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# CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF PUBLIC WORKS AND TENDERS

ADVANCE INFORMATION AND MUNICIPAL PROGRESS

EVERY WEDNESDAY

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. 10.

FEBRUARY 8, 1899

No. 2.

## THE CANADIAN CONTRACT RECORD,

PUBLISHED EVERY WEDNESDAY

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## Notice to Contractors

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

Wednesday, 15th Inst.,

for the construction of the following works:

### ASPHALT PAVEMENT:

On Station Street.

### BRICK PAVEMENTS:

On Crawford Street, Arthur to north end.  
On Orford Avenue, Clara to 19 feet west.  
On Orford Avenue, Parliament to 243 feet east.

### MACADAM ROADWAYS:

On Parliament Street, Queen to Gerrard Streets.  
On Wellesley Street, Parliament to Sumach Streets.  
On Sumach Street, Gerrard to Wellesley Streets.  
On Victor Avenue, Logan to Broadview Avenue.  
On First Avenue, Logan to Broadview Avenue.  
On South Drive, South Drive to Glen Road.

### CONCRETE WALKS:

On Orford Avenue, both sides, Clara to 119 feet west.  
On Orford Avenue, both sides, Parliament to 243 feet east.

Contents of envelopes containing tenders must be plainly marked on the outside.

Plans and specifications may be seen, and forms of tender obtained, at the office of the City Engineer, Toronto, on and after Wednesday, February 8th, 1899.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of 5 per cent. on the value of the work tendered for up to \$1,000, and 2½ per cent. on the value of the work over that amount, must accompany each and every tender, otherwise they will not be entertained.

Tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

Lowest or any tender not necessarily accepted.

JOHN SHAW (Mayor),  
Chairman Board of Control,

City Hall, Toronto, Feb. 2nd, 1899.

WANTED.—Catalogues and prices for materials and appliances used in constructing modern brick store - two flats, mansard deck roof, second flat for public hall. Address, WILLIAMS & VAN LUVEN, Smith's Falls.

## TENDERS FOR SIDEWALKS

Tenders, addressed to the Chairman of the Board of Works, Victoria Building, Brockville Ont. and marked "Tender for Sidewalks," will be received up to 6 o'clock p.m. on Thursday, the 23rd February 1899 for the construction of such GRANULITIC SIDEWALKS as may be ordered by the Corporation of the Town of Brockville during the season of 1899.

Specification and form of contract may be seen, and form of tender obtained, at the office of the Town Engineer Brockville.

A deposit in the form of a marked cheque, payable to the order of the Town Treasurer, for the sum of \$200, must accompany each tender, otherwise they will not be entertained.

The Corporation do not bind themselves to accept the lowest or any tender.

F. G. McCRADY,  
Chairman Board of Works.

Victoria Building, Brockville, 3rd Feb., 1899.

## Tenders for Supplies

Tenders will be received by the undersigned up to 12 o'clock, noon, of TUESDAY, FEBRUARY 15th INST., for the supply of the following materials required by the Board of Works Department of the City of Hamilton for the year 1899:

- (1) LUMBER.
- (2) SPIKES.
- (3) CEDAR POSTS.
- (4) PORTLAND CEMENT.
- (5) 4" STONE CURBING.
- (6) GRAVEL.

According to specifications to be obtained at the office of the Street Commissioner Hamilton.

The lowest or any tender not necessarily accepted.

T. BEASLEY,  
City Clerk.

Hamilton, Feb. 2nd, 1899.



## NOTICE TO CONTRACTORS

### TENDERS FOR SUPPLY OF LAND OR LAKE BOULDER STONE.

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

Wednesday, February 15th, 1899,

for the supply and delivery of 500 toise of stone, in lots of 50 toise, and upwards, at the Frederick Street Yard, in this city.

Contents of envelopes containing tenders must be plainly marked on outside.

Specifications and forms of tender may be obtained at the office of the City Engineer, Toronto, on and after WEDNESDAY, FEBRUARY 8th, 1899.

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, Feb. 4, 1899.



TENDERS FOR

## Office and Vault Fittings FOR NEW CITY BUILDINGS.

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

Wednesday, 15th instant,

for the office and vault fittings required in the various civic departments in the new city buildings, as follows:

1. For carpenters' and joiners' work in connection with the office fittings.

2. For carpenters' work in connection with oak vault fittings.

3. For oil finishing, varnishing and glazing work in connection with the office and vault fittings.

4. For iron floors and staircase for the vault in City Clerk's department.

5. For metallic fittings for the several vaults.

Tenders must be marked on the outside so as to show plainly for which of the above mentioned works they are for.

Plans and specifications and forms of city contract may be seen and forms of tender and all necessary information obtained upon application at the office of E. J. Le nox, Architect, corner of King and Yonge Sts., Toronto.

Tenders must be on forms supplied by the architect, and accompanied by a marked cheque, or cash deposit, equal to 5 per cent. on the amount thereof. Tenders must also bear the bona fide signatures of the party tendering and his sureties, and must comply in every particular with the terms of this advertisement.

Should any party whose tender is accepted fail to give security satisfactory to the City Treasurer for the due fulfilment thereof the deposit accompanying such tender will be forfeited to the city.

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

JOHN SHAW, Mayor,  
Chairman Board of Control.

City Hall Toronto, Feb. 6th, 1899.

## MARKET CONDITIONS.

Belgian cement has advanced to cents per barrel at Montreal, owing to the brisk demand. Fire bricks are also moving freely at from \$19 to \$25 per thousand.

Prices of wrought iron pipe are likely to advance in the new future, as a result of the sharp appreciation in raw materials. While as yet there has been no change in quotations, makers are accepting orders cautiously, and some of them are said to have already withdrawn their prices for delivery.

A large quantity of brick will be required in the construction of the main drainage works for the city of Ottawa. There is an impression that the local brick manufacturers are forming a combine, with a view to advancing the price of brick. It is not yet certain that this is being done, but should it be the case, it will induce contractors to buy in outside places.

## CONTRACTS OPEN

NEWTON, ONT.—Alex. Davidson intends to erect a residence next summer.

COWANSTOWN, ONT.—James Peak and G. Mayning will each build new houses.

SMITH'S FALLS, ONT.—Road improvements are to be undertaken this season.

CARLINGFORD, ONT.—Chas. Garbutt is making preparations to build a brick residence.

SOUTH WALLACE, ONT.—E. Chamney purposes building a new residence next summer.

DONEGAL, ONT.—John Cowan is getting the material on the ground for a new brick residence.

DICKINSON'S LANDING, ONT.—Asaph Dawson is making arrangements to build a residence.

ROCKFIELD, ONT.—F. G. Austen purposes building a palatial residence on his farm near here.

STAYNER, ONT.—The work of laying the water mains here will be commenced at an early date.

CROMARTY, ONT.—John Hogarth intends erecting a residence during the coming summer.

AVONBANK, ONT.—It is probable that Neil Stevenson will build a dwelling house this season.

FREELTON, ONT.—The Methodist congregation are considering the advisability of building a new church.

STRATHROY, ONT.—St. Andrews' Presbyterian church will be renovated and improved, at a cost of \$4,000.

WATERVILLE, N. S.—It is reported that a flour mill will be erected here in the spring by W. W. Pineo.

DUNCANVILLE, ONT.—J. Kincaid, proprietor of the Commercial Hotel, purposes erecting a new hotel building.

FITZROY HARBOR, ONI.—The council has decided to ask for tenders for rebuilding the bridge across the Carp.

OWEN SOUND, ONT.—It is proposed to expend \$4,000 on new cabins, boiler, etc., for the Boyd liner, City of Windsor.

NEW WESTMINSTER, B. C.—G. W. Grant, architect, has prepared plans for the interior fittings of the new market.

ROCKLAND, ONT.—Plans are being prepared for a new Catholic church, brick, to replace the one destroyed by fire recently.

HAWKESBURY, ONT.—The authorities of this town purpose fitting up an old school house for the purpose of a small-pox hospital.

PIPESTONE, MAN.—A meeting of ratepayers will be held shortly to consider the advisability of borrowing \$2,000 with which to build a school.

WOODSTOCK, ONT.—It is rumored that an electric street railway will be constructed in this town next spring, but no definite information is obtainable.

LOGAN, ONT.—Rev. Father Downey intends to replace the church recently burned by a brick edifice, 42 x 82 feet, with basement, chapel, tower and bell.

FERNIE, B. C.—Wm. Blakemore, general manager of the Crow's Nest Pass Coal Company, is prepared to receive tenders for the erection of 200 coke ovens.

FREDERICTON, N. B.—Alterations are to be made to a building on York street owned by Mr. Pitts. Another storey will be added and steam heating apparatus introduced.

GODERICH, ONT.—Major Gray, of the Dominion Public Works Department, is making arrangements for the completion of the harbor works, including the dredging to a depth of 20 feet.

KEMPTVILLE N.S.—Edward Burgess has made an offer to the municipal

authorities to erect a canning factory to cost \$20,000, provided he is granted exemption from taxation.

TRENTON, ONT.—The Trenton Lumber Cutting & Manufacturing Co. propose to commence operations immediately, in order to have their buildings erected and plant installed by the first of June.

BERLIN, ONT.—Adam Sippel has purchased property and is having plans prepared for a ten-roomed brick dwelling to be built thereon. Chas. Adloff has purchased a building site on Alma street.

ST. ANDREWS, N.B.—The provincial government will be asked to repair the wharf here.—Tenders will be asked by the county council for the construction of a sewer from the county jail to half tide.

HALIFAX, N. S.—The city engineer is preparing an estimate of the cost of widening Jacob street. He has also prepared specifications for an electric plant for lighting the streets and public buildings.

CAMPBELLTON, N. B.—Proposals are invited up to Saturday, 25th inst., for the purchase of \$125,000 of town debentures, bearing interest at 4 per cent., payable annually. Address, J. A. Verge, town clerk.

ST. MARY'S, ONT.—The Board of Trade will probably ask the town council to submit a by-law to the ratepayers authorizing the issue of debentures for the construction of waterworks and sewerage systems.

BELLEVILLE, ONT.—Messrs. Mitchell & Abbott, promoters of the proposed rolling mills, will establish the works on the old cricket field. Arrangements are being made to commence erection at an early date.

WIARTON, ONT.—It is probable that a by-law will be submitted to the ratepayers granting a loan of \$25,000 and exemption from taxation to the Owen Sound Beat Sugar Co., to establish a factory here.

MORRISBURG, ONT.—A number of citizens last week interviewed the Dominion government asking permission to obtain water power from the Morrisburg canal, to operate an electric light plant for the town.

SOUTH FINCH, ONT.—A committee has been appointed to call for tenders and arrange for the erection of a new school house in S.S. No. 8. S. Ouder-kirk and J. K. McLean are members of the building committee.

ARNPRIOR, ONT.—There is a strong likelihood of waterworks and sewerage system for this town being constructed during the year. A waterworks commission has been appointed to secure information relative thereto.

ARTHUR, ONT.—Tenders for the erection of a Presbyterian church in this village will be received by William Peterkin up to Thursday, 16th inst. Plans for the same were prepared by Gregg & Gregg, architects, Toronto.

PAISLEY, ONT.—Tenders are invited by Rodenck McLennan up to Wednesday, 15th inst., for erection of brick school house, with stone basement, in S.S. No. 14, Bruce.—Tenders have been taken by D. Shanks for rebuilding store premises.

ROSSLAND, B.C.—H. S. W. Wallace will erect, on Columbia ave., a two-storey structure, 30 x 100 feet, to cost \$7,000.—Work will be commenced immediately on the machine shop to be built by Conliffe & Ablet. The building and plant will cost \$6,000.

LACHUTE, QUE.—The Laurentian Water and Power Co., of this place, is seeking incorporation, to develop water-power and to supply light, heat and power. Mayor Prefontaine and J.L.N. Chevelier, of Montreal, are among the applicants.

NELSON, B. C.—It has not yet been decided whether the new Bank of Montreal building will be constructed of Nelson granite or Calgary sandstone. The structure will be 90 x 30 feet, 2 stories, fireproof, with vaults in the basement and on first floor.

CORNWALL, ONT.—The Cornwall street railway has passed into the hands of the Sun Life Assurance Co. An expert will be engaged to report as to the required changes in the system.—J. Parisien has purchased property on which he will build a residence.

BROCKVILLE, ONT.—The Board of Education is considering the question of building an addition to the Collegiate Institute. A two-storey addition, 40 x 80 feet, with furnace, stairways, etc., is estimated to cost \$12,000, exclusive of heating and equipment.

NIAGARA FALLS, ONT.—The Niagara Falls, Weston Park and Clifton Tramway Company have submitted to the council of Niagara Falls South a proposition to convert the horse car line between Niagara Falls and Niagara Falls South into an electric system.

NANAIMO, B. C.—The town will probably take steps at an early date to establish an isolation hospital. One gentleman has agreed to give \$2,500 towards the project.—Ald. Manson will move in council that offers be invited for preparing plans for a complete system of sewerage for the town.

LINDSAY, ONT.—This town has asked authority from the Dominion government to use the Burleigh Dam or Perry creek with 27 feet head of water, giving some 4,000 horse power.—Tenders are wanted by James Fox up to April 10th for the building of a school house in school section No. 12, Emily.

ORILLIA, ONI.—The by-law to raise \$75,000 to install an electric plant at Ragged Rapids, on the Severn river, was carried by the ratepayers on Monday last. As stated in a previous issue, the contract for the entire plant has been let to the Central Construction Co., of Buffalo, at the price of \$67,000.

TORONTO JUNCTION, ONT.—The council is considering the question of adopting an all-night electric light service. This would necessitate the purchase of additional plant.—The Toronto suburban railway is likely to undergo a change of ownership, and may be extended to Wood-bridge and Cooksville in the spring.

CHATHAM, ONT.—Powell & Carswell, architects, have prepared plans and are asking for tenders for the erection of a Methodist church at McCully's Corners, in Harwich township.—The county council have accepted the plans submitted by Powell & Carswell, architects, for improvements to the jail and court house. Steam heating will be employed.

WINNIPEG, MAN.—The chairman of the Committee on Works wants tenders by February 15th for the supply of from 1,000 to 2,000 cords of cedar paving wood.—The School Board will probably erect a new school in ward 6.—A party of government engineers have gone to Gladstone, to take levels and survey the Big Grass marsh, with a view to its drainage.

STRATFORD, ONT.—The Board of Works have decided to macadamize Downie and Market streets. The engineer will report as to the cost of the work.—L. L. Merryfield, engineer, of Toronto, has been instructed to prepare plans for the reconstruction of the gas works in this city. A new addition will be built, and the condensers and scrubbers replaced by modern apparatus.

HAMILTON, ONI.—The Hamilton, Grimsby and Beamsville Railway Co. have been asked to extend their line to Vineland, five miles from Beamsville. The directors state that if this is done

they will build the road to St. Catharines, which will necessitate the construction of a number of bridges.—A by-law to raise \$22,000 by debentures has been given its second reading by the county council.

**VICTORIA, B. C.**—William W. Northcott, purchasing agent for the corporation, invites tenders up to February 20th for sundry brass goods and fittings, including valves, spindles, nipples, etc. Mr. Northcott also invites competitive plans up to the 13th inst for a new fire hall.—The question of building a high school was considered at the last meeting of the School Board, and although it was looked upon as a necessity, the matter was postponed for the present.

**VANCOUVER, B. C.**—It is understood that a new Roman Catholic church will be built in this city, to cost \$60,000, and to be commenced next summer.—Thos. F. McGuigan, city clerk, desires tenders by Friday, 17th inst., for the purchase of \$100,000 of city debentures.—The Mayor, in his inaugural address, referred to the necessity of extending the sewerage system of the city and of improving the water supply.—The by-law to raise \$100,000 by debentures for the extension of the waterworks system was carried by the ratepayers on the 2nd inst.

**PETERBORO, ONT.**—Th Stanley Piano Co., of Toronto, will remove to this town, and will erect a factory costing \$50,000.—S. R. Armstrong, town clerk, will receive applications up to February 15th for the position of town engineer and superintendent of municipal works.—At a meeting of the county council held last week, the report of the committee on roads and bridges recommended that a committee be appointed to confer with other committees regarding the proposed construction of a bridge across Marsh creek, on the boundary between the townships of Ops and Manvers.

**KINGSTON, ONT.** Power & Son, architects, have been instructed to prepare plans for the restoration of St. George's cathedral, on the old lines, as enlarged and improved by them eight years ago. The same architects are preparing plans for a new opera house to be built in this city.—The question of purchasing a new fire engine is being considered by the city council.—There is a probability of the Oddfellows' Relief Association erecting a building of their own.—T. O. Bolger, city engineer, has submitted to council a report on the paving of Princess street, from King to Bagot street, and Brock street, from King to Wellington street. Asphalt or brick will likely be adopted.—It is the intention of Mr. Tryon to build a row of brick houses on the site of the old National hotel.

**QUEBEC, QUE.**—David Ouellet, architect, has been commissioned to prepare plans for a new wing to be added to the Seminary of Rimouski, and also for the extension of the north wing of the college at Ste. Anne de la Pevatiere.—It is believed that the coming season will be active in regard to building operations. Already plans are being prepared for a number of private residences.—The estimates of expenditure for 1899 have been brought down by the provincial legislature. The appropriations for public works include one of \$75,000 for a new court house at Sherbrooke.—A deputation has requested the Harbor Commissioners to build a pier at the Lower Traverse. Hon. R. R. Dobell states that tenders for the proposed enlargement of the Levis graving dock will be called for within six weeks.

**LONDON, ONT.**—The council will ask the provincial legislature for power to issue debentures for the purpose of putting the market square and approaches in a sanitary condition.—The following building permits have been granted. Mayor Wilson, brick office, corner Talbot and Ful-

larton streets (George Craddock, architect); E. Westland, one and one-half storey frame dwelling on Garfield ave., South London, cost \$800.—The proposal to build a subway beneath the Grand Trunk tracks, to permit of safe access between the north and south parts of the city, has again been revived.—At a meeting of the Hospital Committee held last week, Mr. H. C. McBride, architect for the Victoria Hospital, submitted a statement of expenditures not included in the contracts already let. His estimate calls for between \$8,000 and \$9,000.

**MONTREAL, QUE.**—H. Birks & Sons have purchased the property on Phillips Square, immediately south of their present block at the corner of St. Catharine street. On May 1st they will commence the erection thereon of a four-storey factory.—The proposed enlargement of Bonsecours market was again considered by the Market Committee last week. The Chambre de Commerce favor the expropriation of the property bounded by St. Paul, Le Royer, Bonsecours and Market streets.—Mr. William Whyte, general manager of the western division of the C.P.R., was in the city last week, conferring with the management regarding the permanent improvements to be carried out this year on the road between Fort William and Donald.—L. O. David, city clerk, wants tenders by Monday, 13th inst., for 5,000 feet of fire hose and 50 salvage covers.—The Water Committee will again ask the city council to place at its disposal the sum of \$6,000, with which to purchase a new boiler for the upper level pumping station. The Committee will also ask for \$1,056 for the purchase of water meters.—A representative of the Watson, Ross Milling Co., of Milwaukee, who was recently in the city, stated that the company would next summer build two large elevators in Montreal.—A subcommittee has reported to the Health Committee that the present hospital building is unfit for use, and has recommended that plans be prepared and tenders invited for a new building.—The rumor that a syndicate will erect a large hotel on James street has again been revived. German capitalists are said to be negotiating for the purchase of the St. Lawrence Hall property as a suitable site. It is understood that the proposed plan includes the utilization of the ground floor for business purposes.

**TORONTO, ONT.**—The William Davies Co. have purchased property on Beachell street, and will erect a large building for cooking canned meats.—Mr. Beaumont Jarvis, architect, is preparing plans for a large warehouse and manufactory to be built by the Brown Bros. Co. on the south side of Wellington street, just east of Bay. The structure will be of stone and pressed brick, five stories high, and will cost about \$30,000.—It is learned that the Bank of Toronto has leased the ground floor of the Auditorium, corner Queen and James streets, and will have it fitted up for a branch bank.—The Standard Bank is said to be negotiating for a portion of the Jamieson building, corner Yonge and Queen streets.—The directors of the Toronto Conservatory of Music have had plans prepared for an addition to the present building, to be 65 x 70 feet, and to provide 25 additional rooms; the work will be proceeded with as soon as the necessary funds are obtained.—The tenants occupying the fourth, fifth and sixth flats of the Canada Life Building on King street have received notice to vacate. This would seem to signify that the headquarters of the company are to be removed to Toronto, and that some interior alterations will be made to the building.—At a meeting of the Public School Board held last week, L. Brown gave notice that he would move for the erection of a four-roomed school in the neighborhood of Bolton avenue and

Hamilton street; a 12 roomed school on the Bathurst street site, a new school on Kippendavie avenue, and the furnishing of two rooms in Pape avenue school, will also be asked for.—The city wants tenders by the 15th inst. for the construction of asphalt, brick and macadam pavements, and for the supply of 500 tonse of stone.—Building permits have been granted as follows: George H. Hees & Co., addition to show rooms, 71 Bay street, cost \$3,000; Gold Medal Manufacturing Co., rough-cast factory on Hamburg avenue.—Ald. Denison, C. H. Rust, V. Robin and A. B. Campbell have purchased a 200 foot lot on the Island, and will build four cottages thereon in the spring.—H. Graham & Son, real estate agents, want a vacant lot in the Annex for building purposes.—The city engineer has prepared a plan for the improvement of Spadina avenue. His proposal is to construct a 22 foot boulevard on either side of the track allowance, and to divide the street as follows: In the centre a 16-foot track allowance; east and west of this a 22-foot boulevard; then a 24-foot roadway, probably brick; the balance of the space to be taken up by a 12-foot concrete sidewalk.—The plans for the new bridge over the Don river at Queen street are well under way, and tenders will be invited at an early date.

**OTTAWA, ONT.**—The management of the Booth system of railways are making arrangements for the construction of two steamers, to carry grain from Fort William and Duluth to Parry Sound.—The authorities of the Rideau street convent have decided to enlarge the building by an additional storey, work to be commenced in the spring.—The residents of Bichton are endeavoring to make arrangements with the Metropolitan Electrical Company to light the town by electricity.—The Separate School Committee have ratified the purchase by the French Committee of property at the corner of Church and Cumberland streets, on which to erect the new Lower town school. Tenders for the erection of the building will be invited immediately.—There is some talk of erecting another Catholic church in St. Patrick's parish.—Early in the spring the Ottawa and Gatineau Valley Railway Co. intend to commence work on their approach to the Central depot. The company have not yet reached a decision in regard to the extension of their lines to Maniwaki.—The Public School Board will shortly invite tenders for new clocks required during 1899.—It is reported that a syndicate of Ottawa and Toronto capitalists will establish locomotive works here. The old Perkins foundry and machine shop on Queen street is said to have been leased, the intention being to make a large addition to the room and to install up to date machinery.—The Fire and Light Committee have asked for \$6,000 for the purchase of a new fire engine.—Mr. John Galt, city engineer, has submitted to the Waterworks Committee a report as to the requirements of the waterworks plant. He points out the necessity of building an addition to the pump-house, and of installing additional pumping apparatus, with a capacity of from five to ten million gallons.—The Retail Merchants' Association will petition the city council to build a bridge over the canal at Somerset street.—George A. Wanless, secretary-treasurer of the Metropolitan Electrical Co., invites tenders up to February 21st for the supplying of materials and the construction of works for the development of a water power at Britannia, comprising the excavation of canal, wheel pits, etc., and the construction of dams, coffer-dams, cribwork, flumes, embankments, masonry, concrete work, etc. Plans on view at the office of the company after the 10th inst.—Louis Vallee, engineer of the Public Works Department of Quebec, is inspecting the arrangements for the erection of

the "Alonso Wright" bridge on the Gati-neau, and the Gillies bridge at Des Joachims.—The city will shortly invite tenders for the cutting of a channel in the Rideau river.—Plans have been decided upon for the new central depot. It will be after the design of the Hotel Frontenac, Quebec, of stone, and four stories high.

#### FIRES.

The extensive four-storey factory of the North American Bent Chair Co., at Owen Sound, Ont.; the loss is placed at \$130,000, of which \$50,000 is on the buildings and \$60,000 on plant. The company will likely rebuild immediately.—A number of buildings at Barrie, Ont., were destroyed by fire on the 31st inst. Some of the losers are George Plaxton, Thomas Johnston, J.S. Johnston, J. Oxenham and R. King.—G.T.R. station at Bright, Ont., loss \$2,600.—High School gymnasium at Mitchell, Ont.; planing mill of Matthews Bros. & Company on Dundas street, Toronto, containing valuable machinery; loss on building, owned by Wm. Leak, \$500.—Residence of C. Fugereau at Machanicsville, Que., totally destroyed.—Moore's tobacco store at Vancouver, B.C.; loss \$5,000.—The Florence Hotel at St. Lambert, near Montreal, completely destroyed; loss \$5,000.

#### CONTRACTS AWARDED.

QUEBEC, QUE.—G. E. Tanguay, architect, has let the contract to Walter Sharpe for the erection of a four-storey brick structure in St. Roch's, for the Rock City Tobacco Co. The building will be 120 x 40 ft., fitted with modern improvements, and will cost \$10,000.

HARMONY, ONT.—A. F. Luptin has let the contract for a brick residence, with stone trimmings, to George Weber, of Stratford; H. J. Powell, architect.

VANCOUVER, B. C.—The contractor for the new block to be built at the corner of Hastings and Campbell streets is W. MacDonald; contract price, about \$70,000.

ORMSTOWN, QUE.—The contract to supply the brick for the power house on the Soulanges canal has been let to the Crown Pressed Brick Company, of this place.

COLCHESTER SOUTH, ONT.—Zimmerman & Meston, of this place, have the contract of erecting a residence at Oxley for H. Bell. William Lockwood will do the plastering and brick work.

HALIFAX, N. S.—The Midland Railway Company, of Nova Scotia, has purchased 500,000 tons of steel rails from the Carnegie Steel Company, through their Canadian agent, Charles Cassils.

WINGHAM, ONT.—The county council has accepted tenders as follows for the construction of the Summerhill steel bridge, in the county of Huron: Superstructure, Hunter Bros., of Kincardine; concrete abutments, Frank Gutteridge, of Seaforth. The contract for a small cedar bridge on the boundary of Hullutt and Mr. Killop has been let to Robert Jameson, of Fordwich.

OTTAWA, ONT.—The tender of Peter Thompson has been accepted by the county council for the supply of limestone; price, \$3.45 per ton.—R. & T. Ritchie, of Aylmer, have been given the contract to supply poles for the Metropolitan Electric Company.—The Main Drainage Committee of the City Council opened tenders on Monday last for section 3 of the main drainage works, which included 5,700 cubic yards of rock excavation. The lowest tender was \$107,695, submitted by

Laverdure & Laflamme, of Ottawa. This tender has been recommended for acceptance. The next lowest tender was \$127,000, submitted by Joseph Bourque, of Hull. The city engineer's tender was \$147,000.

TORONTO, ONT.—The Board of Control last week awarded paving contracts as follows: Asphalt pavement on James street, Queen to Albert, Warren Scharffe Co., \$5,336.48. Asphalt pavement, Classic avenue, Spadina to Huron, Constructing and Paving Co., \$3,095. Cedar block pavement, Maple Grove avenue, Brock to O'Hara, Dominion Paving and Constructing Co., \$637. Cedar block pavement, Russell street, St. George to Spadina, Dominion Paving and Constructing Co., \$997. Brick pavement, Borden street, College to Uister, J. McBean, \$7,344. Brick pavement, Cameron street, Queen to Cameron place, Constructing and Paving Co., \$2,666. Brick pavement, Brookfield street, Queen to Humbert, J. F. Connolly, \$3,787. Macadam roadway, Elgin avenue, Bedford road to Avenue road, J. H. McKnight, \$2,898. Brick sidewalk, Richmond street, Victoria to Yonge, Constructing and Paving Co., \$1.18 per foot. Concrete sidewalk, Sherbourne street, Wilton avenue to Gerrard, Gardiner & Co., 67 cents per foot. Concrete sidewalk, Adelaide street, Yonge street to Freehold Loan building, Gardiner & Co., \$1.45 per foot. Concrete sidewalk, Homewood avenue, Carlton to Wellesley, Gardiner & Co., \$1.05 per foot. The Metallic Roofing Co., Toronto, have been awarded the contract for the supply of the whole of the steel ceilings required for the Mansion House Buildings in course of erection for Messrs. J. D. Cartwright & Co., at Cape Town, South Africa.

#### HURRY IN BUILDING.

Haste is one of the drawbacks to good construction, and the results of hurry manifest themselves in nearly every department of building. The cracking of plaster cannot be blamed entirely to the shrink-

age of or settlement of the foundations, for a certain part of cracking in all lime mortar is due solely to haste in preparing the material. Lime mortar hardens by a species of absorption and a drying process quite distinct from the action of hydraulic cement. In order that the drying shall be uniform throughout the mass of lime mortar, it is essential not only that the lime be slaked for a long period before it is mixed with the sand, but also that the mortar should be mixed a considerable time before it is to be used, and that it be thoroughly manipulated, so that the particles of lime are evenly distributed and the mixture perfectly homogeneous. This is on the assumption that the lime is good to start with, which is not always the case. Plasterers pay little attention to preparing mortar; this is usually left to the cheapest kind of labour, and if anyone watches the average mechanic mixing mortar it is evident that such a thing as a careful proportioning of materials receives very little thought. We often find mortar which has stood for generations and is thoroughly hard comparing very favourably with cement, but this is in the old buildings, and is a result of care which was at times expended upon such work. It was formerly the custom to not only mix the mortar and sand together in the bed, but also to work it over carefully on a stone slab, thoroughly kneading it and mixing it before applying to the wall, securing thereby a perfect uniformity of composition which would ensure a gradual drying of the plastering.—Illustrated Carpenter and Builder.

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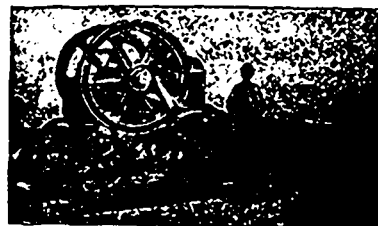
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### TO MUNICIPAL OFFICERS.

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.

### PURE WATER.

We have recently given various indications of the practical way in which German engineers look at things municipal, and we now give the results of their investigations relating to pure water. Of course, there is nothing new in stating that "pure water" is unwholesome; but the ordinary public must be made acquainted with the fact that "pure" drinking water is not "pure" in the chemical sense. Hence we pointedly direct attention to the following remarks from the *Kölnische Zeitung*:

That chemically pure water tastes insipid and nasty is a well-known fact, but few understand that its effect is actually injurious. Even the so-called "distilled water" of commerce destroys single-celled organisms, and in consequence of poverty in suspended matter it absorbs the salts from the tissues and cell partitions, causing inflammation, whereby the ability of the same to retain the soluble stuffs necessary to support life is lost. Water in a distilled form acts, therefore, as a protoplasmic poison. In the stomach it causes inflammation and consequent straining of the outer tissues, whereby these die, and consequently fall off. Besides nausea, this may give rise to vomiting until a pronounced symptom of the inflammation is indicated, although this does not necessarily exclude the possibility of beneficial results ultimately accruing from such process of local poisoning, since place may thereby be made for the formation of new and more vigorous tissue. It may be taken in general as proven, however, that the frequent rinsing of the stomach with distilled water is injurious, and for such purpose preference is now given to the so-called "physiological solution of common salt," or, as an alternative, water from a salt spring. Distilled water is, however, far from being chemically pure in the strict sense of the term, and by testing its electrical conductivity the actual degree of impurity may be precisely determined. According to the researches of Kohlrausch and Heydweiller,

absolutely pure water possesses a conductivity mathematically computed at 0.038 (relative figures are concerned here), while that of the purest water which science has hitherto succeeded in obtaining amounts to 0.0425. Such water can, however, only be produced with infinite care, and is then by no means preservable, mere contact with the air polluting it. Koeppe of Gieszen found well-preserved distilled water of commerce to possess a conductivity of 492; which figure may, indeed, be reduced by repeated distillation to about 10.0, and further through the medium of repeated freezings to 5.0. But such water only plays a role in the laboratory of the researcher; in practice it has no importance. The fact, however, that even the ordinary distilled water of commerce is undoubtedly attended with injurious effects led Koeppe to investigations as to whether waters existed in nature and found employment which by reason of their great purity were dangerous to health, and, indeed, the question must be answered in the affirmative. Nature produces by the process of freezing immense volumes of water which considerably excel in purity the distilled water of commerce. As Koeppe communicated through the medium of the *D. Med. Wochenschr.*, he obtained by the simple melting of natural ice, which had been supplied to him for the household refrigerator, water possessing the low conductivity of 8.0—thus a water not only exceeding in purity that obtained at the chemist, but even that of water prepared at much trouble in the laboratory by distillation. This unexpected result may be attributed solely to the slowness of natural freezing compared with the quick process pertaining where artificial production of ice is concerned; for artificially prepared ice which Koeppe tested for the sake of comparison yielded water possessing a conductivity of 137.0, whilst the values relative to samples of water taken from three Gieszen springs varied from 344.0 to 701.0. The results obtained in the case of the ice water also threw a new light upon the experiences common to mountain expeditions relative to the drinking of snow or glacier water, or of water taken from the clear mountain brooks, against which practice all guides make it their custom to caution the unsuspecting tourists. Hitherto one has, indeed, scarcely thought the danger of such a drink could consist principally in its purity. But this conjecture gains in

probability if we compare the data relating to known investigations of such water. For instance, Waltenhofen tested the Gasteimer Ache and found its electrical conductivity to be 31.8; likewise that of a Gasteimer spring, which for ages past has been denominated "Poison Spring," and whose conductivity was determined at 31.9, both of which values fall considerably short of that of distilled water. The water of the so-called "Poison Spring" is, as a matter of fact, generally despised and regarded as harmful, although no chemical analysis has proved the presence therein of any one of the known poisons. Naturally Koeppe's investigations also suggest caution with regard to medical prescriptions of ice-pills, etc., the frequent injurious effect of which was formerly attributed to the fissure-fungus (*Spaltpilzgehalt*) common to natural ice. This exists, however, only on the surface, and if artificially-produced ice has already been given preference in many instances for ice draughts, the justification lies in all probability, not in greater, but just in its lesser purity, which gives it a closer resemblance to ordinary good drinking water. Just as with distilled water, so would the insipid taste betray too pure ice were it not depreciated through the coldness.—*Contract Journal*.

### LEGAL DECISIONS AFFECTING MUNICIPALITIES.

Judgment by Mr. Justice Robertson in the High Court of Justice, Toronto, in the case of *Caldwell vs. the Town of Galt*, on motion to quash By-law No. 618 of the Town of Galt, which provided for the issue of debentures to the amount of \$10,000 and for levying the necessary rates for payment thereof. Held, that the municipality should be held to the strict requirements of the law, and they had not proceeded regularly by first exercising the power of expropriation by law, and then placing themselves in a position to expend the amount proposed to be raised by the issue of debentures. Order made quashing by-law with costs.

A paper entitled "Sand Filtration of Public Water Supplies" was presented by Mr. R. S. Lea before the *Canadian Society of Civil Engineers*, Montreal, on Thursday, January 19th. Mr. Lea gave numerous illustrations and diagrams, and treated the subject at great length.

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Hemlock scantling and joist up to 20 ft.....	12 00	13 00	14 00
edar for paving, per cord...	5 00		5 00
C dar for kerbing, 4 x 24, per M.....	14 00		14 00
Scantling and joist, up to 16 ft	14 00		14 00
" " " " 18 ft	15 00		16 00
" " " " 20 ft	16 00		16 00
Scantling and joist, up to 22 ft	17 00		17 00
" " " " 24 ft	19 00		19 00
" " " " 26 ft	20 00		21 00
" " " " 28 ft	22 00		23 00
" " " " 30 ft	24 00		25 00
" " " " 32 ft	27 00		27 00
" " " " 34 ft	29 50		29 50
" " " " 36 ft	31 00		31 00
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1 1/2 " " undressed, B M.	18 00	19 00	18 00	19 00
1 " " dressed.....	18 00	20 00	18 00	22 00
1 " " undressed.....	12 00	15 00	12 00	15 00
Beaded sheeting, dressed.....	20 00	35 00	22 00	35 00
Clapboarding, dressed.....		14 00	8 00	12 00
XXX sawn shingles, per M				
16 in.....	2 40	2 35		3 00
XX sawn shingles.....	2 60	1 50		
sawn lat, No. 1.....	1 75	2 00	2 50	2 60
Cedar.....		2 90		2 90
Red oak.....	30 00	40 00	30 00	40 00
White.....	37 00	45 00	35 00	55 00
Basswood, No. 1 and 2.....	28 00	30 00	18 00	20 00
Cherry, No. 1 and 2.....	70 00	90 00	70 00	80 00
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Southampton Mfg. Co. II

Granite.

Brunet, Jos. v  
Brodie, James. v

Heating.

Boston Blower Co. III  
Dominion Radiator Mfg. Co. iii  
Gurney, Tilden Co. iv  
Ormsby & Co., A. B. I  
Wallberg, E. A. III

Interior Decoration.

Elliott & Son Company vi

Lime.

Currie & Co., W&F.P. x  
Ontario Lime Association. III

Luxfer Prisms.

Luxfer Prism Co. v

Legal.

Denton, Dods & Macdonnell. III  
Quinn & Morrison. III

Mantles, Grates, and Tiles.

Chat. Rogers & Sons Co. vi  
Holbrook & Mollington i  
Mosaic Marble & Enamel Co. viii  
Rice Lewis & Son. IV

Mail Chutes.

The Cutler Mfg. Co. I

Mortar Colors and Shingle Stains.

Cabot, Samuel. IV  
Muirhead, Andrew. ....

Ornamental Iron Work.

Dennis Wire & Iron Co. vi  
Malleable Iron Co. v  
Toronto Fence & Ornamental Iron Works. vi

Painters.

Montreal Directory... ix  
Toronto Directory... ix

Plasterers.

Hynes, W. J. ix

Paints and Varnishes.

Muirhead, Andrew. i

Parquet Floors.

Elliott & Son Company vi

Plate Glass.

Lyon, N. T. i  
The Consolidated Plate Glass Co. ii

Plumbers.

Montreal Directory... ix  
Toronto Directory... ix

Refectors.

Frink, I. P. ii

Recoverable Windows.

Duval & Co., E. ix

Roofers.

Campbell & Gilday... ix  
Duthie & Sons, G... ix  
Forbes, D... ix  
Nicholson & Co., D... ix  
Ormsby & Co., A. B... ix  
Rennie & Son, Robt... ix  
Stewart & Co., W. T... ix  
Williams & Co., H... ix

Roofing Materials.

Ormsby & Co., A. B... ix  
Metallic Roofing Co... viii

Sanitary Appliances.

Garth & Co. vi  
Toronto Steel Clad Bath & Metal Co... viii  
The James Robertson Co... ix  
The James Morrison Brass Mfg Co... vi

Stained and Decorative Glass.

Horwood & Sons, H. Lyon, N. T. ....  
Leonard, B. ....  
Mackey Stained Glass Co. ....  
McKenzie's Stained Glass Works. ....  
Reardon's Art Glass Works. ....  
The Robert McCausland Stained Glass Co. ....  
Wood & Co. ....

Shingles and Siding.

Metallic Roofing Co. vi  
Ormsby & Co., A. B. i  
Toronto Foundry Co. ix

Typewriters.

Archib'd, Chas. E. III

Ventilators.

Boston Blower Co. III  
Wallberg, E. A. ....

Wall Plaster.

Albert Mfg. Co. ....

Wire Lathing.

The B. Greening Wire Company. ....

Toronto. Montreal.

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like Ontario, Keene's Coarse "Whites", Fire Bricks, Lime, Plaster, Hair, etc.

HARDWARE.

The following are the quotations to builders for material at Toronto and Montreal:  
Cut nails, 50d & 60d, per keg 1 83  
Steel " " " " 1 97

CUT NAILS, FENCE AND CUT SPIKES.

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like 40d, hot cut, per 100 lbs, 10 to 12d, hot cut, 8d, 9d, 6d, 7d, 4d to 5d, 3d, etc.

Iron Pipe:

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like Iron pipe, 1/2 inch, per foot, 3/4 inch, 1 inch, 1 1/2 inch, 2 inch, etc.

Lead Pipe:

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like Lead pipe, per lb., Waste pipe, per lb., etc.

Galvanized Iron:

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like Adam's-Mar's Best and Queen's Head, 16 to 24 gauge, 26 gauge, 28 gauge, Gordon Crown, etc.

Structural Iron:

Table with 4 columns: Description, Price in Toronto, Price in Montreal, and another Montreal price. Includes items like Steel Beam, per 100 lbs, channels, angles, tees, plates, Sheared steel bridge plate, etc.