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# THE CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF PUBLIC WORKS, TENDERS, ADVANCE INFORMATION AND MUNICIPAL PROGRESS

EVERY THURSDAY

This paper reaches every week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers Purchasers of Municipal Debentures and leading Contractors in all lines throughout Canada.

Vol. 8.

DECEMBER 30, 1897

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## BUSINESS NOTES.

Martin & Vezina, plumbers, Montreal, have dissolved partnership.

Charles A. Prevost and Joseph Trudel, contractors, Montreal, have formed a partnership.

Stamp & Laidlaw, painters, Hamilton, are announced to have assigned to W. F. McGiverin.

## CONTRACTS OPEN.

THAMESFORD, ONT.—Electric light is being agitated.

NORWICH, ONT.—The broom factory is about to be enlarged.

TURNERVILLE, ONT.—Wm. Turner is building a new residence.

FULLARTON, ONT.—C. K. Thiel intends building a two-story cottage.

PETERBORO', ONT.—The town will probably build a House of Refuge.

ST. JOHNS, QUE.—The city contemplates issuing bonds at an early date.

WALLACEBURG, ONT.—There is talk of a new hotel being erected near the glass works.

GEORGETOWN, ONT.—J. B. Inglehart, jr., has made a proposition to establish a creamery here.

HUNTSVILLE, ONT.—A by-law has been passed to borrow \$6,000 to complete the waterworks system.

CLINTON, ONT.—Mr. Shunk, of the Commercial Hotel, will erect a wing, 35 x 140 feet, covered with sheet iron.

MALDEN, ONT.—On January 17th the Township Council of Malden will consider a by-law to raise \$2,000 for drainage purposes.

ST. ANDREWS, N.B.—E. T. P. Shewen, public works engineer of St. John, was in town recently examining the harbor with a view to dredging.

ESSEX, ONT.—The Anderdon stone quarry has been purchased by an American syndicate. It is intended to commence the manufacture of soda ash.

HALIFAX, N.S.—D. B. Carritee, of St. John, and J. C. Patterson, of Montreal, will erect a factory here for the manufacture of tarred roofing and building paper.

DUNDAS, ONT.—The Property Committee of the Board of Education has been requested to report on the advisability of furnishing the public school with single desks.

BURFORD, ONT.—Plans have been prepared and tenders are now being taken by the Dominion government for a new armory here, to accommodate about 100 militiamen.

BRIDGETOWN, N.S.—A company is being formed to supply electric light, generated by water power. It is proposed to lay an iron pipe five-eighths of a mile in length. Curry, Bent & Co. are interested.

BRANDON, MAN.—Plans for a two-roomed frame school building, with stone basement, to be built the coming summer at Pipestone, Man., are now being prepared by Mr. W. H. Shillinglaw, architect, of this place.

PORTAGE LA PRAIRIE, MAN.—James Cowan wants tenders before 5 p.m., January 6th, for building a three-story brick block. Plans at offices of G. C. Silver-

thorne, architect, or H. S. Griffith, architect, Winnipeg.

ST. THOMAS, ONT.—The city is endeavoring to obtain the consent of the Ontario government to guaranteeing \$50,000 of bonds for the construction of the proposed electric railway, of which Mr. J. H. Still is the chief promoter.

LUNENBURG, N.S.—S. W. Oxner, C. E. Kaulbach, A. H. Zwicker, Alex. Knickle, W. F. Acker and J. Jos. Rudolf intend applying for a charter of incorporation as The Lunenburg Marine Railway Co., Limited. The capital is \$25,000.

SHERBROOKE, QUE.—The town will receive tenders until January 6th, addressed to Mr. F. J. Griffith, assistant secretary-treasurer, for the erection of the superstructure of a rivetted steel truss or lattice highway bridge in two spans of 150 feet each.

BOBCAYGEON, ONT.—A meeting was held here last week to discuss the electric railway project. A committee was appointed to take steps to form a company to build a road connecting Fenelon Falls, Bobcaygeon and Peterboro'. W. J. Read is acting secretary.

KINGSTON, ONT.—The governors of the General hospital have decided to ask for plans for the rebuilding of the destroyed Watkins wing.—E. D. Smith, the Winona fruit grower, intends to build an addition to his storehouse for cold storage purposes, to cost \$5,000.

QUEBEC, QUE.—A deputation, consisting of Hon. R. R. Dobell, J. G. Scott and others, waited on the local government last week asking a charter to build a railway from Roberval to St. James' Bay, a distance of 300 miles.—David Ouellet, architect, is preparing plans for two residences to be built on Couillard street for E. Dionne, M.D.

ST. JOHN, N.B.—The Common Council are considering a water supply for the western side of the harbor, to supply the proposed pulp mill of A. Cushing & Co., and also to be used for other purposes. Mr. Murdoch has estimated that a 24-inch main would cost \$135,000 and an 18-inch main \$92,000. Steps are likely to be taken at once to construct the necessary mains.

MAISONNEUVE, QUE.—The Catholic School Commissioners of this city, presided over by Rev. J. A. Belager, P.P., have decided to build a new school building, 204 feet long by 70 feet wide, four storeys high, pressed brick front, with all modern improvements, to cost between \$40,000 and \$50,000. Architect J. Alcide Chausse, of Montreal, has been instructed to prepare plans and to call for tenders.

SARNIA, ONT.—A by-law to raise \$5,000 by debentures has been passed by the Council.—On Monday next the rate-payers will vote on a by-law to raise \$30,000 for the purpose of increasing the pumping power of the waterworks, by pro-

viding a set of pumping engines of three million imperial gallons capacity, with condensers, air and feed pumps, two steel boilers, etc., and to extend the water main to supply the Grand Trunk Railway (Company with water.

**GUELPH, ONT.**—Mr. A. B. Petrie recently purchased a tract of land near the Dundas bridge, on which he intends to build a gymnasium, with club room, swimming bath, etc., a first-class bicycle track, a grand stand to seat about 2,000, and a regulation sized hockey and skating rink. Mr. Hutchison, city engineer, is surveying the property at present. The work will be commenced in the spring and pushed forward as rapidly as possible.

**OTTAWA, ONT.**—Mr. H. J. Beemer promises to commence work at an early date on the proposed inter-provincial bridge, which is estimated to cost \$750,000.—E. F. E. Roy, secretary of the Department of Public Works, will receive tenders until Thursday, January 20th, 1898, for the construction of a training pier of pile-work at Matane and a breakwater at Aulse aux Gascons, Que. Plans at the office of the Clerk of Public Works, Quebec, and at above department.

**HAMILTON, ONT.**—The Cataract Power Company have been granted an extension of three months in which to complete their works.—Building permits have been granted as follows: W. P. Witton, alterations to Royal Hotel, cost \$35,000; E. B. Patterson, addition to factory of the Ontario Lantern Company, cost \$750.—The Sewers Committee has recommended the installing of an incinerator at the Ferguson ave. interception works, at a cost of \$4,000. The Council decided to allow the matter to stand until next year.

**MONTREAL, QUE.**—J. A. Chausse, architect, is preparing plans for a church to be built at Bonfield, Ont. Same architect is preparing plans for six tenements on Nonancourt street for F. X. Lalonde.—Mr. Laforest, superintendent of water-works, has again drawn the attention of the Council to the necessity of duplicating the pumping machinery at the high level pumping station. He estimates the cost of the proposed improvements as follows: Cost and erection of steam engine, \$40,000; cost of an additional boiler, remodelling building to receive engine and boiler, \$19,650; connecting the two sections of the reservoirs to the suction pipe, \$2,500; continuing the 20-inch main to the high level reservoir, \$7,650.

**VICTORIA, B.C.**—The Mountain Tramway and Electric Company will seek incorporation by private bill at the approaching session of the legislature.—John Cobeldic asks incorporation of a company to develop mines, construct blast furnaces, electric light plants, railroads, wharves, etc.—R. T. Elliott is solicitor for a company having for its object the construction of a railway from Pyramid harbor to the boundary line between British Columbia and the Northwest Territories.—Messrs. Weiler Bros., furniture and house supplies, write that they expect to commence building about next March. The proposed building will be 66 x 132 feet, five stories, of brick, heated by steam and lighted by electricity in the most modern style. Plans have not yet been prepared, but they will probably turn their attention to this early in January.

**WINNIPEG, MAN.**—The citizens have subscribed \$13,000 for the establishment of a coffee house in this city.—The by-law to raise \$30,000 to build a fire hall was carried by the ratepayers last week.—It is reported that the Sisters of Jesus and Mary contemplate the erection of a new convent building next year.—The Macpherson Fruit Co. are inviting tenders for the erection of a three-story warehouse. The building is to be located on Main street, opposite the city hall, and will be erected next spring.—It is understood that

a petition has been received by the local government from settlers in the Boyne district, asking for the drainage of the large marsh south-east of Carman, situated in the municipality of Dufferin. J. A. Macdonald, chief engineer, will report thereon. It is learned that Macdonald marsh, south-west of the city, is also to be drained.

**LONDON, ONT.**—The accepted plans for the proposed Jubilee hospital building, prepared by Mr. H. C. McBride, architect, provide for a foundation of stone, walls of white brick, with stone trimmings and slate roof, the building affording accommodation for 130 patients. The design consists of six semi-detached buildings, four pavilions, with administration building in the centre, the main facade facing the south, with wing containing dining rooms, etc., in rear of the main building. The floors of the operating room will be constructed with steel beams and terra cotta arches between same; on this tile or cement floor will be laid. The buildings will be heated and ventilated by the indirect steam hot blast system.—On Monday, January 3rd, the ratepayers will vote on a by-law to raise \$70,000 for increasing the accommodation at the General Hospital. The plans therefore have been prepared by Messrs. Moore & Henry, architects, and show the administration building in the centre of the group. The actual cost of the buildings and alterations for accommodating 110 patients will be \$45,000, but the design includes a special pavilion for private patients, some of the wards of which may be utilized for the special accommodation of children. The cost of a private patient's pavilion will be \$25,000, making a total of \$70,000.

**TORONTO, ONT.**—Mr. C. A. Burns, proprietor of the O'Connor house, corner Simcoe and Adelaide streets, has purchased the Strathy block on the opposite corner, and intends remodelling it for a first-class hotel.—The sum of \$1,729 has already been obtained towards providing a site for a residence for women students at Victoria University. A bequest of the late Hart A. Massey will provide for the erection of the building.—City Engineer Keating proposes to construct a new iron bridge over the Humber river, on the Lake Shore road, using the material taken from the Queen street subway. The stringers would permit a three-span bridge to be built at very little cost. Mr. Keating also states that the bridge over the Don at Eastern ave. may have to be rebuilt at an early date, and he proposes to replace it with the bridge now across Queen street and build a new bridge at that point.—A special meeting of the sub-committee of the Works Committee, appointed to ascertain the cost of extending Queen street into High Park, north of the railway tracks, was held last week. The City Engineer reported that, exclusive of the cost of grading, which is estimated at \$4,000, it would cost \$17,000 to fix up the roadway. This would include a brick pavement upon concrete between the car tracks, and two cinder paths. Mr. Hugh Ryan, representing the Sunnyside Orphanage, asked that the city should also erect a retaining wall along the street front, which would entail a further expenditure of about \$3,000.—A deputation from Schomberg, King Township, last week asked the Ontario government for a bonus for a line of railway fifteen miles long, from Aurora to Schomberg. A charter for this line was granted about two years ago, and the Dominion government voted a bonus of \$3,200 a mile.—A meeting was held in this city last week at which the construction of a railway to James Bay was discussed and advocated.—The Attorney-General has announced that something must be done to improve the accommodation for the reporters at the Parliament Buildings. The architect will be instructed to report upon some plan of

meeting the existing difficulty, either by lowering the present gallery or suspending another and smaller gallery in front of the present one.—Wm. Harris and John Sheridan, representing the Toronto Stock Yards Company, have made a proposition to the city in regard to retaining the cattle market on its present site, offering to erect the necessary stables, sheds, weigh scales, etc.—A deputation of the City Council will probably visit American cities with a view to examining the most improved market buildings.

#### FIRES.

The residence of R. L. Bloom, Port Stanley, Ont., was destroyed by fire on the 25th inst. No insurance.—The house belonging to Joseph Pinch, 5th concession, Township of Romney, a few miles from Whitney, Ont., was burned on the 27th inst.

#### CONTRACTS AWARDED.

**KASLO, B.C.**—Debentures amounting to \$12,000 have been sold to the Trust & Guarantee Co., of Toronto.

**COWANSVILLE, QUE.**—The Confederation Life Association has purchased \$20,000 of debentures, at 108.

**CHATHAM, ONT.**—The Chatham Dredging Company has been awarded a contract for dredging Trembly Creek, at a cost of \$4,000.

**HALIFAX, N. S.**—The contract for wiring the Bank of Nova Scotia building for electric lights has been let to Graham & Pickles.

**HAMILTON, ONT.**—Leather & Watson, of this city, are reported to have been awarded the contract for furnishing supplies for the St. Thomas street railway.

**MONTREAL, QUE.**—The municipality of St. Francois de Beauce has given the Dominion Bridge Company, of this city, the contract for the construction of an iron bridge over the Chaudiere river.

**BROCKVILLE, ONT.**—The contract for constructing a new station for the C.P.R. at Vancouver has been let to Thomas Tompkins, of this city, who has several other smaller contracts on the line.

**SHERBROOKE, QUE.**—Tenders for \$175,000 of 4 per cent. bonds, to run 25 years, were received as follows: Messrs. Frank Thompson & Company, 104.10; C. Ernest Gault, financial agent, Montreal, 104.06; Bank of British North America, 103.05; R. Wilson Smith, financial agent, Montreal, 103.00; A. Robert & Co., Montreal, 101.00. The Thompson tender has been accepted.

**LONDON, ONT.**—The City Council has accepted the tender of the Confederation Life Assurance Company for \$120,000 worth of city three and one-half per cent. bonds.—Tenders were received for fire alarm gongs from the United States Fire and Police Patrol Company, the Bell Telephone Company, the Gamewell Fire Alarm Company, the Anchor Electric Co., of Boston, and the Rogers Electric Co. The tender of the Bell Telephone Co. has been recommended for acceptance.

#### HARDENING CEMENT PAVING.

Portland cement paving will attain a considerable degree of hardness without any dressing or any special treatment; but paving laid in damp weather will ultimately attain a greater degree of hardness than that laid in very hot weather. Further hardening of the surface may be produced by keeping the work moist by means of wet cloths, or by damped sawdust or sand laid over the paving as soon as it has set; flooding the work with water, where this is possible, will be best of all. Miller mentions that cement work

may be rendered very tough and hard by gauging the material with 10 to 15 per cent. of minion—the siftings of ironstone after calcination. Indurating concrete slabs causes them to become very hard; by it their density is increased and their porosity lessened. A solution of soluble silicate of soda, 1 part to 10 parts of water, may be applied to in situ paving, but the pickle should not be applied until after the lapse of a couple of days, by which time some of the moisture will have evaporated, and thus allow the silicated solution to penetrate the pores of the material, for which the silicate has a great affinity.

**PAINTING BRICK WALLS.\***

Of all the subjects on paint and painting, this one, alone, appears to be the least hackneyed. In fact, there seems to be an implied agreement on the part of contributors to let it severely alone. There are several specific and well-defined reasons why the subject of brick painting should demand more attention than it usually does. The principal reasons are: It requires a large quantity of paint, as compared to other work, to do it properly, and that there is quite an amount of it done—more than the casual observer would suppose; also, that there are numerous difficulties constantly arising which handicap the painter who wishes to do a substantial job, unless he thoroughly understands them and knows the remedies therefor.

While it is controvertible, it seems to be a settled fact in the minds of most of our painters, that there should be nothing used on brick-work except oil paint. Taking the surfaces as they come, good and bad, it would be folly to assume otherwise. But, considering the large amount of paint it takes, and the cost of the same, its entire use throughout the job may be partly dispensed with and the result be just as good. We hold that it is the duty, if not to the convenience of the painter, to work to this end. There is one thing sure, the better any surface is sized or filled, the less paint it takes to cover it, and the less work it requires to apply it; but the trouble is to get a filler that will stand on brick. If the walls were perfectly dry at the time of filling, and could be kept so, we would not hesitate for an instant, owing to the ease with which anything adheres to perfectly dry brick, in saying that a common brown glue size would practically answer. But the brick wall remains yet to be built that is and will remain dry in every portion during all seasons of the year, no matter how well it be coated with paint. A glue size has been tried repeatedly with varying results. In some instances, according to the testimony of painters, it has stood fairly well over the entire job. These instances are so rare, however, that they bear questioning; hence, they are hardly worth considering. The experience of others has been that glue sizing would stand except around the cornice, windows, etc., and around the base. There are numerous instances that attest to the

truth of the foregoing assertion, we must conclude that brick buildings, taken as a whole, are more liable to draw dampness around the windows, cornices, near the base, etc., than at places some distance from these points. It seems to us, then, that a glue size might be employed advantageously on portions that the painter is sure will not draw dampness. In all cases, the size should be applied to these parts while the brick is perfectly dry, and covered with paint before it rains. While saying "perfectly dry," we do not mean dry as when taken from the kiln, for it is a fact that a brick will absorb some moisture in any position, and it will remain in it, which is evidenced by weighing them. Before painting brick that is partly sized, the parts on which there is no glue size should be given an oil size, so as to make the color uniform in appearance, and we think it advisable to also use a flat for finishing, for the possibility is that the surface will be unequal in its absorption of oil. We think it a safe proceeding to size brick that is protected by a verandah roof. It is another fact, well authenticated, that brick, relatively, will hold paint better with moisture in them than wood. The trouble with paint on well-burned damp brick is not so much from the paint cracking, scaling or blistering, as from spotting, and efflorescence of the salts in them.

When engaged in painting advertising signs, we hunted for a long time for a size that would hold out paint on brick and stand for a reasonable length of time.

Principally from the fact that it is tedious work to paint letters on a brick wall, on account of rapid suction, and also that the brick will not take paint well, which necessitates much rubbing, it is useless to try to paint letters rapidly on a brick surface if one is compelled to rub the paint in. We found by dissolving glue in linseed oil, and thinning down with benzine, that we got a much cheaper size than pure linseed oil, besides, it filled better, and the letters could be put on much more rapidly than on an oil size, while its lasting qualities were about on a par with an oil size. The glue served the office of filler, while the oil prevented the glue from coming in contact with the moisture. As we had not time to wait for the sizing to dry, we painted the letters on as soon as we got the sizing done. But it would be better to allow it to stand until dry before applying the next coat of paint. A painter once told me that glue dissolved in sal-soda water, and mixed with oil, makes a good sizing for brick. It seems to me that this is worthy of trial, as sal-soda water and linseed oil makes a very good vehicle in which to mix the priming coat for wood, and I know that shellac dissolved in sal-soda water and mixed with oil makes a better paint for damp work, and work afflicted with grease spots, than pure oil. Shellac would be better than glue, but it is too costly. We mention these sizes for the reason that property owners are scared out when it comes to painting brick work, on account of the vast amount of material it takes;

(Continued on page 4.)

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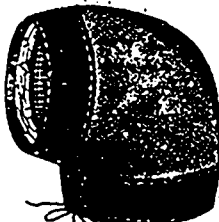
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and not because they are better than oil ; for it is evidenced by universal experience that nothing is superior for brick walls than pure linseed oil. A painter of wide experience informs me that he has painted brick work successfully, on several occasions, by using a vehicle of coal oil and linseed oil, regulating the amount of coal oil by the price the customer wished to pay. He claims he has succeeded in preventing the white incrustation that sometimes comes on brick, by the use of a paint heavily charged with coal oil. While we do not advocate a mixture of coal oil and linseed oil for painting purposes, we do believe that coal oil exerts a good influence on brick, in the way of preventing crumbling and the white incrustation, as the use of petroleum products in the laboratory for the preservation of potash and kindred products is universal. It is the activity of potash, salt-petre, etc., in brick that causes them to crumble, and the white incrustation to appear. Petroleum renders these salts inactive.

One cause, and probably the only one, for the disruption of paint on brick work, except dampness and its attendant evils, is dust, which, during the course of time, settles in the cracks and crevices of the brick, and in those left by the mason ; hence, before beginning to paint, the walls should be thoroughly cleaned. Some use an old stub of a broom, while others recommend steel wire brushes. Most of the accumulation of dust is found along the upper edge of the brick, as there is a little shelf there, which is made by the trowel of the mason. This dust deposit causes the paint to scale off, and it should be cleaned off, for two other reasons : The surface is not only rendered better for paint to adhere to, but a dusty surface will absorb more paint than a clean one.

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While we recognize that ready-mixed paint is detrimental to the interests of the painter, we cannot ignore the fact that modern machinery and science have succeeded in producing paints superior in quality, and cheaper than those mixed in the old-fashioned way by hand. Particularly in the case of brick paint, one of the chief difficulties in the way of hand mixing is, the painter cannot get the proper material ; nor can he get them cheap enough, owing to the small quantity purchased ; while, on the other hand, there are comparatively few painters who know how to mix brick paint properly, especially flat colors. The knowledge is not so much a question of getting it to stick, as in getting a flat that will stand in color and not spot. Some workmen claim that a good flat color for brick cannot be produced that will stand the elements and not fade ; but, all the same, there are several on the market that can lay great claim to these particular qualities.

In stimulating a brick color, Venetian red is invariably used as a base ; but, owing to the many spurious articles on the market, it is an unsafe proceeding for the painter to attempt to mix a brick red that will not fade, without he is acquainted with his Venetian red and knows that it is "O. K." For this reason, if not for others, we would advise using the prepared products, both for flat and gloss work.

An imitation of the celebrated Philadelphia pressed brick is made by adding yellow ochre to Venetian red for light shade, and blue for dark. The darker the shade, the less ochre and more blue should be used, which gives it a decidedly purple tint. Flat color, of course, is made by using turpentine. Milwaukee

brick color is made by using lead and ochre. Of the ready-mixed product, the suspicion is, it is made largely from zinc, barytes and yellow, both buff and light buff. As to the vehicle in which it is mixed, that is largely a matter of guess-work ; but, as the smell of benzine is in evidence, it is safe to presume that it is an extended oil. Whether it is or not, some of them serve for the purpose for which they are intended admirably well.

(To be Continued.)

**LAYING ENCAUSTIC TILES.**

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# MUNICIPAL DEPARTMENT

## TO MUNICIPAL OFFICERS.

The CONTRACT RECORD is desirous of publishing, as far as possible, advance information regarding projected works of construction in all parts of Canada, such as sewerage and waterworks systems, railways, street pavements, public and private buildings, etc. Municipal officers would confer a favor upon the publisher by placing at our disposal particulars of such undertakings which are likely to be carried out in their vicinity, giving the name of the promoter, character of the work, and probable cost. Any information thus furnished will be greatly appreciated.

## THE STRATFORD WATER SUPPLY COMPANY.

In a very complete statement issued by the directors of the Stratford Water Supply Company, in accordance with a resolution of the City Council, the following particulars of the plant are given:

The growth of the Water Supply Company's plant and machinery has been continuous; till now we have a duplicated plant throughout, having six engines and three boilers, the two large pumping engines having a combined capacity of pumping 5,000,000 gallons per day, and boilers equal to 200 horse power combined. We have eleven miles of force mains, with eighty-three street fire hydrants, engine and boiler house, coal siding and shed, etc.

The source of the main water supply has received constant attention, and enables us to assert that the water supplied by this company to the citizens is of better quality than is furnished to three-fourths of the larger cities of this continent. In confirmation of the satisfactory quality of the water we have the repeated tests and statements of the local medical health officer, together with the other distinguished medical practitioners of the city. The watershed of the Avon is throughout rural above Stratford and situated 1,200 feet above sea level, on the highest tableland in Ontario. On the banks of the Avon there are several large springs, three spring lakes, which with spring rivulets and the river Avon all go to form our source of water supply, which is conveyed through a stone and gravel filter, then by 15-inch Akron tile pipe to two small settling basins, then to two wells, from which it is pumped by our force mains through the city. The settling basins and wells are cleaned of sand and the river and reservoir of drift leaves and weeds, the mains flushed and the river policed with posters, circulars and post cards, warning all in the neighborhood against in any way defiling the water. We have also had a constable patrol the

river whenever we had any suspicion that our warnings were being unheeded.

The water supply in quantity has proven to be ample in the driest seasons experienced, and the price realized for the total water pumped by the river is only a fraction over 6c. per 1,000 gallons. In Toronto there is a revenue of 8c. realized for the 1,000 gallons, and in St. Thomas 12c. per 1,000 gallons. Originally our tariff was based on that of London, Ontario, though that city was doing three-fourths of its pumping by water power. Our tariff was revised in the year 1890 in the interest of the consumers.

In Belleville, with 9,914 population, the waterworks company has perpetual franchise; the city pays \$7,000 per year for 10 years for 175 hydrants, and 10 per cent. of cost of all extensions; has 17 miles of main; works valued at \$200,000.

Berlin, with 7,425 population, pays \$45 each per annum on 95 hydrants; it has ten miles of main and works valued at \$135,000.

Brantford, 12,753 population; works cost \$237,598; has 22 1-2 miles of main, 177 hydrants; revenue from consumers \$14,000, and from city \$11,000.

Chatham, 9,052 population; waterworks cost \$145,000; has 14 3-4 miles of main and 166 hydrants, but no proper water supply.

Cobourg, 4,829 population; works 72 hydrants; debt \$60,000; city pays for fire protection \$3,190, and for other purposes \$1,247; total \$4,437.

Guelph, 10,539 population; works cost \$150,000; has 18 miles of mains and 120 hydrants.

Ingersoll, 4,191 population; works cost \$100,000; with 7 miles mains and 60 hydrants.

St. Thomas, 10,370 population; works cost \$150,000; debt \$120,000; revenue \$13,000.

Woodstock, 8,612 population; water works cost \$158,552, with 20 miles of main, 128 fire hydrants; revenue from consumers \$7,000, from town \$6,735, and deficits to be met from the general taxes.

## LEGAL DECISIONS AFFECTING MUNICIPALITIES.

**HENault vs. THE CITY OF MONTREAL.**—The plaintiff alleged that the city had accepted his tender to construct drains in various streets of the city, including one on Champlain street, at the

rate of \$5.25 per running yard; that plaintiff constructed and was paid for a number of these drains; that after he had done part of the necessary work on the drain on Champlain street the defendant, on the 10th September, 1895, ordered him to stop work, and that defendant was obliged for 53 days thereafter to protect and take care of the work done, and guard against accidents. Plaintiff alleged that he had protested defendant against the order, and that defendant on the 3rd November, 1895, took possession of the work. Plaintiff claimed that he was entitled, as payment for the work done, and for damages, to recover the sum of \$1,533.66, less \$100 received on account. The court was of the opinion that a contract was completed between the plaintiff and defendant whereby defendant undertook to construct certain drains in a number of streets, including one in Champlain street; that plaintiff had completed and was paid for the drains in question with the exception of the one in Champlain street, as to which plaintiff received orders to desist, and was subsequently notified that his contract was cancelled. The court held that the city was guilty of a breach of contract, and the plaintiff's action was maintained for the sum of \$381.34.

## QUEBEC MUNICIPAL CODE.

In the Quebec Legislature, Hon. Mr. Deschene introduced a bill to amend the municipal code. By this bill county councils are authorized to acquire one or more machines, stone crushers and rollers to improve and maintain roads, whether local or county, to make arrangements with the local municipalities for the purpose of allowing them the use thereof for their roads, and to fix their price for their use or to give them the gratuitous use thereof.

Dr. McCorkill moved an amendment giving to towns of a population of less than 4,000 the right to join with the county councils in which they are situated and buy all necessary machines to improve the roads. With this amendment the bill was passed.

Mr. E. Donnell has been appointed town clerk and treasurer of Barrie, Ont., in succession to Mr. Henry Bird, who has been in the employ of the town for about a quarter of a century.

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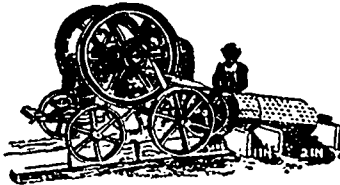
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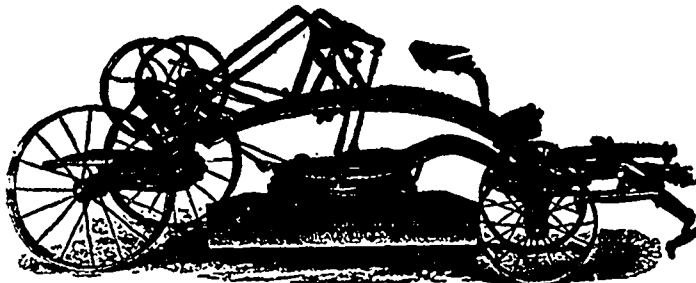
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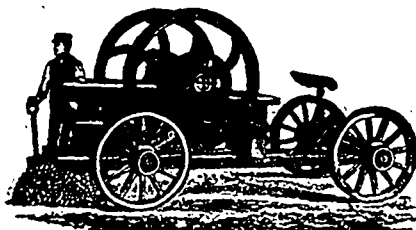
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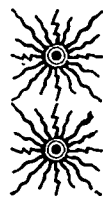
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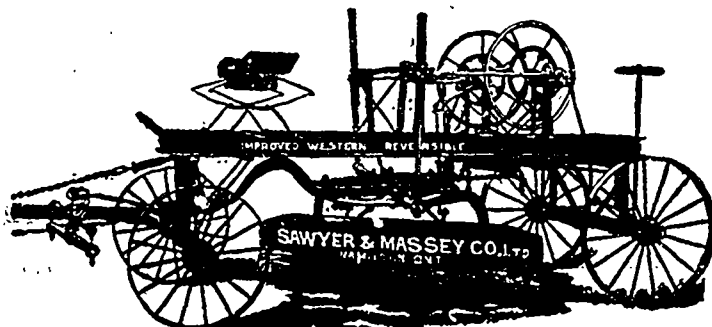
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Table for BRICK prices, including Common Walling, Good Facing, and Pressed Brick.

Table for SAND prices, Per Load of 1 1/2 Cubic Yards.

Table for STONE prices, including Common Rubble, Large flat Rubble, and various sizes of granite and limestone.

Table for OHIO FREESTONE prices, listing various types like Buff Promiscuous, Blue Promiscuous, etc.

Table for CREDIT VALLEY STONE and LONGFORD STONE prices, including Rubble and Ashlar.

Table listing various professional services and materials under categories like Architects, Cement, Drains Pipe, Electrical Engineer, etc.

Table listing various professional services and materials under categories like Interior Decoration, Roofing Materials, Roofers, etc.

Table for Dimension, per cub. ft., listing Kent Free stone Quarries, River John, etc.

Table for SLATE prices, listing Roofing and various types of slate.

Table for PAINTS prices, listing White lead, Red lead, and various colors.

Table for CEMENT, LIME, etc. prices, listing Portland Cements and other materials.

Table for Toronto and Montreal prices for Hydraulic Cements, Plaster, etc.

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