyed in cities or any part of the same, which have been or may be surveyed and laid out and laid down on the plans thereof, and upon which lots of land fronting upon such allowances for streets have been or may be suld to purchasers, shall be public highways, and streets and commons, is retro-active, and applies to streets laid out on plans made and registered before "the passing of the act. A piece of land in Toronto, about twenty acres in extent, was, in 1854 , surveyed and laid out in lots and streets, and a plan was duly registered. Lots were sold and conveyed according to the plan, but were afterwards repurchased by the original owners of the piece of land, predecessors in title of the plaintiffs, and the whole piece was, at that time, fenced in and used as a field until 1888, when the city, without passing any by-law, proceeded to open the streets. It was held that the streets shown on the plan were highways, which the city was entitled to open, but that the passing of a by-law was necessary.

## ROCHE V. RYAN.

This was an action brought to recover damages occasioned the plaintiff by the defendant having, as alleged, excavated upon, dug up, and otherwise interfered with and obstructed certain streets laid out and described on a map or plan of a part of the town of Smith's Falls. The facts were as follows: Plaintiff was the owner of a parcel of land within the limits of the town of Smith's Falls. He caused it to be sub-divided into small lots and ran streets through it and registered his plan. Two streets, named John and Herbert streets, were laid down on this plan, as intersecting each other. Plaintiffs afterwards sold to defendant two lots on Herbert street at its intersection with John street, and two lots to another party on the corner of these streets. Conveyances of these lots were made and registered. The whole parcel of land so sub-divided remained fenced and enclosed, and was used as a pasture field for about six months after the sales mentioned. Prior to the sales a provincial land surveyor, under instructions from the town council, prepared a plan of all the property comprised within the corporation limits, which plan, signed by the mayor, and sealed with the corporate seal, was duly registered. Their plan embodied the survey made by the plaintiff, and showed the lots and streets laid out by him of the property in question. Shortly after the purchase, and while the whole parcel of land in question remained fenced and enclosed, defendant took from the land, called John and Herbert streets, and from the lots he had purchased from plaintiff, a quantity of building stone. Plaintiff then brought action to recover the value of the portion taken from the streets. Defendant denied plaintiff s right to recover, alleging that the streets were the property of the corporation, whose leave he stated he had obtained. It was held, under the Municipal and Surveyors' Act, by the filing of a plan, and the sale of lots, according to it, abutting on a street, the property in the street becomes vested in the municipality, although they may have done no corporate act by which they have become liable to repair. Plaintiffs action was, therefore, dismissed with costs.
WARD V. CALEDON AND ALGIE V. CALEDON.
These cases were recently decided in the Ontario court of appeal. The plaintiffs Ward and Algie were mill owners on the river Credit, and above their mills was a mill and dam belonging to persons named McLelland, whose dam crossed the river Credit in the line of a concession road of the township of Caledon, at that point the river running nearly at right angles to the coneession road. In 1863 , mill and privilege, and in that year the township of Caledon passed a by-law to make further provision for allowing Clark the privilege of erecting and keeping the breastword of a dam where the river

Credit crosses the road, for the term of forty years from January, 1864, on the terms that Clark was to build a good and substantial bridge on the breast work, of stated dimensions, with a proper railway on each side, and Olark and his heirs and assigns were to keep the bridge in repair during the forty years, and Clark was to receive from the council $\$ 80$ to assist him in building the bridge. It was stated that after the McLellands had become the owners of the mill privilege, they obtained from the township of Caledon, leave to continue the use of the highway for the purposes of the dam, and to raise the dam so as to make it capable of holding a larger supply of water than hitherto. It wasshown that the pond at the McLelland's dam extended into the highway about forty feet, the roadway over the river and bridge, being that distance from the line of the allowance. On the 13 th November, 1889, a portion of the dam under the bridge broke away, and the accumulated water escaping from the pond, carried away the dam of the plaintiff Ward below, and damaged the plaintiff Algie's property below that. The McLelland's dam was shown to have been negligently constructed, and the plaintiffs claimed damages against the corporation of the township of Caledon for the reason that having granted a license to store water on the highway, they were responsible for the negligent manner in which it was stored. The township had the McLellands added as third party defendants, pursuant to R.S. O., 1887, chap. 184, sec. 531 , sub-sec. 4, it was held that the license to dam water back upon the highway was (except in so far as it might be a public nuisance affecting travellers on the road) a lawful thing, and that the damage being caused by the negligence of the mill owners the township was not liable, and that such a case is not written. The provisions of R. S. O., 1887, chap. 184, sec, 53 1, sub.sec. 4 , gives to a corporation against which is brought an action to recover damages sustained by reason of any obstruction, etc., on a highway placed agent person other than a servant or relief over against such person.

## NOTES.

The cases of the village of Brighton vs. Austin, and Huson vs. South Norwich reported in the June and July issues of The WORLD respectively, are in process of consideration by the Supreme Court of Canada. The decisions of that honorable body will in due time be reported in these columns.

The Queen v. McGowan is worthy of the attention of residents of the unorganized districts, and decides that the reeves of municipalities in such districts are, under the legislation relating thereto, ex officio justices of the peace in their respective municipalities with power to try alone, and convict for offences, under the Liquor License Act, R. S. O., I887, chap. 194.

## CORRESPONDENCE.

This paper is not responsible for opinions expressed by correspondents.
All communications must be accompanied by the name of the writer, not necessarily for pub ication, but so that the publishers will know from whom they are received.

## Special Meetings.

To the Editor of The Municipal World :
Dear Sir, - A very important question -the right to hold special meetings of the council-is being discussed by the London papers, and as this question affects every municipality in Ontario, it is very desirable that the law on the subject should be well defined. It is contended that the council have no right to hold special meetings unless they have first passed a by-law, taking the powerto themselves to doso,or, in other words, the statutes do not authorize the council to hold special meetings until and after the council has passed a by-law taking to themselves that power. If this contention is the correct one, then all special meetings held by the council before the passing of such a by-law are illegally called, and, as a matter of course, any business transacted at such meetings is illegal, null and void. Section 236, Municipal Act, 1892, points out the mode in which special meetings may be called, and, as it is silent upon the question of a bylaw for the purpose of calling special meetings, it would seem to follow that section $28_{2}$ of the same act would gevern, which reads, " and the powers of a council shall be exercised by by-law, when not otherwise authorized or provided for." Now, as no other mode is " authorized or provided for" by section 236 , it would seem to follow that a by-law was necessary, authorizing special meetings to be held before such meeting could be held. As I am not a lawyer, nor even the son of a lawyer, I am not prepared to express an opinion, and would like to hear from you on the subject through your very excellent paper, and the importance of the subject certainly demands its careful consideration; in other words, "What sayeth the law? How readest thou ?" Yours, etc.,
Town Clerk.

Ed.--We would call the attention of our correspondent to the fact that section 236, of the Consolidated Municipal Act, 1892 , does not authorize the exercising of a power by a council, and, therefore, section 282 does not apply, but it confers on certain individuals, in the official capacity, authority to perform a certain act, that is, the calling of special meetings of council. These individuals are the head of a council, or in his absence or death, the clerk, upon a special requisition to him, signed by a majority of the members of the council (see section 238 also as to town councils). We take it that the object of the provisions of this section is to meet the cases of emergency, which so often arise in a municipality, demanding immediate and prompt attention. We do not consider a by-law of the municipality necessary to
enable the persons named to legally call special meetings of the council, but the formalities laid down in the statute should be strictly observed and fullowed. The authority conferred is a statutory one, and cannot be added to, taken away or overridden by municipal legıslation.

## Clerks' Salaries.

To the Editor of the Municipal. World
Dear Sir,-With feelings of pity and compassion I perused "Fair Play's" letter. His hallucinations show clearly that he is afflicted with temporary aberration of mind, sometimes he fancies that it is my deportment and character that are under discussion, then in his lucid intervals he remembers that it is clerks' salaries, he scarcely gets on the subject when his mind again wavers, and he thinks himself counselor and adviser of the Hon. Oliver Nowat, using such expressions as "I would advise Mr. Mowat," etc.. then he thinks of the clerks again and fancies they are snubbed and despised, and he makes great lamentation over the conceptions of his own mind and proposes a solution of all difficulties by recommending the clerks to form a combine, and press the legislature to fix clerk's salaries below which no council should have power to go, but, of course, councils would have the liberty of going as high as they liked.
"Fair Play" only once in his long, tedious letter makes an attempt at an argument, when he states "that the local legislature lays out nearly all the work of the clerk," and, according to my contention, they should, therefore, fix the salary, and I am only a creature of the legislature and have to jump as they direct." My contention is, if the legislature lays out the work and fixes the clerk's salary then they have a right to hire and pay him, but, if the council has to pay him, then they have a right to say what salary they will give, and what work they want done. Our council fixes the salary of the clerk for one year only, and engages him to do all the work required by council or statute, and I have never known of a case of dismissal, as his engagement expires at a given time and the council can either renew it or not as they please. As to my being a creature of the legislature, "Fair Play" is again wrong, as the legislature only creates the office, and the ratepayers elect the officer, they also elect the memhers of the legisla.ture, and to use the phraseology of "Fair Play", we have both to jump as they direct, or out we go. "Fair Play's" ideas are despotic, mine are radical, so we can never agree. But all the same I bid him good-bye, as I do not know whether my jumping has suited the ratepayers, or whether I may continue to sign myself

> Deputy Reeve.

## System of Road Work, East Luther.

To the Editor of The Municipal World:
Sik,-Beginning with the present year, the council of the township of East Luther
adopted a by-law entirely abolishing statute labor, and an extra rate in lieu thereof is now levied on the rateable property in the township, the same as other taxes. The system adopted is as follows : The township is divided into five divisions, and each councillor is a commissioner for the expenditure of the moneys granted by the council to his division. The statute labor divisions remain as furmerly, and a pathmaster or commissioner is appointed for each, to expend in his divisions an amount equivalent to the number of days road work that the division would have had under the old system, reckoned at sixty cents per day. The commissioners are paid six per cent for letting and inspecting contracts. This does twice as much work as the old system. When the bylaw was first passed, it was thought by many to be a wrong move, but havisggiven fair satisfaction, the opposition thereto has been very largely removed. The principal objection found in the above, was, that there were too many commissioners letting contracts about the same time, and that those who were desirous of following roadmaking were unable to attend. To remedy this it is suggested that the members of the council act as commissioners, one to take charge of each district. They are responsible to the people and would give the matter the best possible attention. They could do the work for three per cent. of the amount expended and make good pay. Would recommend every municipality, especially the older ones, to adopt this system. Yours truly,

> R. E. Hamilton, Clerk.

## Clerks' Salaries.

To the Editor of The Municipal World:
Dear Sir, - I am very much pleased with The Municipal World. The Question Drawer throws light on many a difficult subject, and the correspondence re Clerks' Salaries ventilates the question somewhat. But it certainiy seems evident to me that "Reeve" and "Deputy Reeve" never expect to be clerks themselves, and I think the advice, to put themselves in his place for a year or so, would not be amiss. It has been suggested to your correspondent that it is one of the clerk's duties (besides the regular clerical work) that he should keep a journal of municipal affairs, dates and events, and it is most astonishing that the less ability some councill rs develop, the more exacting they seem to be on the clerk.
T. U.

Progression is the order of the day in some of the western municipalities of Ontario. North Oxford rate-payers have abolished the statue labor system, and now the township council of East Zorra has resolved to submit a by-law at the next municipal elections for the same purpose. The farming community are becoming alive to their own interests and are determined to have good roads.

## QUESTION DRAWER.

Subscribers only are entitled to opinions through the paper on all questions submitted if they pertain to municipal matters. Writt each question on a separate paper on one side only.

MUSKOKA - " $A$ " having transferred his property to " $B$ " after the court- of revision, can the council alter the name on the roll at the December meeting?

No.
O -A pond is close by our school play-ground and is supposed to injure the school-house wellwater. Who should drain it? The owner of the land on which is the pond, the school section or the township corporation?

We consider this a case to be handled by the local board of health of your municipality. Complaint should be made to the board as provided in the Public Health Act, sec. 58. Full power is conferred on the board by subsequent section of said Act to cause an investigation to be made of the matter by their medical health officer or otherwise. The locality and circumstances should be thoroughly examined and the evidence of any witnesses that may be thought necessary should be taken. It the owner of the land is responsible for the creation and maintenance of the nuisance, if 1 is found to be such, he should be notified by the board to abate and remove it within a reasonable time, and, if the notice be not complied with the board may cause the removal and abatement of the nuisance at the expense of the party creating and maintaining the same. See section 62 of the said Act, as to payment of expenses. In a word, the party who creates and maintains a nuisance is the one who shoukd abate the same. In the case mentioned by our correspondent, it may be necessary to bring into play, the machinery of the Ditches and Watercourses' Act.

A Reader-A drain has been constructed by the township council under the Ditches and Watercourses' Act, and surveyed by an engineer through part of a village lot, afterwards a house was built on said lot within a few feet of drain. Again, in course of time, the drain was cleaned, deepened and widened to accommodate the surplus water from lands draining into it. Since said cleaning has been done the water has been wearing the earth away on the side of the drain opposite to the house in question, and allowed the house to settle down, and the owner claims damages for injury to house. The present owner purchased house and lot since drain was constructed.
I. Is the council liable for damage to house?
2. If liable, who should pay, the whole township or those interested in drain?

We have every reason to believe that the drain referred to by our correspondent was constructed under the provisions of the drainage sections of the Municipal Act and not under the Ditches and Watercourses' Act, (R.S.O.) chap. 220. With this understanding we will answer the questions.
I. Cnder the circumstances mentioned, we would say that the municipality constructing the drain is liable for damages to the owner of the house, to the extent of the injury he has sustained, if clearly caused by the cleaning, deepening and
widening of the drain. See section $59{ }^{\top}$ of "The Consolidated Municipal Act, 1892.
2. The municipality being found liable to the party injured, has the right to charge pro rata upon the lands and roads liable to assessment for the drainage works, all such damages or any sum of money that may be required to enable the corporation to comply with any such judgment, order or award, as may have been given or made against them in the premises.
R.-A vote is to be taken in a municipality on two (2) by-laws granting aid to certain public enterprises. The vote on both by-laws is to be taken on the same day, separate ballot papers being used for each by-law. Will it be necessary to have two ballot boxes in each polling place, one for each set of ballots, or may all the ballots be deposited in a single ballot box indiscriminately?

One ballot box in each polling place is all that is necessary under circumstances mentioned by our correspondent.
T. U.-I wish to ask a question in regard to the preparation of the voters' list, as it is now under discussion in this municipality.

1. Is it proper to enter a locatee in the free grant districts as owner before he has got his patent?
2. It it is not right so to enter him in the voters' list, in what way should he be designated? It is argued by some that in an election for the legislative assembly, a voter might be safely challenged on ground of ownership, even though qualified on ground Manhood Franchise, yet, being wrongly entered on the voters' list, he would loose his vote. Since making out my voters' list, I have been notified of a mistake that I had entered a voter as fied of a mistake tenant which is correct enough, but I followed the assessment roll strictly in the case. I was notified of this error just two days case. I was notrieve applied to the judge fo a before I should have appted' list. In that case certified copy of the voters isculate the corrected would it be necessary the cond days before I can apply copy and then way from the stipendary magistrate?
I. We think a locatee of land in a free grant district can be considered to come within the definition of an "owner" given in sec. 2, sub-sec. I of the Ontario Election Act, and can be so assessed on your assessment roll and placed on your voters' list.
3. We must assume that the notification of a mistake in your voters' list which you mention was a complaint filed pursuant to and in accordance with sec .13 of "The Ontario Voters' List Act, 1889." Such being the case it would be necessary that you report to the judge or stipendary magistrate, as the case may be, and obtain his order for the holding of a court for the revision of your voters' list, as provided in the said last mentioned Act. After the court has been held the juige or stipendary will certify'to your list, and no further circulation of the list will be necessary.
P. X. Z.-About thirty-eight years ago, when Lot A (in diagram) still belonged to the Canada Company, the township council was petitioned to have a road opened across the lot, owing to a creek running on the concession road allowance surveyed, a plan of which is in possession of the clerk. The travelled road, however, is now, and has always been between the surveyed road and the creek, and the owner of Lot A has it fenced
up to the travelled road, and the concession road allowance has never been fenced.
(I) If the council and the owner of Lot A are agreed to have the road where it is now, what width of road is the township entitled to?
(2) There is a gravel pit at roadside. Does this gravel belong to the township or to the owner of Lot A ?
(x) Section 545 of the Consolidated Municipal Act, 1892 , enacts that no council, except the council of a city or town, shall lay out any road or street more than one hundred or less than sixty-six feet in width, unless with the authority and permission in the said section mentioned. We, therefore, think the road should have a width of at least sixty-six feet. We would suggest that the proper steps be taken by the different parties in interest to have the surveyed road, abandoned by the municipality, shut up, and the title thereto vested in the owner of Lot A, and to cause the general assumption and establishing of the travelled road, as the latter seems to best suit the convenience of the public.
(2) Our correspondent does not mention the width of the travelled road, nor state whether the gravel pit or any portion thereof is on the travelled road. From the location given us we would say the gravel pit belongs to the owner of Lot A.
T. U.-J. B. has notified the council that when the time required by law for legal notice of closing up a trespass road expires he will close up a certain deviation from the original survey of a side road, the said deviation was originally made to avoid a swamp by the settlers, about fourteen years ago, and has been used by the public without any complaint or hindrance ever since. The deviation is about forty rods in length, and is through the bush and does not come in contact with any field or fence or any improvement that could make it a trespass.
(1) Can he legally close the road in question at all?
(2) If he can, how - long time must he give notice before doing so.?

We assume that the road mentioned by our correspondent is one which has been dedicated to the public either actually or permissively, for uses as a public highway, and that it comes within the definition of a highway given in section 524 of the Consolidated Municipal Act, 1892. Probably public money has been expended, for opening the same, or on which the statute labor has usually been performed. This being the case J. B. has no legal right to close or obstruct the road used. See section 524 of the Municipal Act and Mr. Harrison's note (a) thereto, and the following sections of said act relating to highways.

Township Treasurer-The trustees of a school section in a township had debentures issued in the regular way, by by-law of council, etc.
I. Now, the question is who has to keep an account of these debentures, is it the township treasurer or is it the treasurer of the school section?
2. Has the township treasurer to pay these debentures out of part of the trustees' taxes, and pay over to the treasurer of that section the balance? Or is the township treasurer to pay over the whole trustees' taxes and let the treasurer of the school section pay the debentures.

## I. The Township Treasurer.

2. The by-law passed by the council should provide for the levy and collection of a special rate over and above all other rates in the township, to meet the payment of the school debentures. This rate should be entered on the collector's roll to be prepared by him each year during the currency of the debentures against each lot and part of lot in the school section. This special rate should be cullected by the collector and paid over to the township treasurer, at the same time and in the same manner as ordinary taxes. The debentures are to be paid by the treasurer, and the the treasurer of the school section has nothing to do with the disbursement of these moneys.

Reeve-A township council passes a by-law under section 53 (2) of the Assessment Act. Now, where no day shall have been appointed for the payment of taxes before the 14th December? Will the 14th be the day appointed for the payment of taxes? or, in other words, can the collector force the payment of taxes before the 14th December?

Prior to 14th December, the statutory date, the collector can enforce payment of taxes and after that date he can enforce payment of taxes and per centage. Fourteen days notice is necessary, except in case of emergency. See sec. 124 Assessment Act, sub-sec. 2.

A new scheme of city government is under the consideration of the civic authorities in Winnipeg, Man. It is proposed to elect only one alderman from each ward instead of two as at present, and to form an executive body of three other citizens, who shall be mayor, chairman of the finance committee and chairman of the board of works, and who shall be paid and have full control, subject only to the dictation of the council when two-thirds of the council deem interference necessary.

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