

The Municipal World

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

Vol. 3. No. 11.

S. THOMAS, ONTARIO, NOVEMBER, 1893.

Whole No. 35

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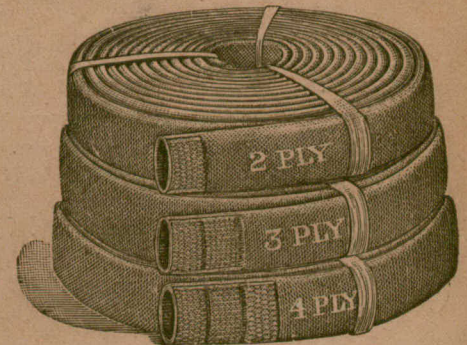
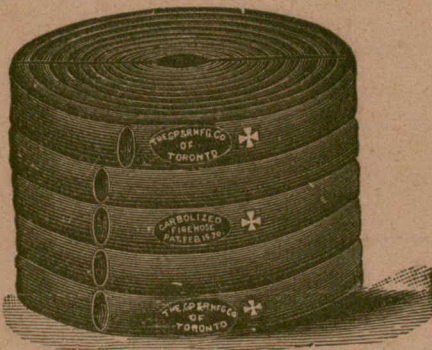
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THE MUNICIPAL WORLD

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CALENDAR FOR NOVEMBER AND DECEMBER, 1893

Legal, Educational, Municipal and Other Appointments.

NOVEMBER.

1. Last day for transmission by local Clerks to County Treasurer of taxes on lands of non-residents.—Assessment Act, section 121.
- Last day for transmission of tree Inspector's Report to Provincial Treasurer.—Tree Planting Act, section 6.
9. Last day for Collector to demand taxes on lands omitted from the roll.—Assessment Act, section 154.
15. Day for closing Court of Revision in Cities, Towns and Incorporated Villages, when Assessment taken between 1st July and 30th September.—Assessment Act, Section 52.
- On and after this date, Councils of Townships, Cities, Towns or Villages may enter on lands and erect Snow Fences.—Snow Fences Act, Section 3.
- Report of Medical Health Officer due to Local Board of Health.—Public Health Act, Schedule A, Section 1.
30. Last day for Municipality to pass By-laws, withdrawing from Union Health District.—Public Health Act, Section 41.

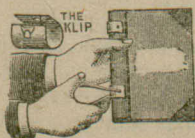
DECEMBER.

1. Chairman of Board of Health to report 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 37 (1); Separate 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 School Act, section 113; Separate School Act, section 50.
- Last day for Councils to hear and determine appeals where persons added to Collector's Roll by Clerk of Municipality.—Assessment Act, section 154.
13. Last day for Public and Separate School Trustees to fix places for nomination of Trustees.—Public School Act, section 102 (2); Separate School Act, section 31 (5).
14. Last day for payment of Taxes by Voters in Local Municipalities passing By laws for that purpose.—Municipal 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.
- County Treasurer to pay Township Treasurer rates collected in Township.—Public School Act, section 122 (3).
- Local Assessment to be paid Separate School Trustees.—Separate School Act, section 55.
15. Municipal Council to pay Secretary-Treasurer Public School Boards all sums levied and collected in Township.—Public School Act, section 118.
- County Councils to pay Treasurer High School.—High School Act, section 30.
- High School Treasurer to receive all moneys due and raised under High Schools Act.—High Schools Act, section 36 (1).
- Councils of Towns, Villages and Townships hold meetings.—Municipal Act, section 254.

NOTICE

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

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The Municipal World.

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

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

Address all communications to

K. W. McKAY, EDITOR,
Box 749, - - - St. Thomas, Ont.

ST. THOMAS, NOVEMBER 1, 1893.

The extract from the *Ottawa Free Press* published in the September number of THE WORLD referring to decision of privy council in Geldert vs. Pictou was very misleading as far as its application to Ontario is concerned. The provincial press, generally, welcomed the decision and municipal councillors, no doubt, anticipated freedom from vexatious actions for damages in the future. A reference to the legal department of this issue will show the correct ruling of the decision.

* * *

The bill, entitled an act to amend the Assessment Act, sent out by the government to municipal councils, public officers, etc., with a view to the expression of opinion thereon of others interested in the subject, or familiar therewith, before the next session of the legislature, appears to be very carefully worded, and if passed, will make the act more easily understood by assessors and others. No changes of importance are suggested, except that in section 5 of the bill, which provides that no personal property of any kind whatsoever shall be hereafter assessed for the purpose of levying rates thereon, except interest, income and dividends, which are fully specified in a proposed amendment of sub-section 10, of section 2, of the Consolidated Assessment Act, 1892. It is proposed to repeal the business tax, section 31 a of the Act of 1892. This has been a little above the comprehension of the ordinary municipal councillor and its removal, will no doubt be welcomed by those who have endeavored to put it in force.

* * *

The fees allowed to bailiffs appointed by the judge under the authority of the Voters' Lists Act, 1889, for the services of notices, etc., in the case of appeals against the list, appear to be excessive, where the number of appeals is large. The persons requiring to be served are always within the limits of the municipality, and a fee of ten cents per mile is allowed for each service. The mileage is calculated on each notice generally, from the clerk's office to residence of per-

son served. An instance recently came under our notice where a large number of complaints were made against persons who lived in one village, thirteen miles from the clerk's office. The bailiff had no difficulty in serving them in one day, and his fees at the rate mentioned were over forty dollars, we hardly think it is the intention of the act, that municipalities should be required to pay these fees, which are only excessive in an instance, such as that mentioned, and would recommend that councillors interested petition the legislature to amend section 24, of the Voters List Act, of 1889, by striking out sub-section B, and providing for the payment of \$1 50 per day to bailiff, and ten cents for each mile necessarily travelled to effect the service of all the notices.

* * *

The oblivion in which such questions as "the reduction of the number of members of county councils," and "a provincial municipal officers' association," have rested during this year, leads us to ask, is any one in a position to give good, substantial reasons why the number of county councillors should be reduced. Would not the injustice of non-representation, in most schemes proposed, be a greater evil than the payment of a small amount for the assembling of additional wisdom at the county board. On the other hand, a provincial municipal officers' association, composed of clerks, treasurers and delegates from municipal councils, should be called for by the legislature and meet at least, every three years. Intelligent discussion would suggest many desirable improvements in our municipal acts. The necessity for commissions of inquiry would, to a certain extent, be removed and a more intelligent and uniform administration of our municipal laws result. The trustees and teachers of our schools have associations organized by the department, why not have a municipal association composed of delegates from every county in the province as an auxiliary to a municipal bureau which should be established in connection with one of the departments of the provincial government.

The Civic Church,

THE SPIRITUAL COUNTERPART OF THE TOWN COUNCIL

The English editor of the *Review of Reviews*, in the last issue of that publication outlines a new movement known as the "Civic Church," which he says is making steady progress in the Old Country. The work of the Civic Church is to establish a kingdom of Heaven here among men. Its electoral duties refer to Municipal Reform, and in this respect, we believe, the movement will be welcomed in the larger cities. The article reads:

The Civic Church is the spiritual counterpart of the town council, representing the collective and corporate responsibility

of all the citizens for the spiritual, moral, and social welfare of the poorest, most neglected district within its borders. It is an attempt to organize the conscience of the community so as to bring the collective moral sentiment of the whole community to bear upon the problems which can only be solved by collective action. The work which lies before such a federative centre is vast and varied. Vast and varied though it be it is surprising how much of it is beyond dispute. Men may differ about original sin, they agree about the necessity of supplying pure water; they quarrel over apostolic succession, but they are as one as to the need for cleansing cess pools and flushing sewers. It is in the fruitful works of righteousness in the practical realization of humanitarian ideals that the reunion of Christendom and not of Christendom only is to be brought about.

"There is little doubt that in any English, or American cities, the good people could rule if they would take as much trouble to organize, and work for the victory of justice, honesty, purity and righteousness as the bad people take to secure the rule of the rum seller, and the dust contractor. But where are they to find their organizing central point? They can only find it in the civic church, the establishment of which in every community is indispensable; if the forces which make for righteousness and progress are to have their rightful ascendancy in the governance of our cities.

The civic church would, of necessity, become an electoral centre, what may be described as a moral caucus created for purpose of making conscience supreme in the government of the affairs of the town. First and foremost the civic church would, wherever it was powerful, render absolutely impossible the nomination of candidates notoriously dishonest and immoral.

Secondly, the civic church on the eve of every election could, and would stir up all the affiliated churches to appeal to the best citizens, to regard the service of the municipality as a duty which they owe to God and man and to all citizens to prepare for the ballot with a due sense of the religious responsibility of the exercise of citizenship. The civic church could also bring almost irresistible pressure to bear to prevent the coercion, the corruption and the lying which are at present so often regarded as excusable if not legitimate methods of influencing elections.

Thirdly, there are always in all elections certain great moral issues upon which all good men agree of whatever party they may be. But, as these issues seldom effect, except adversely, the pockets of wealthy and powerful interests they are ignored. The civic church would bring them to the front and keep them there. All that is needed is that the professedly religious men should be as resolute to pull the wires for the Kingdom of Heaven as irreligious men are to roll logs for the benefit of the gaming hell or the gin shop."

Development of Municipal Institutions in Ontario.

Continued from last issue.

the district treasurer five shillings per day for their services. The quarter sessions still maintained the authority they formerly held in reference to the administration of justice, the location and alteration of highways and other matters general to the district. This was the municipal system in vogue at the time of the rebellion of 1837, when the abolition of separate provincial governments brought about Legislative Union.

In 1839, the township commissioners, provided for in the act of 1835, were named town wardens. The change whereby the people were intrusted with the freest of action in the elections of municipal officers, viz., the clerk, assessor, collector, commissioners or wardens, does not seem to have been much in the direction of popular self-government, but any act that took from the nominative magistracy any of the powers they exercised was appreciated. This system was continued up to the year 1841, when the legislature of the united provinces endeavored to create a municipal system that would meet all the requirements of Upper Canada.

In 1840, the authorities recognized the necessity of leaving the people free to control their own internal affairs and giving up that system of paternal government which had worked so unsatisfactorily. Some difficulties arose in dealing with this question on account of the position taken by Lower Canada. During the suspension of the constitution in French Canada, an ordinance had been passed by a special council to provide for the better internal government of the province by the establishment of local or municipal institutions therein.

The province was divided into districts, and the governor and council determined the number of councillors and appointed the warden. Consequently, the system in operation in Lower Canada was entirely controlled by the government. It was the desire of the Upper Canadians, who had been gradually educated for more popular local institutions, to elect the warden and their officers. This furnished the basis of the Municipal Act of 1841, which was introduced by Mr. Harrison, provincial secretary, and which provided by district councils to be composed of one or two members, to be elected at the regular meeting in each township, and hold office for three years, retiring in rotation. The council was required to meet four times a year. The warden, treasurer and clerk were appointed by the governor of the province. Every by-law passed had to be approved of by the provincial authorities. The governor had the power to dissolve district councils at any time. To the district councils was transferred the powers of the quarter sessions with reference to the administration of municipal affairs.

By the Act of 1849, district municipalities were abolished in favor of counties and county councils composed, as at present, of reeves and deputy reeves.

The Fifth Form in Public Schools.

The most important educational question discussed during the last session of the legislature was that of the point at which the public school course should end. Is it in the interests of public education that the teaching of the subjects included in what is known as the fifth form in the public schools should be encouraged, or should the department and the profession rather favor the relegating of this work, as far as possible, to the high schools? While the minister of education, if our memory serves us, always expressed himself in favor of having the work of the fifth form carried on in the public school, wherever the conditions are such as admit of its being done effectively. It must be confessed that some of the regulations seem rather adapted to produce the opposite effect. The refusal of the department to appropriate money for fifth form examinations in schools, in which but one teacher is employed, is probably wise. There can scarcely be a doubt, we suppose, that it is practically impossible for a single teacher, however able and industrious, to teach fifth-form work efficiently without detriment to the work of the lower classes, and so to the great majority of his pupils. But whether this refusal should not be offset with some special inducement to the employment of assistants wherever practicable, so as to make it possible to extend the course to the end of the fifth year without loss, or rather with positive gain to the lower forms, is an important question. Seeing that the amounts of the grants to public schools has not been increased during the last twelve years, while the sum total of the expenditure for educational purposes has been largely increased, there certainly seems to be some ground for the charge that the common schools are hardly getting their share of this most practical kind of encouragement.

It is also understood that the holding of fifth form examinations in public schools is not encouraged in towns and cities in which high schools and collegiate institutes are maintained. The reason given is, of course, that the duplication of the teaching and examinations is unnecessary, and consequently a waste of money and labor. But is this so? The argument is valid, it seems to us, only on the supposition that all the pupils who would have taken the year's work in the public school had it been taught there, will, failing that, avail themselves of the high schools. Will such be the fact? We doubt it. Nothing seems to us more certain than that there are many boys and girls who would continue for another year in the public schools, were that necessary to complete its course and reap all the advantages it

offers, who will not enter the high schools. Various reasons suggest themselves. The high schools are not usually free. They are generally associated in the minds of parents and pupils with the idea of preparation for the university or for a profession. Their courses are not adapted for those who can remain in them for but a year, etc.

We are proud of our High Schools. We regard them as one of the strongest links in the educational chain. We doubt if for good teaching and efficiency they are excelled in any country. But nevertheless, or rather for that very reason among others, we do not think that they can take the place or do the work of the fifth-form in the public schools. Nothing could be better for them than that their pupils should enter at a more advanced stage of preparation, and that they should thus be enabled to carry them a stage further in the intermediate work. But the real question is, what is best for the country? The ideal of public education is the greatest good of the greatest number. Can anyone doubt that if a much larger number of our public schools were well equipped for carrying their pupils forward for another year, a largely increased number of the boys and girls of Ontario would be led to take advantage of the fact and would therefore receive another year at school before going about their life work? For obvious reasons this last year would be worth considerably more from an educational point of view than any preceding year. Any incidental result, too, would be that a considerably larger number would be stimulated to enter the High Schools and thus the number of citizens possessing a higher education would be increased in proportion. Few thoughtful persons will, we believe, be willing to maintain that the end of the fourth-form in the public schools is such a goal as should satisfy us as an education for the great mass of Canadians. and yet it is beyond controversy that under present arrangements this is the goal which the great majority of parents set before themselves for their children.—*Educational Journal.*

The county council of York, under the direction of the public school inspector, has recently issued a may of the county. A copy has been placed in each school room. An exchange referring to the matter, says: From a business standpoint, the geography of our more immediate surroundings is of much greater importance to us than a knowledge of some far-away mountain or desert which may never exist to most of us, but as a mental conception, give the children a thorough training in the geography of Canada, and especially of the grand Province of Ontario, begin with your own county.

* * *
In order to present a full and correct statement of the finances of the municipality on 15th December, every councillor should see that all accounts against their respective corporations are settled up, or the amount made known, to be entered as a liability.

Collectors Duties.

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

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

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

Given under my hand etc., this day of A. D., 18 .
E. F., Collector.

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

To prevent misunderstanding, a city is deemed to be within the county of which it forms judicially a part.

In the case of persons whose names appear on the roll, but who are not residents within the municipality, the collector shall send to him by post, addressed in accordance with the notice given by such non resident, if notice has been given, a statement and demand of the taxes charged against him in the roll, and shall, at the time of such transmission, enter the

date thereof on the roll opposite the name of such person. The notice is required to contain, written or printed, on some part thereof, the name and post office address of the collector.

As provided in section 126 of the Assessment Act, a collector may make distress of any goods or chattels which he may find upon the land of non-residents who have required their names to be entered on the collector's roll, only after one month from the date of the delivery of the roll to him, and after fourteen days from the time such demand or notice, as aforesaid, has been so transmitted by post. If this notice has not been given by non-residents, and their names still appear on the roll, the collector has no authority to levy the tax by distress. After the collector has levied the taxes with costs by distress, on the goods and chattels of a person who should pay the same, or of any goods and chattels in his possession, wherever the same may be found in the county in which the local municipality lies, or of any goods or chattels found on the premises, the property of, or in possession of any other occupant of the premises, he should, by advertisement, posted up at least in three public places in the township, village or ward, wherein the sale of the goods and chattels distrained is to be made, give at least, six days' public notice of the time and place of such sale, and the name of the person whose property is to be sold, and at the time named in the notice the collector or his agent shall sell at public auction the goods and chattels distrained, or so much thereof as shall be necessary. If the property distrained is sold for more than the amount of the taxes and costs, and no claim of the surplus is made by any other person on the ground that the property belonged to them, or that he was entitled by lien, such surplus shall be returned to the person in whose possession the property was when the distress was made. If such claim is made by the person for whose taxes the property was distrained, and the claim is admitted, the surplus shall be paid to the claimant. If the claim is contested, such surplus shall be paid over by the collector to the treasurer of the local municipality, who shall retain the same until the respective rights to the property shall be determined by action or otherwise.

If the taxes payable by any person cannot be recovered in any special manner provided by this Act, such as distress and sale of the goods of resident taxpayers, and the sale of land in the case of non-residents who have requested their names to be put on the roll, and before a municipal corporation can sue for the taxes imposed in the ordinary manner upon a resident ratepayer, the corporation must be able to show, in the first place, that the defendant's name is on the roll and, in the next place, that they have done what

would be necessary to entitle them to distrain by warrant for the taxes. If a person sued have goods that might be seized, except perhaps where there would be no occasion to make the previous demand mentioned in section 124, a ratepayer cannot be made to pay a tax of which notice has not been given him as the law has provided. In order to entitle a corporation to sue a non-resident owner, it must not only appear that the special remedy provided by the Act is unavailable, but that the defendant's name is on the roll, and it must also be distinctly averred and proved that the owner has requested his name to be placed on the roll.

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

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

Enforcing warrant:	
Where amount of taxes does not exceed \$20.....	\$ 50
Where amount of taxes does not exceed \$60, but above \$20.....	75
Where amount of taxes exceed \$60.....	1.00
For every mile necessarily travelled in going to seize under warrant, where money made, or paid after levy.....	12
Every schedule of property seized, Not exceeding \$20.....	30
Exceeding \$20 and not exceeding \$60.....	50
Exceeding \$60.....	75
Every bond, when necessary.....	50
Every notice of sale, not exceeding three, each.....	15
Necessary disbursements and allowances for removing or retaining property seized.....	3%
Five per cent. on the amount realized from the sale of property seized, such percentage not to apply to any overplus.	

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

ENGINEERING DEPARTMENT.

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

Roads and Roadmaking.

Many facts have recently brought sharply to notice how little attention has been paid to the scientific and economical building and care of our streets and common roads as compared with our railroads, and have lead to the conclusion that much of the lack of appreciation of good common roads, and the necessity for skilled civil engineers in their construction and maintenance is due to the want of practical knowledge on the part of most people, as to what constitute a really good road and its economic advantages over a poor one, and likewise to insufficient laws upon the subject.

In the historical sketch of its roads, published by the Pennsylvania Railroad, it is stated, that, at one time the supervisors and track foremen were satisfied with an excellence far below the ideas of perfection entertained by the managers, and to remedy this, the latter adopted the plan of having each supervisor prepare on his own division one mile of sample track, not limiting him as to cost, but requiring that it be made as perfect as possible. The officers, supervisors and foremen then passed over these sample miles, carefully examining each, and at the conclusion of this inspection, the most experienced supervisors acknowledged that they had never before known what a perfect track was. May not much the same be said of the majority of people in regard to our common roads, that they have little realizing conception of a perfect road and its economical advantages over an indifferent one. Manifestly, such is the case, and the remedy lies in the direction of the education of the people, up to a better knowledge of good roads, which will be followed by a greater appreciation, and of a determination to have them.

Like all such education this must begin at the top, and it is therefore encouraging to notice that there has been an awakening upon the subject of better roads and an evident desire for more knowledge as to their scientific and economic construction and maintenance. This has been shown in a marked degree during the passed year, that in the numerous articles that have appeared in the journals and periodicals of the day.

It would appear that there are few subjects of greater importance to the country at the present time than the establishing of the best and most direct means of communication between the people over its highways.

The first item to be attended to is the drainage, and it is as important as any other. It is almost impossible to make a good road on a wet yielding soil, except

by going to great expense in providing a heavy concrete foundation. Money spent in securing a good, firm, dry road-bed will save a vast amount of trouble in attempting to maintain a good surface, and to keep it clean. In northern latitudes the remark is frequently made in the spring that the frost has heaved the road. It is true that the road-way would probably not have heaved had there been no frost, but yet the frost does not spoil a dry road-way and in fact it is the ice thawing that does the mischief, and not the frost. The proper remark to make in such a case would be, the road is badly drained.

County roads do not require a wide road-way. If extreme economy be necessary, the central part of the road may be macadamized for a width of only eight feet; this is about the least width that a vehicle can be readily driven on. In such a case it would not be advisable to make the entire road-way less than twenty feet wide, so that the vehicles may pass on either side of the central portion, and that the macadamized part may be easily widened in the future.

To provide for a pretty constant traffic in both directions the macadamized portion of the road-way should be sixteen feet wide, as the axles of wagons and buggies are usually five feet eight inches in length or five feet, two inches from one wheel to the further end of the axle; therefore, allowing a space of two feet from the further wheel to the outside of the paved part of the roadway, sixteen feet four inches, or in round numbers, sixteen feet, would appear to be the proper width to allow vehicles always to keep their own side of the road without going off the paved portion, while it will always give a play of nearly two feet on each side, and of nearly four feet altogether in the width allowed to the vehicles to travel over, thus leaving space enough for vehicles to avoid always going in the same track and wearing the roadway into ruts.

If any further addition is to be made to the width of the macadamized part it should be enough to allow three vehicles to pass over it abreast *i. e.*, sixteen feet and seven feet, four inches, or twenty-three feet, eight inches in all; twenty-two feet, however, is a common width for a paved, part of a road-way of this description as the difference of one foot eight inches can be gained by reducing the two feet of spare width at the outsides by ten inches on each side; however, the clear width between the sidewalks should not be less than twenty-four feet, while a thirty foot roadway will allow four vehicles to meet abreast, and thirty-five feet is enough for a regular traffic of four vehicles.

In cuttings or embankments in ordinary loose earth or gravel, the side slopes should be made one and one half horizontal to one vertical; in rock, one quarter to one is sufficient; for stiff clay, two to one should be allowed, and soft greasy clay requires a slope of three to one to be

allowed. In the case of ordinary earth when cuttings or embankments are not more than five feet high, a slope of one to one is sufficient and one half to one for stiff clay.

In the case of embankments the surface of the ground, when it has a transverse slope, such as would cause the bank to slide laterally, should be cut into steps before the embankment is commenced. The necessity for this, for any particular slope can only be determined by the conditions of the case, it being remembered that water getting in between the original surface, and the made ground will render the embankment very liable to slide.

All trees, stumps, brush and vegetable matter should be cleared off the surface before the embankment is commenced.

With regard to earth roads the remarks already made as to draining, grading, and forming, the surface applies to them also. As earth roads do not shed the surface water readily the water tables should be kept about a foot lower than the crown of the road-way. The road-way itself should not be more than twenty feet wide in order that the water tables may be able to keep the surface as dry as possible.

No stones larger than three inches in diameter should be used on the road. We have often seen the ruts filled in with large stones with the result of making an extremely rough and bad road. In all cases the materials of the road-way should be uniform. No sods or vegetable refuse should be used in grading up the crown of the road, or in filling in ruts, but the earth chosen for the purpose should be as gravelly as possible. The transverse slopes of the road-way should not be less than one in twenty-four, one inch in two feet. In the case of clay roads, sand, old broken bricks, or even charcoal may be spread on the road-way to prevent the clay from sticking to the wheels; it is, however almost impossible to keep a clay road in good order in wet weather, and the time and money spent in trying to do so would be much better invested in macadamising the road. A very sandy road which is at its worst during dry weather might be improved by putting a little clay on it.

There is nothing strikes a European more on his arrival in North America than the excellency of the railroads and the inferiority of the roads.

This inferiority may partly be due to the fact that the rich both in the United States and Canada almost invariably live in cities where the roads are better kept up, or else in the immediate neighborhood of towns which they can reach by rail.

The country roads seem to be principally used by farmers to whom time seems to be no object, and who do not apparently realize that good roads can be profitable since they do not actually place dollar bills in their hands, and who seem to think that the only way to increase their income is to sell more produce, no matter how

much it may cost to draw it to market, and accordingly they spend a great part of their lives slowly plodding over bad roads without a thought of trying to improve them.

The principal advantages of good roads are that greater loads can be carried with greater speed, that farmers can market their produce at whatever time they can get the best prices, without being dependent on the weather, and that they can also use the roads in wet weather during the spring and fall, when they cannot plough, thus utilizing their horses when they would be otherwise idle.

In general, good roads practically shorten the distances, encourage inter-communication between town and country, benefit trade, enhance the value of all adjacent properties, and effect a large saving in money uselessly expended in hauling materials over bad roads.

A horse can draw on a common macadamized road more than twice as much, and on a good solid Telford-Macadam road more than three times as much as he could on a gravel road. Therefore, a farmer might send produce into market for two hundred days in the year using a pair of horses to draw a load of about a ton, on a poor gravel road, could if the road were well macadamized, dispense with one of the horses. Supposing that the horse cost him forty cents per day, including interest on first cost, he could save in this single item eighty dollars per annum. The resistance due to grades really varies as the sine of the angle of inclination, but for grades of one in twenty, or flatter, it practically varies as the tangent of the angle. Thus, for example, on a grade of one in twenty the resistance due to gravity is practically one-twentieth of the load.

On a good macadamized road where the resistance to traction on the level is, say one-fortieth of the load, and grade of one in twenty will increase this resistance by one-twentieth of the load, therefore, a grade of one in twenty is of considerable length will considerably reduce the amount which a horse can draw over it; hence, it is false economy to put a road into first class condition, and yet leave on it a hill with a grade which practically destroys a great part of the advantages to be derived from the excellence of the roadway.

Since good roads virtually shorten distances and render travel over them much more pleasant, they make property through which they pass much more valuable, especially in the vicinity of towns where many would live further out in the country were the roads kept in good order.

There are so many cases where farmers could bring two loads per day into town if the bad condition of the roads did not prevent them. Besides this the continued jolting of heavy vehicles over rough and badly kept roads strain the horses in such a manner as to shorten their lives, and to develop in them such diseases as often render them unfit for heavy work.

The mud and rough surface of bad roads tend to destroy the wheels and frame work of vehicles, and to break the springs and bolts.

Again, in dry weather, the dust of badly-kept roads is very annoying, destroys clothes and tends to prevent people from travelling.

The fact that people on this side of the Atlantic insist on having such first class railway accommodation, and yet put up with such bad roads has always been a mystery to us.

Bridges.

In many localities, as fast as the early wooden bridges become too weak, owing to age or heavy traffic, the old structures are being replaced with iron ones. This is commendable, but it is unfortunate that the means are not as commendable as the intentions. What man would ever think of giving an order for a coat to an unknown tailor without any guarantee as to the quality of cloth, fit of the garment or workmanship, except perhaps to specify that it shall be a cloth coat, and that it shall reach from the neck to the knee; and that when the work was done pay possibly fifty per cent. more for the garment than the best coat of the kind desired could be had for. It is susceptible of demonstration that in many, and perhaps most cases, this is a close parallel of what municipal councillors do in purchasing iron bridges for our country roads.

But, of course, it is always agreed that it shall be an iron bridge, but there is iron, and iron, and bridge iron, and there is mosquito-netting, and muslin and ducking. If a man were ordering a coat he would be particular to specify the kind or quality of material to be used since he knows that there is shoddy cloth and good cloth; so too there is shoddy iron and good iron. Even good iron is made of different qualities for different purposes. If the bridge were to be made of wood, the buyer would certainly specify that the timber should be oak or pine, straight grained, free from knots and sap, and he would not accept brush or cross-grained cotton wood instead. Yet there is more difference between iron and iron than between two varieties of timber. The highest value for timber is three times the lowest, and the highest value for iron is six times the lowest; if we include steel under the name of iron, as is frequently done, and as would be proper in this case since the average municipal councillor could not tell the difference, then the highest is eight times the lowest, if cast iron be included simply as iron, as for this comparison there is reason for so doing, then the highest is about sixteen times the lowest. How foolish it is then to say simply an iron bridge. Again, when the municipal councillor orders a coat he pays little or no attention to the strength of the cloth, but applies certain tests to determine its prob-

able wearing qualities, and its suitability to the services desired; he knows that the strongest cloth is not necessarily the best cloth. Iron suitable for bridges should have qualities somewhat similar to that possessed by cloth suitable for a coat. Nearly all men have had sufficient experience to enable them to select cloth with a reasonable degree of certainty of getting a good article, while only those who have made a special study of iron are competent to determine the suitability of iron for the service proposed.

When the coat is finished the councillor is particular to see that the cloth is that which he selected, and not some other kind, of lighter weight; but he rarely applies these sound business principles to the inspection of the bridges he buys. He will reject the coat if it is sewed with rotten thread, but is oblivious to the fact that most highway bridges are sewed with very rotten thread.

The manner of connecting the several pieces of a bridge is the most vital part, and the determination of the strength of this element requires great skill.

Of course, the contractor says he will make a good bridge, but, as his interests lie in getting a cheap one, would it not be wise to see if the structure is really good?

When a financial agent passes in his accounts they are inspected by a competent person; when goods are received they are counted or weighed before the bill is paid. But usually there is no pretence to testing a highway bridge, and if there is, it generally does more harm than good. The bridge may be tested, and stand up under a heavy load, but the very act of testing it may, and often doubtless does, partially destroy the structure, the heavy test load may over-strain the materials, virtually cracking the pieces, after which lighter loads will complete the destruction. Such tests give a feeling of security, that in fact does not exist. Nearly all bridges which break down fall under a light load which follows a heavy one. Again the absolute weight of the test load is not the only important item. A bridge can be tested and that too without damaging it so as to determine with almost absolute certainty, whether it is sufficiently strong for the services demanded.

The failure of highway bridges is not so rare an occurrence as may at first be thought. The people complain, and properly, if the railroads do not take any reasonable precaution to ensure safety to travellers, but they are singularly indifferent to the safety of their own bridges. Bridges will occasionally fail from unforeseen causes, but it is not wise or prudent to spend a greatly increased sum to secure absolute safety; but it is wise and also a duty since human life may possibly be involved to provide for all possible contingencies. At present most highway bridges fail to provide even a reasonable degree of security. It is a perfectly well-known fact that nine out of ten of the

highway bridge disasters so common in this country, can without the slightest question be prevented if those who have charge of the bridges care enough about it to do it.

The evil effects of the present system can be eliminated only by a complete reform in the present system of highway bridges. The first error is in advertising lettings only in the local newspapers; they should be advertised in the newspapers which make a specialty of that kind of advertisements, and reach the men who make a specialty of building bridges.

A second and greater error is not having the bids inspected by a competent engineer. The railway officials employ skilled men to inspect the bids for their bridges, who go over the plans with the minutest care; consequently, none but competent and honest builders bid for railway bridges. It is well known that many municipal councils do not employ such skill; consequently the tendency is to induce all incompetent and dishonest bridge-builders to give their attention exclusively to highway structures. Is it unreasonable to believe that there are incompetent and dishonest bridge builders? Is it unreasonable to believe that a dishonest or incompetent builder, knowing that neither his plans nor his bridge are to be inspected by a competent man, will not fail to make his price so low that it will be lower than a good bridge can be had for? Is it unreasonable to believe that under these conditions honest and competent builders will be reluctant to bid? Is it wise to do business in a way to repel the reputable manufacturer and set a premium upon dishonesty and incompetency?

Drainage.

As every act is, or should be, a part of a great plan of life, so every stake that is set, and every line laid in a field should have relation, not only to general principles, but also to some comprehensive plan of operations.

That absolute necessity of some regularity of plan in our work must be manifest. Without system we can never in the outset, estimate the cost of our operation; we can never proportion our tiles to the quantity of water that will pass through them; we can never find the drains afterwards, or form a correct opinion of the cause of any failure that may await us.

We prefer, in general, where practicable, parallel lines for our minor drains, at right angles with the mains, because this is the simplest and most systematic arrangement; but the natural ravines or water-courses in fields seldom run parallel with each other, or at right angles with the slopes or the hills so that regular work like this can rarely be accomplished.

If the earth were constructed of regular slopes or plains of uniform character we could easily apply it to all our rules; but broken as it is into hills and valleys, filled

with stones here, with a bank of clay there, and a sand pit close by, we are obliged to sacrifice to general convenience often some special abstract rules.

We prefer to run drains up and down the slope, but if the field is filled with undulations or hills with various slopes we may often find it expedient for the sake of system to vary this course.

If the question were only as to one single drain we could adjust it so as to conform to our perfect ideal; but as each drain is, as it were, an artery in a complicated system which must run through and affect every part of it, all must be located with reference to every other, and to the general effect.

Keeping in mind then the importance of some regular system that shall include the whole field of operation the work should be laid out with as near a conformity to established principles as circumstances will permit.

In considering what fall is necessary and what is desirable, we have seen that although a very slight inclination may carry off the water, yet a proportionately larger drain is necessary as the fall decreases because the water runs slower.

It is surprising what a small descent is required for the flow of water in a well-constructed drain. People frequently complain that they cannot find sufficient fall to carry off the water from the drains. There are few situations where a sufficient fall cannot be found if due pains are exercised. It has been found in practice, that a watercourse thirty feet wide and six feet deep, giving a transverse sectional area of one hundred and eighty square feet, will discharge 300 cubic yards of water per minute, and will flow at the rate of one mile per hour, with a fall of no more than six inches per mile. It is certainly advisable always to divide the fall as even as possible throughout the drains, yet this will be found a difficult rule to follow. Very often we have a space of nearly level ground to pass through to our outfall; and usually the mains, in order that the minor drains may be carried into them from both sides must follow up the natural valleys in the field, thus controlling in a great measure our choice as to the fall. We are, in fact often compelled to use the natural fall nearly as we find it.

It is thought advisable to have the mains from three to six inches lower than the drains discharging into them, so that there may be no obstruction in the minor drains by the backing up of water, and the consequent disposition or other obstructing substances. Wherever one stream flows into another there must be more or less interruption in the course of each. If the water from the minor enters the main at a quick fall, the danger of obstruction in the minor, at least, is much lessened. A frequent cause of partial failures of drains is there not having been laid with regular inclination. If instead of a general and uniform fall there should be

a slight rising in the bed of a drain, and descending water will be interrupted there till it accumulates as high as to be above the level of rising. At this point therefore the water must have a tendency to press out of the drains, and will deposit whatever particles of sand or other earthy matter it may bring down.

Drains must, therefore, be so arranged that in cutting them, their beds may be as nearly as possible straight or at least have a constant, if not regular fall.

All agree that it is best to have but few general outlets. In the whole experience of draining there is nothing so desirable as permanent and substantial work at the point of discharge. The outlet is the place of all others where obstruction is most likely to occur. Everywhere else the work is protected by the earth above it, but here it is exposed to the action of frost, to cattle, to mischievous boys, to reptiles, as well as to the obstructing deposits which are discharged from the drains themselves. In regular work under the direction of engineers, iron pipes, with swing gratings set in masonry are used to protect permanently this important part of the system of drainage.

It may often be convenient to run parallel drains down a slope bringing each out into an open ditch, or at the bottom of some bank, thus making a separate outlet for each. This practice is strongly depreciated. These numerous outlets cannot be well protected without great cost; they will be forgotten or at least neglected and the work will fail.

Regarding this point, of few and well secured outlets as of great importance, the arrangements of all the drains must have reference to it. When drains are brought down a slope as just suggested, let them instead of discharging separately be crossed near the foot of the slope by a sub-main running a little diagonally so as to secure sufficient fall and so carried into a main or discharged at a single outlet.

It may be objected that by thus uniting the whole system and discharging the water at one point where may be difficulty in ascertaining by inspection whether any of the drains are obstructed, or whether all are performing their appropriate work. There is prudence and good sense in this suggestion and the objection may be obviated by placing wells or peep-holes at proper intervals in which the flow of water at various points may be observed.

The position of the outlet must evidently be at a point sufficiently low to receive all the water of the field, or in other words it must be the lowest point of the work. It will be fortunate too, if the outlet can be at the same time high enough at all times above the back water of the stream, or pond, or marsh into which it empties; and high enough to be protected by solid earth about it. In any case great care should be taken to make the outlet secure and permanent. The process of thorough drainage is expensive, and will

only repay cost upon the idea that it is permanent—that, once well done, is done forever. The tiles may be expected to operate well, for a life time, and the outlet, the only exposed portion of the work, should be constructed to endure as long as the rest.

Shade Trees.

The question of trees in the streets is, or at least ought to be, of interest to every town dweller, for it is only in trees and grass plants, and occasional climbing vines that he is able to get a glimpse of the country which seems to many to be man's natural birth right. It is a good sign that there is a growing taste for the cultivation of the beautiful ivy, which will grow so luxuriantly on the front of a brick or brown stone house, and requires the smallest possible amount of attention. Give it a rooting place in good rich soil, and nature does the rest. In two years or less your house will be half covered with the rapidly growing climber, and in a little longer time it will be completely embowered in it. The cost is only a trifle, and this ivy is absolutely free from objectionable features.

In the scanty soil which trees are likely to get in paved streets, they necessarily have a hard time. Nevertheless with a little care they can be made to thrive and do well. In my opinion the failure of a large number of street trees to thrive, is to be attributed primarily to lack of intelligent interest in street tree-planting, and, in the second place, to general neglect. Trees planted in our city streets, even under the most favorable conditions, must of necessity be compelled to grow among many disadvantages. The principal causes of failure so far as they may be understood by non-professionals, may be briefly enumerated as follows: first, the selection of trees; second, planting; third, maintenance.

For street planting only a few varieties of trees are at all available. Of these the family of maples supply the best resource, since maples will grow under discouraging circumstances, and are especially suited for our purpose, being clean, long lived and tractable; moreover they will respond to the smallest help, being as it were solicitous to please, and to show an appreciation of human attention. No one who understands trees will be surprised that I speak in this way about maples. Of the various kinds, silver and white-leaved maple grow the most rapidly and is perhaps the least desirable, but nevertheless it is far superior to some kinds of trees used for street planting. The sugar maple, the Norway maple, the sycamore maple, the scarlet maple, and even the finer varieties, such as the cut leaf, etc., will all do well, and if nourished and properly cared for are less likely to be infested by insects than almost any other kind of tree. The aim-

able elm needs moisture, but will flourish in clay or in rich loose soil. There is a craze for planting large trees, say from four to six inches in diameter, both in streets and upon lawns. In eight cases out of ten, to be conservative under the ordinary conditions of removal, they fail. The safe rule is to go to a reputable nurseryman, select under his guidance a well formed perfect tree, two or three inches in diameter, a full natural head and a fibrous root, pay him his price for it, and plant it properly. The chances are that in these circumstances, success will follow. It is a crime to cut off the head or leaders of a young tree, since its chances for attaining perfection and permanency are thereby impaired if not destroyed. After selecting a tree such as I have described, dig a pit at least four feet square, and as many deep, fill it with good loam or soil, plant the tree in this, placing it as to depth just to the point where the trunk leaves the main root. This is the natural and proper depth. Spread the roots out lightly, and evenly, fill in the soil carefully and finally cover the whole compactly, and behold, the tree is planted.

Next as to maintenance; in the first place leave a space at least equal to three feet in diameter uncovered by flagging and open to the sun-light, the winds and the rains. Apply each season, in the spring and fall, a little surface stimulation, such as would be afforded by well rotted manure, or some artificial fertilizer. In the spring pick up the soil loosely around the trees, and mould it up lightly so that too much moisture shall not penetrate the roots. Be sure to protect the bark from injury; and I am tempted to advise the tree owner to shoot any horse that nibbles the tree or to use drastic measures in dealing with its owner. Keep up this course of treatment, and the chances are that the response of nature will be satisfactory. What is worth doing at all is worth doing well, and the rule is particularly applicable to the subject in hand.

Now, what is the matter with many of our old trees? Well, the general answer may be given in one word, "neglect." They are being supported on poor-house fare. They have outgrown their supply of nourishment, and likewise their environment. They are craving food. Take up the flag stones that confine and coffin them; dig up the earth around them, fertilize them, and many of them may yet be restored and enjoy a vigorous life. Others, too long neglected, will gradually die. Many trees also want pruning, thinning out of dead and surplus wood. For my part I would be glad to give advice *gratis* in order to save a good tree. New streets in our cities ought to be properly planted in the beginning and thus in time they will become pleasantly shaded thoroughfares.

Hygiene.

Peace hath her triumphs no less great than those of war, and never has this legend been better exemplified, than in these times of almost universal quietude. The strife now is against disease, or rather against the development of diseases which slay their thousands, where the sword and gun destroy their hundreds. All the highly civilized nations of the world are moving in this strife with greater or less success, and that nation will lead in the race for supremacy which has her soil and inhabitants in the best hygienic condition. Providence permits such a pestilence as cholera to feed on the filthy cities of Europe in a terrible manner, and thus to serve as a warning to those countries not yet invaded. Its command is, "be thou clean." The reward of the fulfilment of this injunction in freedom from not only cholera, but typhoid fever, diphtheria and other diseases which exist in epidemic form, and thus cholera becomes a blessing not disguised. Representative men of the medical profession are at short intervals discovering the causes of the various ills to which human flesh is heir, and are indicating the means by which they can be avoided. They find that most of them are caused or aggravated by certain conditions of soil or dwelling or surroundings. To change these conditions, the various arts and sciences must co-operate. Engineers must take up a large share of this difficult and responsible work, and solve its problems as they have solved many in the past. The drainage of a swamp in the neighborhood of a certain town in England, reduced the mortality from thirty to twenty per thousand, and in a particular part of that town, the mortality to but seventeen.

Located as most of our cities are in soils which mingle with water on the slightest provocation to form that delightful and peculiar mixture, mud, we should be particularly interested in discovering a means by which public intercourse can be carried on at all times without the disagreeable filth which now accompanies it for many months of the year. Personal cleanliness is the foundation of all hygiene, and I am free to say that the people located in any unpaved village or city have little encouragement towards this, first step to their own salubrity. In the larger cities, the streets after years of use, become so impregnated with droppings that they are little more than vast manure trenches, the dust from which is blown into our houses in summer and carried in as mud in winter. I have been much interested in examining microscopically the dust from a dirt road and astonished to find the amount of organic material it contains. Outside of their value as promoters of commercial business, no better economic investment could be made by our counties, towns and cities, than the creation of well drained, easily cleaned highways and streets.

LEGAL DEPARTMENT.

H. F. JELL, SOLICITOR,
EDITOR.

Municipal Councils.

THEIR POWERS AND JURISDICTION—
HIGHWAYS.

Continuing the discussion of the question of the liability attaching to municipal corporations to keep in repair roads and bridges in their respective jurisdictions—the duty imposed by statute, to keep in repair extends as much to sidewalks for the use of pedestrians as to the travelled way for the use of carriages and also to street crossings. One authority has stated that, as a general rule, the duty to keep in repair extends only to the road actually used for travel, provided it is wide enough to be safe, and is, in its actual condition, reasonably safe for travellers who use due care. Where an ordinary highway is out of repair, the public have a temporary right to go on the adjoining land for the purpose of travel. There have been many cases where injury has occurred upon property used as a highway or street, which has never been legally laid out or dedicated as such, and the municipality has sought to defend upon this ground. But it has been held that where the corporation has treated a piece of land within the limits of the municipality as a public highway, taking charge of it as such, it is chargeable with the same duties as though it were legally laid out; and it is liable for damages by reason of neglect to keep the same in safe condition for travel. Numerous cases have, from time to time, been brought against municipal corporations for damages for injuries sustained by slipping and falling on an accumulation of ice and snow on the walks in cities and towns. As a general rule, allowing snow to lie on a macadamized road does not come under the idea of allowing a road to be out of repair. It is for the jury to say, however, whether under the particular circumstances of the place, season, etc., if the non-removal was non-repair. In an American case it was held that after a fall of snow it was the duty of the city to use ordinary care and diligence to restore the walk to a reasonably safe and convenient state, the presiding judge remarking “the just rule of responsibility and the one, in his opinion, prescribed by statute, whether the obstruction be by snow or any other material, is the removal or abatement necessary, so as to render the highway, street or sidewalk at all times safe and convenient, regard being had to its locality and uses.” In a Canadian case it was laid down that this doctrine only goes the length of holding that a way properly constructed and kept in such a condition as to be reasonably safe and convenient for travel at all seasons of the year, is not defective by reason of the fact that it is covered with a smooth and even surface of ice, which renders it slippery; but if the

ice be allowed to remain in such an uneven and rounded condition on the surface that a person could not walk over it, using due care, or without being in danger of falling down, the municipality may be held liable. Any object upon or near the travelled way, which in its nature is calculated to frighten horses of ordinary gentleness, may be held, under some circumstances, to constitute a defect in the way itself. It is well to note the fact that a corporate body never can either take care or neglect to take care except through its servants. If such a body by its servants have the means of knowing that a highway is unfit for travel and are negligently ignorant of its state, they are guilty of negligence. As was stated in one of the cases bearing on this subject, “the corporation are, as it were, themselves the overseers of the highway, and on the principle bound to keep it in repair.” It is no defence that they appointed a proper overseer of highways, and gave him the means and authority to keep the road in good repair. They have not only the duty thrown upon them of keeping highways in repair, but have all necessary power given to them to perform that duty. The corporation must at their peril answer for the consequence of the duty not being performed. The negligence of their officers or servants is no answer.

Legal Decisions.

COUNTY BRIDGES.—THE VILLAGE OF NEW
HAMBURG VS. THE COUNTY OF
WATERLOO.

In referring to the recent decision of the Supreme Court of Canada, set out on page 124 of this paper, the *Galt Reporter* contains the following:—

“The statement, in the judgment that the river is over 112 feet in width ‘when the waters rise as high as within one foot of the top of the lower bank’ is, we believe, open to question if it refers to the place where the bridge crosses the river, because at that point, it is said, the lower bank was so washed away as to prevent its formations being discernible. Be that as it may, the important part of the decision is that in which it is held that bridges, within the sections of the act referred to, must be so constructed as to be above the waters of the river in a state of flood or freshet. This view of the meaning of the words of the statute, having regard to this plain and ordinary sense, is, to say the least, strained and unnatural. If it had been the view of the Legislature more inapt phraseology for expressing the mind of that body could hardly have been chosen. The width of the river, and not the length of the bridge, is what most people would have supposed was intended. *Why any certain width of river should be mentioned in the statute, if it is the water at flood level that is to be bridged, is not made very clear in this final exposition of the subject.*”

GEROW VS. AMELIASBURG.

The following appears in a recent issue of the *Brockville Times*, in reference to this case, which was recently brought before Judge Armour at Belleville, and perhaps created as great an interest as any civil action brought before the court in some time. The plaintiff in the suit was a cooper by trade, residing at Rossmore, and in the writ issued against the corporation of Ameliasburg claimed the sum of \$3,000 damages sustained by being injured in a fall from his wagon when delivering barrels, when driving over, as he claimed, a road in a dangerous condition. The claim set up by Gerow was that the road had been for some time in an unsafe condition, and the corporation knew it or ought to have known it, and should have had it placed in good condition. This was in substance the ground upon which the plaintiff brought action. The defence set up by the corporation was, 1st, That the road was in a reasonable state of repair, and that with reasonable care the plaintiff should not have fallen from his wagon; 2nd, That the position in which the plaintiff was riding (being on the end of a board projecting over the whiffletrees) was an unsafe position at any time; 3rd, That the accident was entirely due to negligence upon the part of the plaintiff; 4th, That as no complaint had been made to any officers of the corporation as to the unsafe condition of the road previous to the accident, they should not be held responsible for it. The action was one that not only concerned the corporation of Ameliasburg, but all surrounding corporations felt an interest in the case, believing that the decision of the court would, in any event, effect them as well. Many who were present were surprised at the ruling of his Lordship throughout the case and particularly so when he said it was the duty of every corporation to keep its roads in repair, and that they were liable for damages if an accident happened whether they received notice or not, of a road being out of repair. The learned judge further ruled that any person driving upon the public highway has a perfect right to ride in any position about his load he saw fit, believing as he drove along, that the public highway was in a safe condition. In fact, he had no right to believe anything else than that it was in repair when he drove out from his home upon it. His Lordship further held that no accident would relieve any corporation from liability unless such accident had been caused by the sudden washing away of a bridge or falling of a tree across the road and the corporation had not had a reasonable time to repair the same. But in case it could be shown that the corporation had had time to make the necessary repairs, whether they were aware of such need or not, it would not relieve them of any liability for damages in an action that might be brought against them. With these facts laid before the jury they returned a verdict for the plaintiff of \$250 and costs. It is not necessary to say the result of the decision was a great surprise to those who were well acquainted with the circumstances under which the action was brought and also those who claim to be authorities on municipal law. If the jury were right and they were governed entirely by the judges' ruling, the result of the action has established the precedent of a liability of corporations of which few of them have been aware heretofore. According to the present decision it will be impossible for any corporation to know when they are free from liability, for it must be admitted that it is an utter impossibility for any corporation to always have its roads, in what others might think good repair. His Lordship may have been conscientious in his ruling, but it is a question whether if the case was not submitted to a higher court it would not be decided that he had been a little too severe in defining the duties of a corporation in respect to the oversight of roads.

This is only further evidence of the urgent necessity that exists for the most wide-awake vigilance on the part of municipal corporations in seeing that the highways within their respective jurisdictions are kept in a proper state of repair.

FAWCETT VS. DUNDALK.

An action brought by Wm. Fawcett, of Melancthon, against the village of Dundalk was the most important case on the docket at the Orangeville Assizes. Fawcett carried on the business of farming and buying cattle in and around the village, and his business frequently took him a distance into the country. One day in May last, he drove into the village, intending to proceed to the country to transact some business. Owing to rain, however, he spent a very quiet day in Dundalk. In the evening between 8 and 9 o'clock he decided to play the part of the good Samaritan, and while en route to a neighboring hotel to assist and pick up an intoxicated neighbor, he and his horse and buggy got all mixed up in a ditch which the corporation had dug half way across the road. Fawcett claimed to be injured for life, and he commenced a suit to recover \$5,000 damages. The corporation denied any liability in various ways and said that Fawcett was careless and that if he was such a fool as to drive into an open ditch he should put up with the consequences and not ask them for damages. There were a large number of witnesses called on both sides, but apart from the evidence of the plaintiff stating his case and condition since the accident, the principal testimony was medically given by doctors who had examined and pronounced for plaintiff. Some seven or eight doctors were called to give evidence. The case lasted a day. The jury returned a verdict awarding the plaintiff \$2,000 and costs.

GELDERT VS. THE MUNICIPALITY OF PICTON.

In view of the vital importance to every municipal corporation of the main question in issue in this action, we have taken the pains to obtain a copy of the judgment of the Judicial Committee of the Privy Council, delivered on appeal to them on the 3rd day of August last. After a careful perusal of this judgment we have come to the conclusion that the article relating to this case, taken from the *Ottawa Free Press* and published on page 141 of this journal, is misleading, at least, in so far as it applies to municipal corporations in the Province of Ontario. The decision does not, by any means, go so far as to warrant the general assertion that "by this rendering of the law such accidents cannot be charged against the municipality, it being necessary to prove that the authorities were wilfully negligent in repairing such places." It may be superfluous to state, that the defendant municipality (the county of Pictou) is located in the Province of Nova Scotia. Lord Hobhouse, who delivered the judgment of the committee, states in the course thereof, that "By the Common Law of England, which is also that of Nova Scotia (and of Ontario) public bodies charged with the duty of keeping public roads and bridges in repair, and liable to an indictment for a breach of this duty, were, nevertheless, not liable

to an action for damages at the suit of a person who had suffered injury from their failure to keep the roads and bridges in proper repair." After referring to a number of cases on the subject His Lordship further adds "The question, then, is whether any statute has given to private persons the right of action now claimed against this municipality (viz., damages for neglect of its duty to repair a bridge whereby severe injuries were caused to the plaintiff) which does not exist at common law." After an exhaustive resume and discussion of the statutes and cases relating to the matter, His Lordship concluded by stating that "In their Lordship's opinion the appeal (of the municipality) should prevail, and the judgments below (in favor of the plaintiff) should be discharged and the action should be dismissed." Now we fail to see how this case is applicable to cases of a similar nature in the province of Ontario, for the reason that the municipal statutes of this province impose in express terms upon municipal corporations, civil responsibility for all damages sustained by any person by reason of the default or failure of such corporation to keep in repair, public roads, streets, bridges and highways, within their respective jurisdictions, provided the action is brought within three months after the damages have been sustained. (See Sec. 531, Con. Mun. Act, 1892.

DANGEROUS COUNTY ROADS.

In view of the number of actions that have been brought against municipal corporations during the current year for damages for injuries sustained by the several plaintiffs from defect in and the non-repair of certain highways within the jurisdiction and under the control of the municipalities concerned, we think it our duty to call the attention of municipal officers in particular and the ratepayers in general to the necessity for a more efficient surveillance of our highways. It would appear from the facts adduced in *evidence* at the different trials that dangerous and unwarranted excavations, wash-outs and "pitch-holes" are allowed to remain in their unsafe condition by the officials whose duty it is to see that they are repaired, until an accident occurs, resulting in serious injury to life and limb, the recovery of heavy damages against the corporation in default by the party injured, and the consequent uncalled-for depletion of the municipal coffers. In this connection we clip the following from the issue of the *London Free Press* of the 5th Oct., and which we consider worthy of reproduction in these columns:—

"There have been two cases at the present assizes wherein individuals have sued municipalities for damages sustained through dangerous or defective roads. The one case, *Sells vs. the Township of London*, was for \$3,000 (although the case was settled for \$500) for permanent damages received by his wife by being pitched out of a vehicle last winter through a defect in the Blackfriar's gravel road west of this city. This piece of road is one of the oldest in this part of the country, as it was constructed some 35 years ago as a main leader into this city and to connect with

the Sarnia gravel at the 5th concession, London township, on the Centre side line west. And whatever may be said of ordinary mud roads being out of repair, a road that has been continually gravelled for more than a quarter of a century, had the work been done properly, should not be now in a dangerous state at any time of the year.

The other case was *Orange vs. the township of Euphemia*, to recover damages for injuries received by Miss Orange on the night of the 23rd of May last by being thrown out of a waggon on the Haggerty Road, in that township. A washout had taken place in the spring, causing a cut in the road 14 inches deep and two feet wide. By the jolt Miss Orange was thrown out, and, as in the case of Mrs. Sells, was seriously and probably permanently injured. Now, the condition in which the average country roads are in spring and fall makes it surprising that more suits are not brought to recover damages of this kind. These suits are a serious condemnation of the roads of the country. Just when the farmers and travelling public require good roads, as in the two cases mentioned, they are full of pitch holes and deep ruts, and in such a condition that travelling is absolutely dangerous. To start with, the old statute labor system of road building and mending is inefficient and does not meet the requirements of the present time. And until this antiquated plan is abolished by township councils they will have stick-in-the-mud roads, people injured and municipalities sued for damages.

There is not enough money spent in road improvements, and what is expended by this *effete* pathmaster system is almost thrown away. This statute labor should be all commuted, and the amount required to build and maintain roads levied in a tax, the work let by contract, and the whole construction supervised by efficient and competent commissioners. Township councils have the power to adopt this system, and why is it not done? Scraping big heaps of dirt on the middle of the roads in June and putting a few loads of sandy gravel on top will not make a permanent road, for there is no foundation. And in the spring and the fall of the year these roads cut up into deep ruts and holes and are almost impassable. Instead of merely drawing a few loads of gravel on a road in the fine weather in June, repairing and filling up ruts should be going on all the time in the fall and spring when the work is most needed, and this cannot be done until the statute labor system is abolished and competent commissioners appointed to superintend the roads. Country roads in Ontario are all right during the summer months, especially during such a dry time as we have had this season. But, comparatively speaking, good roads are of not much benefit to the farmer in summer, for he does not need them for marketing crops, drawing wood and other necessary work. For roads to be of the most benefit and service to the public they must be in a permanently passable condition the year round. And we all know, unless that great road mender, the snow, comes in the winter, how impassable the ordinary country road is for a great part of the time. And the loss to the farming community every year through wear and tear of wagons and harness, horseflesh, etc., is incalculable. It is time in this advanced stage of the world in railways, electric cars, steam threshers, and other rapid improvements in everything pertaining to advanced farming and travel, that country roads should keep apace, and not have these important municipalities sued for having dangerous roads under their surveillance."

It is understood that the Ontario government have resolved, for the purpose of securing uniformity, to issue stationery for forms, etc., to be used in taking the vote in the prohibition plebiscite on 1st January next. Ballot papers and poll books must, in compliance with the act, be procured by the clerk of each municipality, but the ordinary poll book will be used, with the addition of a ruled column, headed, "Prohibition." The various forms will be supplied without charge, and will be forwarded, with copies of the Plebiscite Act, for use by the deputy returning officers, in ample time for the coming municipal elections.

QUESTION DRAWER.

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

A. M.—I observe your answer to my question in this month's number. To be more fully I will go over the subject again. J. C. of Inverary, bought a lot in our municipality some six or seven years ago, and since then, the lot has never been assessed to him nor any other person, nor has it been in non-resident list. The lot was missed same as if it had never been in the municipality. What I wanted to know, was, could we bill him with the back taxes, and if he refuses to pay, when could we put the lot up for sale? he is about selling the lot, but the purchaser wants the matter settled about the back taxes before he closes the bargain, and I enclose you a three cent stamp, and ask you to mail me the reply as soon as convenient, if you will kindly do so, I do not want the man to beat our municipality out of the taxes if it can be helped.

We think we now understand the matter of your enquiry fully. In answer to your question, we would call your attention to section 154 of the Consolidated Assessment Act, 1892. This section clearly explains the amount of the arrears which you can place on your roll this year and collect. It also sets forth the procedure to be observed.

As to when you will be in a position to collect these taxes by sale of the land, we think the same course should be pursued as if the taxes were in arrears and unpaid for the present year.

H. J. L.—In your reply to E. B's second inquiry in last number, I think possibly you are mistaken. The act says that the assessor shall put in column twelve, the value of each parcel of real property. In case taxes are not paid, the county treasurer would have to know the amount of taxes to charge against each lot separately. How could the treasurer divide the taxes without having the value of each lot? I know the county treasurer will not allow us to charge taxes in bulk against two or more lots. My views may not be right, but I take the liberty of sending them to you.

We are pleased to hear from H. J. L. in this matter. One of the objects of the publication of this journal is to obtain the opinions and ideas of parties interested on municipal questions. In this instance, we must adhere to our view of the situation as given in the October issue of THE WORLD. We think the two lots and the factory thereon are a parcel of real property, and if the taxes are not paid thereon, the whole arrears are chargeable by the county treasurer against the whole parcel of real property and every part of it.

T. U.—1. In view of the provisions of section 109 of the Public Schools Act, how would you deal with a school section that was blessed with a secretary-treasurer that is rich himself, and has a splendid education, but every year works up his school board to shut up his school half the year, and this year, to excell himself in close-fistedness, has hired the teacher on the second term in order to get the full benefit of the municipal school rate, but has only asked the council for the sum of \$50 and says that when the money runs out he will only have to discharge the teacher. Now, according to the section mentioned of the Public Schools Act, we are required to raise the sum of \$100 as a rate on the public school supporters of the whole township, and a proportionate amount when the

school is kept open for a shorter time. In the case above cited you will see the injustice, as this section will be wholly supported out of the municipal school rate, and that by school sections that are teaching full time every year. It seems to me that to follow the act strictly, we should levy as a municipal rate, sufficient to pay this section \$100, and he only asks \$50, which would leave that section without any school rate of their own and \$50 to spare.

2. My next question is, can a municipal council constitute themselves a board of health, and legally act as such?

1. The section of the Public Schools Act, referred to by our correspondent, shows plainly the duties of municipal councils as to raising money thereunder, and the moneys so raised, levied and collected should be paid over to the different school sections entitled thereto, under the provisions of said section. If the present members of the school board are not satisfactorily performing the duties imposed on them by statute, the school supporters should, at their annual meeting, called for the purpose, elect others to fill their places, as their terms of office, respectively, expire.

2. There seems to be no strictly legal obstacle in the way of a township council's appointing three of the members of the council to be a local board of health for the township, together with the reeve and clerk, but we think it more satisfactory, and we are of opinion that it is the custom to appoint three ratepayers of the municipality not in the council.

INQUIRER.—Sub-section 2, section 39, R.S.O., chap. 205, applies to the organization of the local board of health, as regards this town; the population being less than 4,000, and by section 47 of said act, the council may appoint, and fix the salaries of the medical health officers and sanitary inspector. I can find nothing as to who shall fix the salary of the secretary, whether the local board or the council. Neither the council nor the local board appoints the secretary, but his appointment is fixed by law as secretary. Now, what I want to know is, whether or not, the local board has a right to fix a salary for the secretary. It appears to me, they should have the right as no other provision is made for his services as secretary.

On page 93 of THE WORLD in June, 1893, you use these words, "6. We consider the board of health the sole judges as to what expenditure is necessary in carrying on their work, and as to what material they require to enable them to do so." Now, if the board should consider the payment of a salary to the secretary as a necessary expenditure, have they (the board) the legal right to include such salary as a proper expenditure of the board?

Do you know what the practice is in this matter in the towns and cities of Ontario?

We are of opinion that the local board of health should fix the salary of the secretary, if they consider his services worth more than his allowance for each meeting of the board, as a member of such board, and we see no legal reason why this should not be done. We have not full information as to what the practice is in cities and towns in this province, but will make enquiry and give results in a future issue.

A. B. C.—Our municipal treasurer, not being able to read or write, could his son (who transacts his father's business as treasurer) hold office as reeve or councillor, he (the son) having all necessary qualifications?

We are of opinion that the son can hold office as reeve or councillor of your municipality under the circumstances mentioned.

SEC.—1. Can a municipal council make a grant of say \$25, \$50 or \$100, as they deem expedient to each school kept open a year?

2. If one school is kept open a year, others less, or if no school is kept open a whole year, what is the legal grant?

3. Could an equal grant be made to each school, if no school is open a whole year, and no two schools the same length of time, in an isolated township municipality?

1. Sub-section 1, of section 109, of the Public Schools Act, 1891, provides that "the municipal council of every township shall levy and collect by assessment, upon the taxable property of the public school supporters of the whole township, in the manner provided by this act, and by the Municipal and Assessment Acts, the sum of \$100, at least, for every public school therein, in which a public school has been kept open the whole year exclusive of vacations," and "Where the public school has been kept open for six months or more, a proportionate amount of the said sum of \$100, at least, shall be levied and collected by assessment upon the taxable property of the whole township," etc. It will be observed that the smallest grant that can be made under this section, where the school has been kept open the whole year, is \$100.

2. The legal grant, under the circumstances suggested, is fully set out in the sub-section of the Public Schools Act, as above quoted.

3. If a school has not been kept open for at least six months of the year, no grant, under the above sub-section, can be made to such school. We do not think that, under the circumstances mentioned by our correspondent, the equal grant can be made to each school. It is well to draw attention to the fact that the above-quoted sub-section makes provision for the levying of an additional \$50 in each school section for each assistant teacher employed therein.

The present inspector of registry offices is suggesting many needed changes in these offices throughout the province. The importance of the safe preservation of the records of deeds, mortgages, wills, etc., is so great that any reasonable expenditure for document files, roller book shelves or large fire-proof offices should not be withheld. The fact that the registrar has a good salary, and easy work, leads many county councillors to look upon applications for improvements to his office as something to be laid over. The statute defines the registrar's duties and the penalty if he does not perform them properly, and rather than wait for pressure to be brought to bear by the government inspector, the council should see that facilities are provided for the care of documents of such great importance to every one of them, in the best way, without the least possibility of loss or destruction by fire or any other means.

Tile, Stone and Lumber Drainage
CHAPTER 38, R.S.O., 1887.

We were rather surprised recently to learn that only twenty-three municipalities distributed among the counties of Essex, Elgin, Huron, Lambton, Kent, Middlesex, Victoria and Waterloo had taken advantage of the provisions of this act, which provides that town, village and township councils (without submitting the matter to the ratepayers) may pass by-laws from time to time for borrowing for the purposes of tile, stone or timber drainage, in sums of not less than \$2,000 nor exceeding \$10,000, "such monies as they consider expedient, and for issuing therefore the debentures of the municipality, bearing interest at the rate of four per cent. per annum.

Any person assessed as owner of land in the municipality wishing to borrow money for the purpose of tile, stone or timber drainage, may make application to the municipal council according to a form provided. The council shall lend the money so borrowed from the government only for the purpose of tile, stone or timber drainage for the same term of twenty years in sums of one or more hundreds of dollars (no fractional part of \$100 to be loaned), and to persons who are assessed as owners.

The council shall impose by by-law, levy and collect for the term of twenty years a special annual rate of \$7.36 on each \$100 loaned over and above all other rates upon the land, in respect of which the money is loaned, and the rate shall be collected in the same manner as other special rates imposed by the municipal council.

This payment of \$7.36 covers both principal and interest, and is a small amount compared with the benefits derived from \$100 worth tile drainage. The preliminary proceedings necessary to be taken by a council before borrowing the money are easily understood. The Act gives form of by-law, which is to be passed at a meeting of the council specially called for the purpose. This meeting must be advertised for four weeks in such newspapers as the council by resolution, direct. After the by-law has been passed it must be promulgated as provided by the Municipal Act, sec. 329. This consists in publishing the by-law for three weeks in a newspaper published in the municipality, adjoining municipality or county town, as the council may direct. A notice in the form given in sec. 330 of the Municipal Act should be published with the by-law.

After this is done affidavits to be made by the reeve and clerk according to forms 2 and 3 of the Tile Drainage Act must be prepared, and these, with a copy of the by-law must be deposited with the Commissioner of Agriculture. If satisfactory the clerk will receive notice that the Government are prepared to receive applications for money as provided in the Act.

An account of the expense of publication of the notice of special meeting and

of promulgation must be kept and the affidavit of the clerk requires copies of the three issues of the newspaper containing promulgation of by-law to be attached thereto. The various proceedings to be taken by intending borrowers and the council are plainly set forth in the act.

No by-law should be passed for less than the full amount, \$10,000, as the expenses of promulgation, etc., are the same.

The expenses must be paid by the borrowers, and this is one of the arguments used against procuring money from this source. A fair estimate of what the expenses should be, are:

Promulgation and notices	\$12 00
Debentures, 100	10 00
Forms, application, etc	3 00
	<hr/>
	\$25 00

This would be 25 cents for each \$100 loaned. After the drain is complete an inspector, appointed by the council, must examine it and see that the work has been properly done, and make out a report of the cost. This must be at least \$134 for each \$100 loaned. The \$34 is generally made up of work by the borrower himself at a low rate, such as drawing tile and the Board of Drainers, so that the \$100 loaned pays the actual outlay. For this service the inspector should receive a fee to be determined by the council, and as half a day is generally sufficient for making out one report he should receive at least \$1.50. In addition to this the clerk is entitled to a fee to cover the expense of his work in connection with preparation of by-laws, etc., a fair estimate would be \$2.25 for each \$100 loaned, making the total expense \$4.

Where more than \$100 is loaned to one person at one time the inspector's fee should be less than \$1.50 for each \$100.

The principal benefits derived from borrowing money in this way are the advantageous terms of payment, and a poor man can often improve his farm by this means when he could not procure money from any other source. In some municipalities the wealthiest farmers who were money lenders themselves, borrowed as much as they could at first, and shut out the poorer class. This is a matter the council must regulate in the interests of the municipality.

Provision is made by the act for repayment of the whole of the unpaid principal by the borrower at any time.

A member of the council for Tilbury North has given notice of a by-law to be submitted at the next municipal election for residents and ratepayers, providing for the repair and maintenance of the concession roads without aid from the township treasury, and the repair and maintenance of the side roads out of the township treasury alone. This appears to be a new idea in reference to the maintenance of roads and one concerning which we would like to have further particulars.

R. COAD

J. ROBERTSON

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The Municipal Index

BEING AN

ALPHABETICAL INDEX

TO ENACTMENTS IN THE REVISED STATUTES OF ONTARIO, 1887, AND SUBSEQUENT STATUTES OF THE PROVINCE OF ONTARIO WHICH AFFECT MUNICIPAL CORPORATIONS, THEIR COUNCILS AND OFFICERS.

By **ALLAN MALCOLM DYMOND,**

Barrister-at-Law,

Law Secretary to the Department of the Attorney-General of Ontario, and Law Clerk to the Legislative Assembly

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This Work, which is a digest of the Municipal Law of Ontario, has been compiled with the view of enabling Municipal Officers, as well as Legal Profession, to find with the greatest facility, enactments which concern the powers, duties and privileges of Municipal corporations or their Officers, and which are now scattered through nearly 6,000 pages of printed matter. The chapter and section of the Statutes, as well as the page of the volume which contains the section are given.

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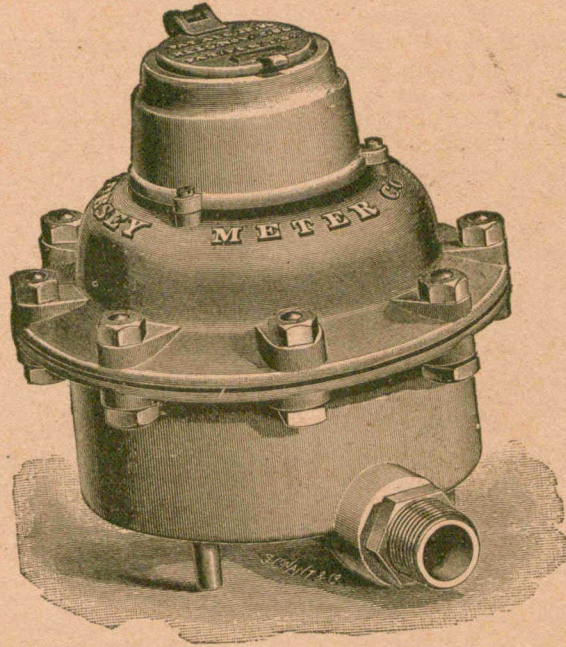
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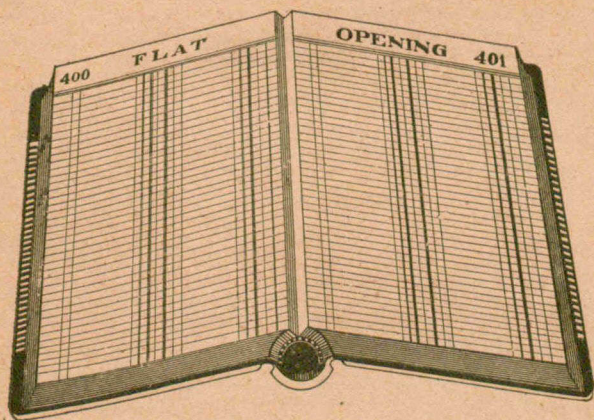
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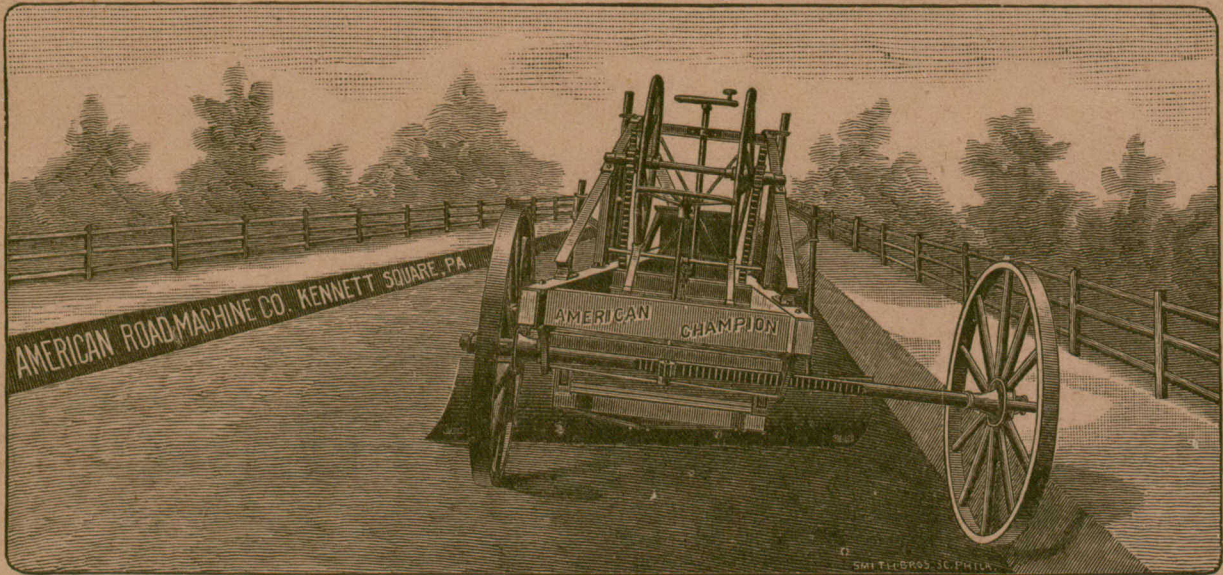
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