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CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL

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.

NOVEMBER 18, 1897

No. 42.

THE CANADIAN CONTRACT RECORD,

PUBLISHED EVERY THURSDAY

As an Intermediate Edition of the "Canadian Architect and Builder."

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Information solicited from any part of the Dominion regarding contracts open to tender.

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TENDERS FOR ANNUAL SUPPLIES

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on

Tuesday, December 7th, 1897,

for the following supplies for the year ending December 31st, 1898:

Lumber Pit Gravel, screened and unscreened. Sand. Sewer Pipe. Brass and Bronze Castings Brass Work for Services. Coal and Wood. Lead Pipe. Stop Valves. Special Castings. Iron and Steel. Paving Brick.	Hydrants. General Supplies Wire Nails. Cedar Paving Posts. Horse Feed, etc. Cast Iron Pipe Lubricating Oils, etc. Lumber for W. W. Purposes. Rubber Valves, etc. Iron Valve and Stop Cock Boxes. Stone Curb.
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Contents of envelopes containing tenders must be plainly marked on outside.

Specifications may be seen and forms of tender obtained, at the office of the City Engineer, Toronto, on and after the 17th November, 1897.

A marked cheque, payable to the order of the City Treasurer, Toronto, for 5 per cent. of the amount tendered for up to \$1,000, and 2½ per cent. of the amount over that sum, must accompany each and every tender. Otherwise it will be ruled out as informal.

The lowest or any tender not necessarily accepted.
JOHN SHAW (Mayor),
 Chairman Board of Control.
 Toronto, Nov. 9th, 1897.

CONTRACTS OPEN.

RIVERSIDE, N.B.—A water supply is to be provided for the village.

SACKVILLE, N. B.—A site has been chosen for the new school house.

KINGSLEY, N. B.—John Anderson is preparing to erect a new residence.

ROSSLAND, B. C.—The ratepayers will be asked to sanction a loan of \$15,000.

BELLEVILLE, ONT.—A by-law has been carried to issue \$30,000 of debentures.

THREE RIVERS, QUE.—The C. P. R. will, it is said, erect a large hotel here.

TWEED, ONT.—It is rumored that the Rathbun Co. will erect a saw mill here.

PARRSHORO, N. S.—Debentures will be issued to raise \$10,000 for waterworks purposes.

SYDENHAM, ONT.—Joseph Woodruff is rebuilding his grist mill which was recently burned.

COATCOOK, QUE.—The council are discussing the construction of a sewerage system.

ALBERT, N. B.—T. Tingley has purchased three lots and is preparing to build thereon.

MERLIN, ONT.—George Peters and W. Shaw have purchased a site on which to erect a planing mill.

GALT, ONT.—A by-law will be sub-

mitted to the ratepayers to raise \$3,000 for constructing a sewer.

GRENVILLE, QUE.—This town offers a first class location for a pulp mill and electric light plant.

WINCHESTER SPRINGS, ONT.—Subscriptions are being taken to secure the erection of a town hall.

WOODSTOCK, ONT.—The Board of Trade will request the C. P. R. to erect a new station in this town.

NORTH HALEY, QUE.—Mr. Putney will probably rebuild his large boarding house which was burned last week.

PARRY SOUND, ONT.—H. Stewart, of Detroit, was in town this week looking for a suitable location for a shingle mill.

GUELPH, ONT.—New axle works are likely to be started here in the spring, under the management of Mr. T. Pepper.

CANNING, N. S.—It is understood that an Anglican church will be built here in the near future, a site having been offered.

EAST TORONTO, ONT.—It is the intention of the Baptist congregation to erect a new church next spring, to cost \$3,000.

MANSONVILLE, QUE.—Efforts are being made by St. Paul's church congregation to obtain funds with which to build a new church.

GATINEAU POINT, ONT.—The plans of the new waterworks system will shortly be completed. The work will cost about \$8,000.

KEMPTVILLE, ONT.—The corporation invites tenders until Monday, 22nd inst., for the purchase of \$5,000 of debentures. O. Bascom, clerk.

HULL, QUE.—The sewerage system, which is to cost \$53,000, will be constructed by day labor, under the direction of the city engineer.

OKANAGAN, B. C.—A company has been formed to develop the water power at Okanagan Falls. Operations will be commenced next spring.

WESTON, ONT.—The ratepayers are talking of fire protection.—An electric light and power company, with a capital of \$3,000, is being organized.

PORT HOPE, ONT.—The Provincial Board of Health have approved of the plans for the proposed extension of the sewerage system of this town.

WALKERVILLE, ONT.—The town has decided to expend \$8,000 for local improvements, and twenty-year debentures will be issued for that amount.

PORT COLBORNE, ONT.—On December 31st, the ratepayers will vote on a by-law to provide the sum of \$16,000 for the construction of a waterworks system.

VANCOUVER, B. C.—Moore & Henry, architects, of London, have prepared plans for a large storehouse to be erected in this city by the McClary Mfg. Co.

GODERICH, ONT.—F. Smith has decided to rebuild his planing mill.—It is unlikely that the Grand Trunk elevator

To Contractors

Separate tenders addressed to the undersigned will be received through registered post up to noon on

Monday, the 29th of November, 1897

for the supply of:

- 1st. 8 Steel Jail Cages of 4 Cells each and other Steel and Iron Work.
- 2nd. A Hot-Water Heating Plant and all Plumbers', Gas Fitters' and Electric Fitters' Works and Material.
- 3rd. All other Trades, Work and Material required in altering, remodelling and making improvements to the present County Jail Buildings.
- 4th. All Trades, Work and Material required in the erection of a separate Residence for Jailier.

Plans and specifications may be seen on and after Wednesday, the 17th Day of November at the office of Geo. A. Allan, Architect, Dunham Building, Brockville.

A deposit in cash or marked cheque (payable to the order of the Treasurer of the United Counties of Leeds and Grenville) equal to 5 per cent. on the value of the work tendered for, must accompany each and every tender as a guarantee of good faith. Should any party or parties whose tender may be accepted fail to execute the necessary contract and give satisfactory security for the due fulfillment thereof, his or their deposit will be forfeited to the said counties.

Deposits of unsuccessful tenderers will be returned. The lowest or any tender not necessarily accepted.

ROBERT J. JELLY,
 Chairman Building Committee,
 P. O. Box 519, Brockville, Ont.

here, which was recently destroyed by fire, will be rebuilt by the company.

BRUSSELS, ONT.—A by-law to provide for a drainage system and the laying of granolithic walks will be submitted to the ratepayers at the municipal elections.

ORILLIA, ONT.—The plans submitted by Messrs. Bird & Smith for the proposed House of Refuge provides for 150 inmates, and the cost of construction is placed at \$17,000.

NELSON, B. C.—The Kootenay Steam Laundry Co. propose to erect a two-story building, 180x60 feet, with stone basement.—A new church will be built here next spring.

SHERBROOKE, QUE.—The vestry of St. Peter's church have approved of the design for a new building, and the plans have been submitted to the building committee for a full report.

COLLINGWOOD, ONT.—It is rumored that a brick block is to be erected on the Hocking property by a syndicate, composed of Mayor Chamberlain, Messrs. William Williams, Brown Bros. and others.

GRANBY, QUE.—H. & F. Giddings & Co. have purchased the factory buildings which they have occupied for some time. It is said to be their intention to erect a five-story building, 50x100 feet, in the spring.

MANIWAKI, QUE.—The late Dr. Comeau gave \$10,000 towards the erection of a hospital at this place, and Messrs. W. C. Edwards & Co. and others are taking steps to secure the erection of the building at once.

BRANDON, MAN.—The board of directors of the hospital have decided to enlarge the building used for infectious diseases, and to put in a system of fire protection. It is probable a chemical fire engine will be purchased.

AMHERSTBURG, ONT.—J. H. C. Leggatt, town clerk, gives notice that the council intend to build a sewer on Parks street.—The extension of the sewerage system has been approved of by the Provincial Board of Health.

HALIFAX, N. S.—The military authorities have in view the erection of another barracks, to be located in the suburbs of the city and to be built of stone and brick. It is also stated that the Wellington barracks will be extended.

BRANTFORD, ONT.—The Verity Plow Co. state that they will rebuild if the city will give them \$15,000 for the present buildings.—The city council has decided to spend \$3,212 in placing additional hydrants throughout the city.

TRENTON, ONT.—Abbott Bros., rolling mills, Montreal, desire to locate in Ontario, and this town has offered them a bonus of \$60,000. The proposed works will include a large smelting plant, rolling mill, and malleable iron works.

MONCTON, N. B.—New tenders will be invited for the plumbing of the I.C.R. station.—Tenders are invited by D. Pottinger, general manager Intercolonial Railway, until Saturday, the 27th inst., for the supply of timber, lumber, etc.

VERNON, B. C.—A franchise has been granted to the Cascade Water Power and Light Co., composed of Rossland and Spokane capitalists, who will build an electric railway through the lower country and furnish electric light and power.

INGERSOLL, ONT.—Ald. Toul has given notice that at the next meeting of the council he will introduce a by-law to provide for the erection of a town hall, to cost \$12,000. Should the scheme be approved of, plans will be prepared and a by-law submitted to the ratepayers.

GRAND FORKS, B. C.—The Chief Commissioner of Lands and Works has promised to build a bridge across the Kettle river a short distance below this town.—Surveys have been made of the pro-

posed railway from Penticton to Robson, and work will shortly be commenced.

ST. CATHARINES, ONT.—The Hamilton, Grimsby & Beamsville Railway Company have made a proposition to the city to extend the electric railway to this city in lieu of a bonus of \$40,000.—It is said the Dominion government are considering the question of deepening the Welland canal.

ASHBURNHAM, ONT.—A special meeting of the council was held last week to receive Mr. Kennedy's report on the proposed waterworks system for the village. Mr. Kennedy estimated that 2,300 feet of 8-inch and 5,350 feet of 6-inch mains would be required. Another meeting is to be held this week.

CHATHAM, ONT.—A change has been made in the directorate of the Chatham City & Suburban Electric Railway Co., Angus Sinclair succeeding George C. Rankin. The company hope to secure the necessary amendment to their charter for the extension of the road north and south.

KINGSTON, ONT.—The city is considering the paving of a portion of Princess street.—H. P. Smith, architect, is preparing plans for a brick terrace on Alford street for Howland Bros.—Mr. Fairfield is erecting a grist mill at Millhaven.—Mr. Newlands, architect, states that the building of a new drill shed will not be commenced before next spring.

DARTMOUTH, N. S.—It is probable that a New York syndicate will purchase the present electric light plant and make extensive improvements in connection therewith, including the erection of a generating station at Fall river. The proposed improvements will cost in the vicinity of \$100,000. Mr. C. K. Corsaut was recently in town in connection with the project.

WINDSOR, N. S.—The Nova Scotia Midland Railway Co. will construct a railway from this place to the town of Truro, in Colchester county. The contract has been awarded to Mr. W. G. Reid, of Montreal, who will shortly begin the work of getting out ties, culvert timber, and other materials. Large bridges will be required over the St. Croix and Shubenacadie rivers.

QUEBEC, QUE.—D. Ouellet, architect, is preparing plans for a chapel to be built at L'Anse aux Eaux, Gaspé county.—The Young Men's Christian Association have decided to build an annex to their building, corner of Glacis and d'Aiguillon streets, to be 100x25 feet, and with Milton pressed brick front. Messrs. Peachy & Dussault are the architects. The masonry contract has been awarded to Walter Sharpe, and the joinery to A. Cummings.—David Ouellet, architect, is calling for tenders for reparations and finishing of St. Jerome church, at Lake St. John. Same architect has invited tenders for alterations to the Sacristy and St. Edward de Frampton church, Dochester county.

LONDON, ONT.—A. M. McEvoy, county treasurer, will receive tenders until Thursday, December 9th, for the purchase of \$24,000 of consolidated debentures.—A. O. Graydon, city engineer, wants tenders until to-day (Thursday) for constructing a concrete protection wall. He has also invited tenders for an addition to the central fire-hall.—Moore & Henry, architects, of this city, have submitted plans to the McClary Mfg. Co. for a large warehouse to be erected at Vancouver, B. C., at a cost of \$10,000.—At the municipal elections a by-law will likely be voted on to provide funds for the proposed hospital building, the cost of which will probably reach \$75,000. A meeting is to be held to-night to finally decide the question.—Joseph Johnston has been granted a permit for a residence on Talbot street; H. C. McBride, architect.

WINNIPEG, MAN.—The Board of Works has been asked to report to council on the paving of Portage avenue and other streets.—The question of the city constructing a system of waterworks will be submitted to a vote of the ratepayers on the 24th inst.—G. A. Mitchell, of Rat Portage, is preparing plans for a large building to be erected in this city in the spring.—The city engineer has reported respecting the proposed bridge over the Red river that a structure like Maryland or Norwood would cost \$70,000, with a reduction of \$6,000 if the old Main street superstructure were used. The report will be considered by the city council.

HAMILTON, ONT.—It is said that the Hamilton & Toronto Sewer Pipe Company will not rebuild their factory until next spring.—Building permits have been granted as follows: Thomas Allen, two-story brick dwelling on O'Reilly street, cost \$1,400; S. Hill, two brick cottages on Barton street east, cost \$1,000; Stewart McPhie, residence on Wentworth street south; E. Buscombe, jr., residence on Pearl street; T. E. Leather, residence on Bay street.—Stewart McPhie, architect, has taken tenders for the erection of brick stores and dwellings on Barton street east.—Pratt & Watkins have purchased property corner King and John streets, and intend to erect a large dry-goods store thereon in the near future.—A number of improvements are contemplated by the city, including a shelter for wholesale butchers at the market, the removal of the hide and tallow house, and the wiping out of the row of restaurants on the east side. The total cost is placed at \$5,000.

VICTORIA, B. C.—Tenders are invited for the erection of a house for the officer in charge of works at H. M. Naval yard, Esquimalt. Plans at the office of the assistant civil engineer.—The British Columbia Electric Railway Co. want an extension of time for two years for the completion of their works.—Steps are being taken to secure the erection in this city of an Old Ladies' Home.—Some ratepayers are urging upon the city council the desirability of devoting the \$11,000 obtained for providing an official residence for the admiral to the further improvement of the streets, now that the former scheme has been abandoned.—The British Columbia Electric Railway Co. will shortly complete their plans for a transmission plant. The generating station will be located at Goldstream, and will have a capacity of 1,000 horse power, developed by water under a 570 feet head. This power will be transmitted to a sub-station in Victoria.

OTTAWA, ONT.—The construction of a bridge across the canal at Somerset street will probably be undertaken at an early date.—W. D. Morris has purchased the property at the south west corner of Maria and Banks streets, and intends remodeling the buildings in the spring.—The plans for the interprovincial bridge call for a structure to cost about three-quarters of a million dollars. Six arches resting on solid masonry will support the bridge. The abutments on the Hull side will be over half a mile long. Mr. H. J. Beemer states that tenders will be invited from the principal bridge builders in Canada and the United States.—The Ottawa & New York Railway Co. have offered to locate their workshops here if given a bonus of \$100,000. This proposition may be submitted to the ratepayers at the elections in January.—The Department of Railways and Canals has taken over the contract on the Soulanges Canal held by Archie Stewart, of this city, and the work is being carried on under the control of the Government.—John Henderson, city clerk, will receive tenders until the 22nd inst. for supplying one horse waggon and one horse sleigh.

MONTREAL, QUE.—The Canadian Pacific Railway Company will erect a large

depot at Vancouver, B. C., at a cost of \$150,000. Mr. Edward Maxwell, of this city, is the architect. The harbor commissioners have finally accepted the plan of harbor improvements proposed by the Department of Public Works. The Dominion government will undertake the work, which will cost \$3,000,000.—The Road Committee will require an appropriation of \$200,000 to build a large sewer to provide for the draining of St. Denis ward.—The St. Lawrence Anchor Fence Co. is seeking incorporation.—Senator Thibeaudeau, C. H. Armstrong and others, of this city, are seeking incorporation as the Atlas Hotel Company, with a capital of \$50,000, the object being to build hotels on the line of the Atlantic & Superior Railway Company.—The Market Committee have requested the Finance Committee to appropriate the sum of \$50,000 for the extension of Bonsecours market.—The improvements to be made to the Windsor hotel will cost between \$30,000 and \$40,000, and will include a new elevator and refurbishing of the hotel.—Mr. Stewart Howard, C.E., has prepared a plan for the G.T.R. for the abolition of the level crossings by the construction of a viaduct. The total cost of this work is placed at \$1,423,253, which sum does not include the alteration of the track. The cost of a series of arches, iron bridges at the streets, and iron trestle work at the station end would be about \$972,000.—Sketch plans have been prepared by the Grand Trunk Railway Co. of the proposed building to be erected on Victoria square. It will be of stone, and will cost \$250,000.

TORONTO, ONT.—It is said to be the intention of the House of Industry board to erect a wing next spring to increase the accommodation for women.—The City Council on Monday last threw out the recommendation of the Board of Control to accept the tender of the Sprague Company for five elevators for the new city buildings, and new tenders will be invited.—The city are inviting tenders for annual supplies. Tenders close Tuesday, December 7th, as will be seen by advertisement in another column.—A meeting of the Liberal-Conservative Association will be held this week to consider the details in connection with the new club building which is being erected on Victoria street, north of King street, at a cost of \$20,000.—G. A. Stinson, real estate broker, has disposed of property at the corner of St. George street and Lowther avenue. It is the intention of the purchaser to build a residence thereon.—The last section of the water front improvements will probably be commenced next spring, the committee appointed to consider the matter having so decided.—A report of the Children's Aid Society states that the erection of a new building is necessary.—An order-in-council has been passed directing that a water tank of 200,000 gallons capacity be erected at the Central Prison. A 6-inch pipe, to cost \$600, will be laid to an underground reservoir, and a steam pump will be installed at a cost of \$1,600.—The city council has refused to grant the \$90,000 asked for by the School Board for additional accommodation.—Building permits have been granted as follows: William Murray, three pairs of semi-detached 2-story and attic brick residences, 53 to 63 Brunswick ave., cost \$15,000; J. L. Coffee, dwellings 40 and 42 Tyndall ave., cost \$6,000; remodelling of 169 Victoria street for St. Michael's Hospital, cost \$1,200.—A meeting of property owners in the vicinity of St. Lawrence market was held on Tuesday last to discuss the improvement of the market buildings. It was decided that steps should be taken to remodel the market and utilize the city hall as soon as vacated. Several years ago a plan was prepared by Mr. Paull, which was awarded a prize of \$1,000, and some of the speakers advocated the carrying out of this plan. The cost would be about \$80,000.

FIRES.

Property at Brandon, Man., owned by Adams & Reesor, was damaged by fire on Tuesday last. Loss \$2,000, covered by insurance.—A large summer boarding house at North Hatley, Que., owned by Mr. Putney, was burned last week. The loss is covered by an insurance of \$3,000.—The saw mill and electric light plant of J. L. Pollock at Drayton, Ont., was damaged by fire on the 11th inst.—William Bell, of Scarboro township, lost his brick residence by fire.—The planing mill of Wakefield Kellington at Neepawa, N.W. T., was partially destroyed by fire a few days ago. Loss \$1,000, no insurance.—A foundry at Fingal, Ont., owned by Macpherson & Co., was burned last week.

CONTRACTS AWARDED.

KINGSVILLE, ONT.—G. A. Stinson & Co., of Toronto, have purchased \$18,000 of town debentures.

DRESDEN, ONT.—The contract for two furnaces for the Methodist church has been given to the Gurney Tilden Co., of Hamilton.

HAMILTON, ONT.—The St. Lawrence Foundry Co., of Toronto, have been given the contract for the erection of a fountain in Woodland Park.

FORT WILLIAM, ONT.—The Royal Electric Co., of Montreal, have been awarded the contract for the construction of an electric light plant; price \$13,000.

WINNIPEG, MAN.—Tenders for the superstructures of the bridges on Main, Osborne and Salter streets were received as follows: Dominion Bridge Co., Montreal, \$32,120; King Bridge Co., \$31,995.

PEMBROKE, ONT.—The directors of the Pembroke Southern Railway Co., opened tenders last week for the construction of the road from Pembroke to Golden Lake. A committee was appointed to report thereon at the next meeting of council.

GUELPH, ONT.—Robert McDonald has let contracts as follows for a new store and dwelling, 44 x 21 feet, pressed brick, two stories, corner Ontario and Neeve streets. Mason and brick work, Clark & Bernallick; carpentry, John Young; painting and plumbing not let.

QUEBEC, QUE.—A school is being built at Sault Montmorency. Mr. Alph. Laberge is the contractor. The roofing has been awarded to Nap Barbeau.—Octave Lemieux is building a residence, two stories, on Maple avenue. The contractors are: Joinery, C. Emile Morissette; masonry, Emile Cote.

PETERBORO ONT.—The Canadian General Electric Company have awarded contracts as follows for an iron power station and pump house: Masonry and brick work, Mr. Bailey, Toronto; iron and steel work, the Hamilton Bridge Co.; window frames, St. Lawrence Foundry Co., Toronto; galvanized iron work, Douglas Bros., Toronto.

LONDON, ONT.—Tenders were opened by the Sewer Committee last week for the completion of the north section of the sewerage system: from Pall Mall and Richmond streets to Dundas and Egerton streets, for which 8,101 feet of egg-shaped brick work and 3,632 feet of 18 inch tile were required. The bulk tenders were found to be the lowest, and were as follows: A. J. Brown, Toronto, \$39,060; W. F. Grant, Toronto, \$50,375; Oakley & Holmes, Toronto, \$46,231; Clark & Connolly, Toronto, \$46,232; Jas. Pogue, Peterboro, \$52,995; J. H. McKnight, Toronto, \$45,750; Harding & Leathorn, London, \$64,800. The contract was awarded to A. J. Brown, his figure being below the city engineer's estimate. This section will complete the new sewerage system with the exception of the big siphon at the outlet and the flush tanks.

TORONTO, ONT.—The House of Industry board have awarded contracts as

"ASBESTIC"

—The King of Wall Plasters

FIREPROOF, being purely Asbestos, which is incombustible.
NON-CONDUCTOR OF HEAT - NO CRUMBLING OR CRACKING
WEIGHS LESS and is INTRINSICALLY CHEAPER
than any other Plaster.

A few of the principal Buildings PLASTERED WITH ASBESTIC

THE McDONALD BUILDING, Victoria Square, Montreal.

THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION BUILDING, Montreal.

THE ROYAL VICTORIA COLLEGE, Montreal.

THE PROTESTANT INSANE ASYLUM, Verdun, near Montreal.

THE GRAND HOTEL, St. Hyacinthe, Que.

THE NEW CUSTOMS-APPRAISERS STORES, NEW YORK, now building, which will consume 5,000 tons.

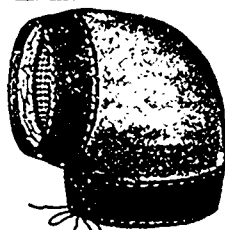
THE PARLIAMENT BUILDINGS, OTTAWA, portion of which was recently destroyed by fire and rebuilt.

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MONTREAL WINNIPEG

follows for the erection of a wing: Brick and stone, Orr Bros., \$1,586; carpenter work, Moir & McColl, \$1,725; slate and felt roofing, R. Rennie & Son, \$145; galvanized iron, A. B. Ormsby; plaster work, John M. Cander, \$179; steam heating, gas and electric wiring, John Ritchie Plumbing & Heating Company, \$345; painting, M. O'Connor, \$253.

MONTREAL, QUE.—Tenders for the construction of sewers were awarded by the city last week as follows. Marsolais & Gosselin, Cadieux street, from De Montigny street to Mount Royal avenue, \$7.15, and rock excavation, \$3.50; Capital street, between Place Royale and St. Francois Xavier street, \$7.45, and \$3.80 for rock excavation. C. Belleheumer, Ernest street from St. Denis ward eastwards, \$5.50, and \$4 for rock; St. Andre street, from Mary Ann street to Mount Royal avenue, as follows. Cross section, 3 x 2, internal diameter, \$3.50 per lineal yard; excavation for cross section, \$3.43, and refilling for cross section, 50 cents.—Building permits have been granted as follows: Building on Rozet street for Jno. Quinlan—W. E. Doran, architect; masonry, Jno. Quinlan; carpentry and bricklaying not let. House on Conway street for Robert Pitts; contractor for all trades, W. Bumbray. House, three tenements, on Delormer street, for John McIlhonn.—A. Prefontaine, architect, has let the contract for a convent at St. Eustache to G. Lanson. A. St. Louis, architect, has accepted tenders as follows for three houses, 127 x 75 feet, on St. Denis street, for Theo. Lessard. Masonry, Theo. Lessard; carpentry, J. Bernard & Son.—J. A. Karch, architect, has accepted tenders for two houses, six tenements, on Sherbrooke street, for A. Geau. The contractors are: Masonry, Mayer & Branchaud; carpentry, E. W. Desparois.

mended for its insulating properties. It is made of ground cork, ground tan-bark, ground peanut shells, or other suitable material of that class, and is mixed with paper waste, alum, or other fire-resisting materials, and molded into bricks. These bricks are dried in kilns before use, and the product is damp and sound proof and, to a large extent, fire proof. The bricks may char, but will not blaze.

Knoch also makes an elastic material, which, it is claimed, is absolutely fire, water and acid proof, and will not crack when used for flooring, walls, etc. It is made by dissolving chloride of magnesium in water at 27° Beaume. One pound of salt is then thoroughly dissolved in about one quart of cold water. To this is added 66 lbs. of burnt powdered magnesium and 4.4 lbs. of finely ground leather waste, and the compound is mixed by hand in a tub. Of this mixture 13 lbs. is mixed with 5 qts. of the chloride of magnesium solution, and the resultant mass is thoroughly kneaded by hand or in a machine until a uniform pulpy mass is obtained.

This mass is then spread over the surface to be covered and kept from running by wooden or sheet iron forms. It is smoothed by a tool and a beautiful surface is formed. The addition of more of the meal, or 6.6 lbs. instead of 4.4 lbs., makes it a still better non-conductor. To further insulate, and to provide an elastic floor, a layer of dry cork meal is placed between two layers of the above mixture. This covering can be used over stone,

brick, or old floors, and can be walked upon 12 hours after laying. It is said to have a surface as hard as stone, but it is elastic as wood. Any pattern may be impressed upon it by forms, and the material may be produced in sheets ready for shipment to any point.

The cost is small, 220 lbs. of the mixture costing \$1.66. For surface work a square yard, 3/8 in. thick, costs 73 1/2 cents; 3/4 in. thick, costs 99 1/2 cents, and 1 1/4 in. thick, costs \$2 per sq. yd.

PILE DRIVING THROUGH STONE.

In a paper recently read before the American Society of Civil Engineers, Prof. W. H. Burr described some experimental pile-driving through new stone-filled crib work. Nineteen piles were driven. The crib was 35 feet deep, and the piles, from 52 feet to 60 feet long, were shod with chilled cast iron points, held on by straps spiked to the pile. The hammer used in the driving weighed 3,500 lbs., and the greatest number of blows was 350. There was no difficulty whatever in driving the piles, and there were no failures. In the discussion following the reading of the paper, several other gentlemen gave particulars of pile-driving through loose rock. The shoe used in the work of the New York department is conical, the angle of the cone being about 60 degrees. The base of the cone is flat, and it is secured to the cone by a pin, cast as part of the shoe and let into the end of the pile. This type of shoe is said to have proved very satisfactory in practice.

WARM COVERING FOR BRICK FLOORS.

An agreeable covering for brick floors has lately been introduced in Germany and is described in consular reports for August last by J. C. Monaghan, United States consul at Chemnitz, Germany. This material is the Knoch cork-stone flooring and is somewhat of the nature of linoleum. It is highly com-

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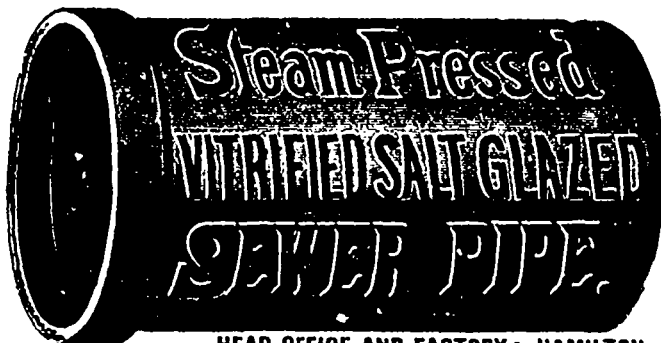
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TO MUNICIPAL OFFICERS.

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.

SHERBROOKE WATERWORKS ARBITRATION.

A decision has been given in the arbitration case between the city of Sherbrooke, Que., and the Gas & Water Company. The arbitrators in the case were Messrs. E. H. Keating, C.E., Toronto; Wm. Kennedy, hydraulic engineer, Montreal; and B. D. McConnell, C.E., Montreal. The Gas & Water Company were represented by Messrs. H. D. Lawrence, C. W. Cate and A. S. Hurd, Q.C., and the city by their attorney, Mr. H. B. Brown, Q.C., and Messrs. J. A. U. Beaudry, C.E., of Montreal, and C. Bailairge, of Quebec. The witnesses examined included Dr. Wyatt Johnston, bacteriologist, Montreal; Robert Arkley, millwright; D. G. Loomis, contractor; S. W. Jenckes, manager for the Jenckes Machine Company; Dr. F. J. Austin, medical health officer; Dr. W. A. Farwell; E. F. Waterhouse, secretary-treasurer of the company; A. Sangster, superintendent, and A. G. Sangster, foreman of the company; R. Davidson, chief of the fire department and officer of the health department; W. S. Dresser, insurance agent, and J. S. Mitchell, hardware merchant, all of Sherbrooke. The award places the value of the system at \$115,907.47, less the unexpired portion of their contract with the city, \$21,807.69, making the net value \$95,069.78. This award seems to be satisfactory to the citizens generally, and to the majority of the council, although the council had offered the company only \$75,000 for their plant.

COST OF STONE ROADWAYS.

In a valuable pamphlet published by the Good Roads Committee of the Canadian Wheelmen's Association, Mr. Archibald Campbell, C.E., says:

The cost of a broken stone roadway cannot be stated, as is commonly supposed, at a definite amount for a lineal foot, square yard, or mile. An estimate, to be of value, must be made entirely in view of the circumstances of each case. The grading and earthwork needed may

be very little, or may be very great. A Telford foundation may be necessary, although rarely used except in the case of a wet sub-soil, or the highest class of work. Little under-drainage may be required; or an elaborate system may be necessary. Outlets for under-drains and surface drains may or may not be easily obtained. The surface metal used may be found in the immediate vicinity, requiring little treatment, or it may be necessary to bring stone a considerable distance by rail or boat. Curbing may not be considered desirable. The management may be efficient, or it may be inexperienced and wasteful. To obtain the cost of gravel and broken stone roads from this or that municipality is apt to be very misleading. Cleveland, Ohio, has broken stone roads costing \$3.65 a square yard; but these roads have Telford foundation ten inches in depth, and are surfaced with trap rock brought from the north shore of Lake Superior. Beverley street, Toronto, an expensive form of broken stone pavement, cost about \$1.00 a square yard. Under favorable circumstances, a light but good form of driveway has been built for 25 cents a square yard; for an ordinary lot of sixty-six feet frontage, with money at 4 1/2 per cent., this would amount to \$2.78 yearly for ten years, under the frontage tax system.

SELF-CLEANSING SEWER PIPE.

A new form of sewer pipe manufactured in England is described by The Surveyor as having been tested, as to its self-cleansing capacity, by the Northern Architectural Association and the Newcastle and Gateshead Water Company. The 2-gallon flush of water for water-closets is well known to be inadequate, and the new pipe (Plummer's patent) was tested in competition with an ordinary circular 6-in. pipe.

The experiments were made for the two forms of pipe drain, which were laid under exactly similar conditions as to gradient, and similar matter was passed into each drain, which was charged 20 times. After the 14th round the ordinary 6-in. pipe was completely blocked up, while Plummer's patent pipe cleared itself throughout all the experiments.

This clearing of the pipe with a comparatively small quantity of water is due to the fact that the flush is concentrated in the narrow channel at the bottom of the pipe. We should think that this

shape is worthy of the attention of our sewer pipe manufacturers.

Drainage referee Hodgins has given judgment in the case of Cosfield South vs. Gosfield North. North Gosfield council entered into a scheme for the improvement of some drains in the township and Gosfield South was charged with a portion of the cost. The latter appealed against the plans and assessment, and the judge allowed the appeal with costs, setting aside the report and assessment.

A portable asphalt plant designed to be available for transportation by railway and capable of operation on contracts in smaller communities, where the amount of work to be done is too small to warrant the erection of a special plant, has been brought out by an inventor of Pittsburg, Pa. The plant is stated to contain all the machinery that a paving contractor requires, save the steam roller and the street tools. There are no sheds or buildings to erect, yet all parts are protected from rain and sun. The plant is carried on two specially constructed cars which are separated in operation to allow of the erection of a central tower between them on tubing standards. Three plants have been built, each of a reported capacity of over 1,500 square yards a day.

House connections with sewers are referred to in a recent report by Mr. Charles R. Cutter, Deputy Superintendent of the sewer division of the street department of Boston, Mass. He complains that while the city aims to build tight sewers that will keep out ground water and thus reduce to a minimum the volume of sewage to be pumped, the average house connection is put in as cheaply as it is possible to make a conduit leading from the house to the sewer. The work is done by a drain layer over whom the city engineers have no control, except in the joining of the sewer and drain. Where everyone is anxious to have the connection made at a minimum cost, there are apt to be many leaky joints, and in consequence Mr. Cutter recommends having the connections laid up to the house by the city's men, charging the owner for the work. He also urges giving his division the right to compel stables, factories and other places liable to discharge detrimental material into the sewers, to put in catch-basins or settling tanks to remove this material from the sewage.

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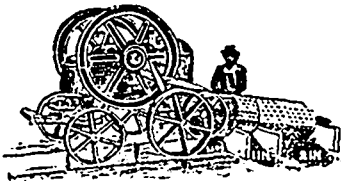
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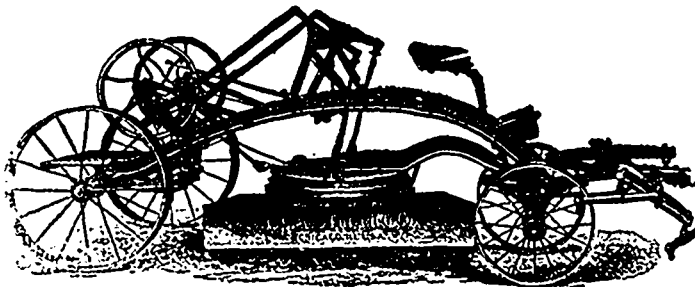
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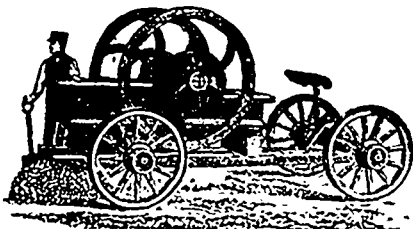
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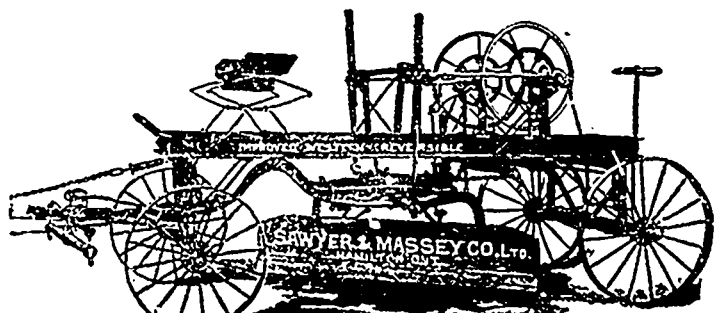
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