

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Continuous pagination/
Pagination continue
- Includes index(es)/
Comprend un (des) index
- Title on header taken from:/
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
- Caption of issue/
Titre de départ de la livraison
- Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF

PUBLIC WORKS • 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. 9.

APRIL 6, 1898

No. 10.

THE CANADIAN CONTRACT RECORD.

PUBLISHED EVERY WEDNESDAY

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

Subscription price of "Canadian Architect and Builder" (including "Canadian Contract Record"), \$2 per annum, payable in advance.

C. H. MORTIMER, Publisher,
CONFEDERATION LIFE BUILDING, TORONTO.
Telephone 2362.

New York Life Insurance Building, Montreal.
Bell Telephone 2399.

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

Advertising Rates on application.

TO CONTRACTORS

Tenders will be received by the undersigned up to WEDNESDAY, APRIL 6TH, at 1 p. m., for the several trades required in

REMODELLING A RESIDENCE

into a pair of semi-detached houses, also for erecting a new

PAIR OF SEMI-DETACHED HOUSES

on Bloor Street West for J. F. Eby, Esq.
Plans and specifications may be seen and all other information obtained at the offices of the Architect

GEO. W. GOVINLOCK, Architect,
714 Temple Building, Toronto.

The lowest of any tender not necessarily accepted.

TENDERS

FOR THE ERECTION OF A

Cottage at the Gravenhurst Sanitarium

Will be received by the undersigned until

Monday, 11th April, 1898.

Plans and specifications may be seen on application to Mr. Campbell, at the Sanitarium, or at the Architect's office.

The lowest of any tender will not necessarily be accepted.

D. B. DICK, Architect,
17 Toronto Street, Toronto.

WATERWORKS

FORT WILLIAM, ONT.

Sealed Tenders, addressed to the Secretary, will be received by the Board of Water and Light Commissioners up to 8 p. m. on

Friday, 15th April, 1898.

Lump tender wanted, covering all material and labor for Power House, Pumping Machinery, Seven Miles of Mains, Elevated Storage Tank, Etc.

Full particulars can be had and plans and specifications seen at Fort William and at the head office of the Consulting Chief Engineer, John Galt, Esq., C.E. and M.E., Canada Life Building, Toronto.

Marked bank cheque, payable to Board of Water and Light Commissioners, for 6 per cent. of tender, must accompany bid.

The lowest of any tender not necessarily accepted.

T. ED. OAKLEY,
Secretary-Treasurer.

WANTED - Competent Draughtsman

Apply to S. G. CURRY, Architect, 50 Yonge Street, Toronto.

SEALED TENDERS

Addressed to the Architect, will be received up to 5 o'clock p.m. on THURSDAY, APRIL 7TH, for the erection of

An Additional Storey to a Building in Simcoe Street.

The plans and specifications may be seen at the office of the Architect.

The lowest or any tender not necessarily accepted.

F. S. BAKER, Architect,
50 Yonge Street, Toronto.

Tenders Wanted

Separate tenders will be received at the offices of the Verney Plough Company, Limited, Brantford, up to APRIL 6TH, from all trades, for the erection of SEVERAL LARGE FACTORY BUILDINGS for the above company.

The party whose tender is accepted will be required to furnish proper security for the completion of the work.

The lowest or any tender not necessarily accepted. Plans and specifications may be seen at the offices of the Company and G. O. M. MILLER & CO., Architects, 19 King Street East, Toronto.

TENDERS WANTED

Tenders addressed to the undersigned (and marked "Tender for Church Work") will be received up to noon of

WEDNESDAY, APRIL 13TH,

for the Mason and Plaster, Carpenter and Joiner, Plumbing, Metal Work, Heating, and Painting and Glazing trades required in the enlargement of the First Methodist Church and School Buildings, in the Town of Picton, Ont.

Plans and specifications may be seen at the offices of the Secretary, Picton, and Power & Son, Architects, Kingston.

The lowest or any tender not necessarily accepted.

W. H. WILLIAMSON,
Secretary Building Committee,
Picton, Ont.

RAT PORTAGE WATERWORKS

Notice to Contractors

Sealed tenders, addressed to the undersigned, and endorsed "Tenders for Waterworks," will be received up to 6 o'clock, p.m., APRIL 20TH, 1898, for the different works and supplying of material in connection with the construction of a system of Waterworks in the town of Rat Portage.

Plans and specifications may be seen and specifications procured at the office of the Board of Waterworks Commissioners.

Each tender must be accompanied by a certified cheque, payable at par at the Imperial Bank, Rat Portage, to the order of the Waterworks Commissioners, to the amount of five per cent. of the approximate cost of the work, otherwise the tender will be rejected as informal.

RICHARD HALL,
Chairman Board of Waterworks Commissioners.
Rat Portage, March 30th, 1898.

CONTRACTS OPEN.

ATLMER, ONT. - A large number of new dwellings will be erected here this season.

FRANCONIA, ONT. - W. Allen is laying the foundation of a \$3,000 brick residence.

HAMPTON, N. B. - A new Methodist parsonage will be built here this summer.

PARRSBORO, N. S. - A new fire engine house will be erected by the town; cost \$4,000.

ATHENS, ONT. - The Methodist congregation contemplate erecting a new church.

VALLEYFIELD, QUE. - The Montreal Cotton Co. has commenced the erection of a new mill.

MANIWAKI, QUE. - An electric light plant will likely be installed for public and private lighting.

GEORGETOWN, ONT. - The School Board will probably put in new furnaces in school building.

WELLAND, ONT. - The Schwoppe school house, one mile south of this place, will be replaced by a new structure.

BELLEVILLE, ONT. - The question of purchasing a steam road roller is again being considered by the Council.

WALLACEBURG, ONT. - The paving of a number of streets with cedar block, brick or granolithic is being urged.

BUCTOUCHE, N. B. - A draw is to be put in at the Moncton and Buctouche railway bridge at this place, cost \$3,000.

SALEM, N. S. - There is a scheme on foot to secure a water supply from Yarmouth, at an estimated cost of \$1,900.

PORT ARTHUR, ONT. - The Port Arthur and Western Railway Co. purpose building a branch road to Kakabeka Falls.

DRESDEN, ONT. - A meeting will be held this week for the purpose of forming a joint stock company to build an elevator.

BOBCAYGON, ONT. - J. L. Read purposes building a commodious dwelling. George Hamilton will also erect a residence.

GUELPH, ONT. - The council is securing information regarding road machinery, with a view to purchasing a roller and crusher.

WINDSOR, N. S. - The Methodist congregation purpose building a new church. - Chappell Bros. will build a sash and door factory.

NELSON, B. C. - The South Kootenay Board of Trade urges that public buildings be erected here in accordance with the importance of the town.

TORONTO JUNCTION, ONT. - The Town Clerk has been instructed to invite tenders for materials required in the construction of sewer and water connections.

LYNDEN, ONT. - George Blain will probably erect a new dwelling house. - S. Doherty has purchased the Vansickle property and will improve the buildings.

MIMICO, ONT. - Mr. Fetherstonhaugh, of Toronto, is having a brick residence erected at the foot of Church street, 60 x

36 feet, with large conservatories, estimated cost, \$10,000.

PETERBORO, ONT. At the last council meeting, it was decided to invite tenders for concrete sidewalks on one or three blocks, the town engineer to prepare specifications.

MORLEN, MAN. Improvements will be made this year to the general hospital, including the erection of a wing and the changing of the heating system from hot air to hot water.

LENNOXVILLE, QUE.—The construction of a waterworks system will likely be undertaken at an early date. S. Thompson & Co., of Sherbrooke, are negotiating for the franchise.

STRATFORD, ONT.—Experts will report as to the advisability of using the old walls of the city hall. Should the walls be considered unsafe, an entirely new building will be erected.

GODERICH, ONT.—Mr G W Yarker, of Toronto, on behalf of American capitalists, has offered to build a new grain elevator at Goderich, taking stock of the company as part payment.

ST. THOMAS, ONT.—At the last council meeting the advisability of establishing a municipal lighting plant was discussed, but no action was taken. The present contract expires in October, 1899.

MONCTON, N. B.—Buildings will be erected this year by the following: Peter McSweeney, Dr. E. O. Steeves, L. W. McAnn, Sumner Co., Percy Crandell, F. P. Reid & Co., and L. Higgins & Co.

GALT, ONT.—The Imperial Hotel Co. have applied to the government for permission to build on the Robinson homestead.—The C. Turnbull Co. will build a new mill on the old McKay factory site.

BRODHAGEN, ONT.—F. Jacob, clerk, township of Logan, has been instructed to prepare a by-law to provide for the construction of the Nicholson drain, and for the issue of debentures for raising the necessary funds.

BRANTFORD, ONT.—The City Council have decided to dispense with gas for lighting purposes, and will invite tenders for lighting by electricity, also for installing an electric light plant to be controlled by the city.

SHERBROOKE, QUE.—Clift & Pope, architects, of Montreal, have prepared plans for the new St. Peter's church to be built here.—Work on the new building for St. Charles College, estimated to cost over \$50,000, was commenced last week.

ASHBURNHAM, ONT.—The village of Ashburnham is arranging for the construction of a system of waterworks. The water will be supplied by the Peterboro' Water Company, and connection will be made by crossing under the Otonabee river, at the foot of Elizabeth street.

HINTONBURG, ONT.—Mr. Birch intends building a brick residence, with mansard roof, corner Tenth avenue and Richmond road.—The Board of Health has recommended that the ratepayers endorse the combined waterworks and sewerage scheme as proposed by E. J. Rainboth.

PERTH, ONT.—The following works will be carried out this season: Improvements to St. Andrew's church, cost \$9,000; residences for Robert Stewart, William Anderson, David Lowe, William A. Keays, Stephen Bennett and James Noonan, new cheese factory in outskirts of town.

RAT PORTAGE, ONT.—In this issue tenders are invited for the construction of a waterworks system for this town. The engineer is J. Chalmers.—The Mayor has announced that within the next few days tenders for a three storey brick post office building here will be invited by the Dominion government.

ST. JOHN, N. B.—Representatives of the city council have been assured by the

C. P. R. authorities that the erection of a 75,000 bushel grain elevator will be commenced at once, estimated cost \$150,000.

A. I. Trueman, chairman Board of School Trustees, will receive offers up to April 18th for the purchase of \$35,000 of debentures.

FREDERICTON, N. B.—The Agricultural Society will ask the provincial government for a grant of \$2,000 towards the erection of a permanent exhibition building.—The Water Committee of the City Council have recommended the enlargement of the boiler house at the pumping station and the purchase of another boiler.

ST. CATHARINES, ONT.—To the members of the Board of Works Mr. H. C. Symmes recently stated that he had reached an agreement with Mr. C. A. Tilden, who represents Mr. George Dawson's interests in the old Port Dalhousie street railway charter, whereby the two would construct an electric railway to Port Dalhousie.

WINDSOR, ONT.—The Board of Works is considering the purchase of a stone crusher and steam road roller.—William Newman, C. E., of this town, has prepared plans for the cleaning out of the Ruscombe river by dredging. The cost of the work is given as \$33,088, made up as follows: Dredging, \$28,031; four steel bridges, \$5,057.

ARNPRIOR, ONT.—The question of extending the waterworks and sewerage systems is under consideration. A proposition looking to that end has been made by James Fowler, on behalf of local capitalists. Mr. Willis Chipman, C. E., of Toronto, is consulting engineer for the town.—S. R. Rudd is making preparations to build two dwelling houses.

COLLINGWOOD, ONT.—Mr. A. W. Campbell, Provincial Road Instructor, will visit this town on the 15th inst. to discuss the question of street improvements with the Board of Works.—W. Whipples, chief engineer of the steamer "City of Midland," has purchased property on which he will erect a brick dwelling house this summer.

KINGSTON, ONT.—The Electrical Construction Co., of London, Ont., are in need of increased accommodation, and an effort is being made to have the company establish its works in this city.—T. O. Bolger, city engineer, wants tenders by April 7th for 200,000 feet of 2½-inch plank; 40,000 feet lineal 5x4 cedar sleepers for walks; hardware, smithwork, etc.

HULL, QUE.—The ratepayers approved of the by-law granting a bonus to the Toronto Rubber Co. for the establishment of a factory here. The buildings proposed to be erected by the company are as follows: One four stories high, brick, 60x200 feet; warehouse, 50x150 feet; power house, 60x60 feet. Work is likely to be commenced at once.

SUSSEX, N. B.—D. P. Kent intends erecting a fine residence.—The Exhibition Building Committee have not yet selected plans for the proposed building.—Fred W. Stockton will shortly commence the erection of a new building.—The wardens of Trinity church are negotiating for the purchase of a site on which to erect a Sunday School building.—Frost & Wood contemplate enlarging their premises.

WOODSTOCK, ONT. It is hoped to take steps at an early date to erect a Y. M. C. A. building. The selection of a site has already received some attention.—It is probable that steps will have to be taken to increase the water supply or curtail the quantity used. Three propositions are being considered. First, building a basin near the pump-house to store the surplus water; second, to put meters on the supply pipes of all consumers; third, to procure an increased supply from the spring south of the town.

LONDON, ONT.—Bidding permits have been granted as follows: R. Southam, extension to printing office, Dr. Thompson, residence, corner Oxford and Richmond streets, cost \$3,000; John Sussex, brick warehouse on Talbot street, three stories, 20x50 feet; J. B. Henry, brick cottage on Maitland street, between Piccadilly and Oxford streets, cost \$1,000.—The City Council is considering the question of installing a municipal lighting plant.—The City Engineer has presented to the Board of Works an estimate of the cost of building a permanent breakwater around the village of West London. The total length of the breakwater is given as 7,700 feet, and the cost of construction \$192,500. It is improbable that the work will be proceeded with.

CALGARY, N. W. T.—Thomas McCaffrey, Winnipeg manager of the Union Bank, is here making arrangements for the erection of a suitable bank building.—J. S. Dennis, Department of Public Works, Regina, will receive tenders until the 15th inst. for the construction or repair of the following bridges: Bridge over Cascade river on road from Banff to Anthracite; bridge over creek at foot of Stony Hill on road from Canmore to Anthracite; bridge over Stony creek on road from Canmore to Anthracite; bridge over South Fork Fish creek, between Sections 3 and 4, Township 22; piers, abutments and approaches for steel bridge over High river at Thompson's crossing; bridge over channel at Elbow river, between Sections 4 and 5, Township 24; repairing bridge over Elbow river, between Sections 4 and 5, Township 24, Range 2, west of 5th meridian. Plans and specifications at office of J. A. McMillan, this town.

VICTORIA, B. C.—The provincial estimates were last week laid before the legislature. For public works \$620,000 is asked, the chief items being as follows: New wing for the hospital for the insane, \$44,000; new court house, Rossland, \$6,000; addition to Nelson court house, \$4,000; court house and jail at Quesnel, \$2,000; lockups at Cascade, Enderby, Penticon, Fairview, Wardner, Coal Creek, Revelstoke, Goat River, Ymir, Hinceville; recorder's office, Fairview; Kaslo civic building, \$2,000; public schools at North Saanich, Nanaimo Bay, Wellington (addition), Union Stevenson, Prairie, Ladner, Langley, Fairview, Greenwood City, (revote), Slovan City, Nelson, Rossland (\$5,000), Revelstoke (addition), North Bend, Ashcroft. One of the larger grants is \$30,000 for the Thompson river bridge at Kamloops.—The Provincial Lands and Works Department has arranged to erect a new bridge to span the Arm at the summer resort known as The Gorge.

WINNIPEG, MAN.—J. H. G. Russell, architect, has prepared plans for a school building for the district of Ashland, No. 86. Tenders for building the same will be received by John Cuddy, secretary-treasurer, up to 7 p.m. on April 9th.—The Winnipeg & Selkirk Electric Railway Co. are seeking an amendment to their charter extending the time for commencing work.—The council has been asked to advertise its intention of constructing macadam roadways on Ellen, Hargrave, Bannatine, Vaughan, Ellice, Garry, Logan, Assiniboine, Osborne and Charlotte streets.—The City Engineer has presented a report to council on the cost of city scavenging and the disposal of garbage. He recommends that the city purchase a plant, and that an odorless garbage furnace be erected in a suitable locality.—The city council has resolved to purchase property, 99x120 feet, at the corner of Rupert and Princess streets, on which to build a central fire hall.—The work of rebuilding the McIntyre block by the executors of the McIntyre Estate will be proceeded with at once. The manager is Mr. William Litchfield.

QUEBEC, QUE.—The proposed St. Lawrence river bridge awaits the appropriation of \$1,000,000 by the government, which is likely to be delayed until the next session of parliament. The site will be seven miles above the city. The bridge at this point will cost about \$3,000,000, as against \$5,000,000 if built at the city where one of the pier cribs would be located in 100 feet of water. Mr. C. Baillarge, city engineer, writes that \$2,000,000 has been paid in.—C. J. Lafrance, city treasurer, wants tenders by Thursday, 14th inst., for the purchase of \$250,000 of debentures.—Tenders are invited by the city until Tuesday, April 12th, for the excavation required for an extension of the main drainage pipe in the Grand Allee. Address J. Gallagher, waterworks engineer.—It is announced that the Quebec District Railway and the Quebec, Montmorency & Charleboix Railway have been amalgamated, and that the motive power of the latter road will be converted from steam to electricity. It is also probable that considerable extensions will be made at an early date.—Messrs. Tanguay & Vallee, of Quebec, and J. B. Veriet, of Sherbrooke, have been commissioned to prepare plans for the new Sherbrooke seminary, to replace the building destroyed by fire recently.—Extensive alterations will be made this spring to St. Fabien church, Rimouski; David Ouellet, architect.—Jos. P. Ouellet, architect, is preparing plans for the interior decorations of St. Catherine church, Portneuf. Same architect has prepared plans for a residence to be built at Roberval for L. P. Bilodeau, tenders for which will be invited shortly.

MONTREAL, QUE.—It is the intention of the Merchants Cotton Co. to build an addition to their factory, to be completed by October next.—The municipalities interested in the construction of a new bridge across the Lachine canal will send a delegation to Ottawa to urge upon the government the necessity of carrying out the work. The engineer of the proposed structure is Francis Lapointe.—The Finance Committee has granted \$5,000 for service pipes and mains in streets where such do not exist, and \$2,000 for new meters.—It is proposed to construct a new bicycle path on the lower Lachine road, to be one-third of a mile in length and built of wood. A club-house will also be built, which will include a large assembly hall.—A large deputation from Montreal recently had an interview with Sir Richard Cartwright and Hon. Mr. Fielding regarding the proposed harbor improvements. It was explained that the City Council had, in 1889, entered into a contract with the harbor commissioners by which certain works for the protection of the city from floods and the improvement of the harbor were to be carried out jointly. The City Council had expended \$300,000 on a temporary dyke and pumping plant, and had obtained power from the provincial legislature to borrow \$1,000,000 for improvements. It was urged that the government should proceed with its part of the work during the coming summer.—W. E. Doran, architect, is calling for tenders for three houses on Clendeboye avenue, Westmount, for S. Price, for interior decoration of St. Mary's church, and for remodelling a house corner Conde and Grand Trunk streets for Owen McGarvey.

HAMILTON, ONT.—The city solicitor is preparing a by-law for an issue of debentures to cover the cost of roadway improvements. Nothing has as yet been decided upon as to the streets to be paved or the kind of pavement to be constructed, but it is probable that the by-law will fix the sum to be expended at \$150,000.—The Fire and Water Committee's recommendation for an expenditure of \$3,000 on water meters has been referred back by council. The Sewer Committee's recommendation to provide \$50,000 for

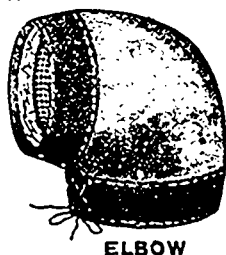
trunk sewers was withdrawn, it being understood that the scheme would be considered at a later date in connection with the question of road improvement.—The city has given notice of its intention to construct stone curbing, to cost \$1,400, and cement sidewalks to the value of several thousand dollars.—A special committee has been appointed to consider the advisability of submitting a by-law at the municipal elections providing for the establishment by the city of an electric light and power plant.—The following building permits have been granted. John Hahnau, two storey brick dwelling, corner Sunson street and Grant avenue, cost \$1,400; E. B. Patterson, four two storey brick dwellings, corner McNab and Murray streets, for D. Sullivan, cost \$4,000; Long & Bisby, alterations and additions to warehouse, corner Main and John streets, cost \$6,500; Donaldson & Patterson, four two story brick dwellings, corner Bay and Robinson streets, cost \$5,500.—Tenders are invited by Robert Cohen, architect, until April 7th, for a factory and office building on Victoria avenue north.—Tenders close Tuesday, 19th inst., for a 12 ton and 15 ton steam road roller. T. Beasley, city clerk.

OTTAWA, ONT.—A local architect is preparing plans for a large brick building to be erected in rear of the post-office. It is understood to be for an insurance company.—The Grand Opera House will be remodelled and enlarged, the work to commence early in the summer.—The Grey Nuns have made a proposition to the city for taking over Potter's Island Hospital. Should the proposition be accepted, they propose building a thick concrete wall around the island from the base of the river to two feet over the highest water mark, and then filling in the island and building a solid stone structure.—A new Anglican church will be built at the corner of First avenue and Banks street, South Ottawa, to be of frame, with a seating capacity for 300 persons, and to cost \$2,000. As soon as finances warrant, the erection of a more substantial building will be commenced. The church will be in charge of Rev. T. Arthur Hancock.—McKinley & Northwood, plumbers and steam-fitters, have commenced the erection of a large three-story building, with basement, to cost \$5,000.—F. J. Alexander, architect, has been commissioned to prepare plans for a large warehouse for Kenneth Macdonald, to be built at the corner of George street and By Ward market. He will also build a store on George street for Mr. Macdonald.—J. W. H. Watts intends building a number of residences in Stewar-ton during the coming summer.—At a recent congregational meeting at Bell street church, the plans of the proposed addition were adopted.—Robert Burns, of the Sun Life Insurance Co., will erect a residence in the south end of the city.—The Department of Railways and Canals has extended the time for receiving tenders for the power house at the Soulanges canal until 4 p.m. of the 9th inst.—The Board of Works have instructed the city engineer to prepare specifications for an asphalt pavement on Sparks street.—Messrs. John McLean and William Kanes, of Montreal, are negotiating for the purchase of property situated on the banks of the Ottawa river, on which to erect a large soap factory.

TORONTO, ONT.—Mr. Alexander Man-

ning will likely build an additional storey to the printing establishment of the Miln Bingham Printing Co., rear of Manning Arcade. The Grand Trunk Railway Co. contemplate making improvements at different points. It is proposed to lay about 120 miles of new rails, chiefly between Niagara Falls and Windsor. It is also probable that improvements will be made to several station buildings.—Geo. M. Miller & Co., architects, 18 King street east, have prepared plans for several large factory buildings to be built in Brantford for the Verity Plough Co. Tenders for building the same will be received up to April 9th. Mr. George Gooderham has acquired a property on Danforth road, just east of Little York, for the purpose of erecting kennels, to be built in the latest and most approved plan. Plans for the buildings have been prepared by Mr. David Roberts, architect, and work will be commenced at once. In addition to the kennels, there will be erected a manager's cottage.—Messrs. Park, Blackwell & Co. have had plans prepared for a large pork-packing establishment to be erected at the foot of Bathurst street, to cost \$100,000. The work of excavation has already been started.—The rate payers on Queen street west, from Yonge street to the subway, are taking steps to secure the construction of an asphalt pavement. Petitions are now being circulated.—The Allen Manufacturing Co. have purchased property on Pearl street, in rear of their present factory, and will erect thereon a large factory building.—The Board of Control have adopted the proposition to build a bicycle path on the Island.—Tenders will be invited for a brick pavement on Cowan avenue.—It is reported that the C.P.R. have acquired an option on the Carling property, opposite the Union Depot. If purchased, a large hotel will be built thereon.—Geo. H. Hees & Co. have made arrangements to rebuild their window shade factory on Davenport road, destroyed by fire last week.—A meeting of members of the city council is being held this afternoon to consider the report of the Market Improvement Committee. The plans prepared by Mr. A. R. Denison, architect, include the remodelling of the existing market building by the removal of all the butchers' stalls, the entire area from St. Lawrence Hall to Front street, between West Market and Jarvis streets, to be converted into a covered space for wagons. The sides of this building are to be composed of lifting doors; Front street is to be roofed over and the city hall building remodelled and extended; a single span roof will cover the entire block. The south half of the basement is set apart for a fruit and produce exchange, with a double line of railway tracks in the centre, the north half to be divided into cold storage rooms of suitable dimensions. The "brine pipe system" of cold storage is recommended, and the estimated cost of the improvements is placed at \$150,000.—Messrs. Simpson & Ellis, architects, are preparing plans for remodelling a residence at Toronto Junction for Mr. Arch. Campbell, M.P.—Mr. C. J. Gibson, architect, will receive tenders until Saturday next for a residence in Rosedale. Same architect will award contracts next week for a warehouse for P. W. Ellis & Co., Wellington street east.

(Continued on page 4.)



ELBOW

MICA BOILER AND STEAM PIPE COVERINGS

The Highest Non-Conductor and the Cheapest Covering on the Market.

Full Particulars from
The Mica Boiler Covering Co. - 9 Jordan St., Toronto
MONTREAL WINNIPEG

—The plans of Mr. J. Francis Brown, architect, have been accepted for a new Baptist church in East Toronto. Tenders for the work will likely be invited about June 1st.—The city will construct brick sidewalks on several streets.—The Consumers Gas Co. will receive tenders until the 22nd inst. for 40,000 tons of gas coal.—F. L. Fellowes, C.E., wants tenders immediately for work in connection with the Canadian Military Tournament and Horse Show, including large grand stand, wooden building, ring 240 x 80 feet, etc.

FIRES.

At Tilbury, Ont., on the 29th ult., a fire destroyed the Stewart block, corner King and Yonge streets. The building was owned by M. Stewart; loss \$4,500.—Desjardines' hotel on Calumet Island, Que., opposite Pembroke, was destroyed by fire recently.—M. Park & Co.'s saw mill at Boye City, B.C., has been burned.—James McLaughlin's residence near Warkworth, Ont., was consumed by fire last week; insured.—A row of three brick dwellings on Corrigan street, Kingston, owned by Delos Grimshaw, was destroyed by fire on the 1st inst.; loss \$5,000; insurance \$1,200.—A building at Smiths Mills, Que., owned by P. N. Esnouf & Co., and C. A. Jenkin's store house, were burned recently; loss partially covered by insurance.—The three storey window shade factory of George H. Hees, Son & Co., 276 Dovercourt road, Toronto, was totally destroyed by fire on Friday last, also several small houses owned by the Ontario Industrial Loan & Investment Co. The insurance on the Hees' building was \$15,000. It is the intention of the company to rebuild at once.

CONTRACTS AWARDED.

COTE ST. PAUL, QUE.—Extension of sewerage system. J. Emile Vanier, engineer; Church & Robin, contractors. Other tenders will be called for as the work progresses.

SIMCOE, ONT.—Mr D. B. Dick, architect, Toronto, has let the contract for a new building for the Bank of Hamilton to John Montgomery, a local contractor. The price, including pressed brick front and hemlock joists, is \$5,616.

MONTREAL, QUE.—Store and dwelling, cor. Windsor and St. Antoine streets, for E. Desjardins: Carpentry, C. Dubrulle; masonry, A. Pelon.—J. Alcide Chausse, architect, has accepted the following tenders for house on Shaw street for J. A. Chausse: Masonry, J. Durocher & Bros.; carpentry and joinery, T. Charpentier; roofing, J. Towie & Co., plumbing, David Ouimet; painting and glazing, Ernest Belanger; iron work, Dominion Bridge Co.—W. E. Doran, architect, has let contracts as follows for a building on Belmont for B. Tansey: Masonry, John Quinlan; carpentry and joinery, Phaneuf & Dore; roofing, Montreal Roofing Co.; plumbing and heating, Thos. O'Connor; brick, John Sheehan; plastering, J. Lefebvre; painting and glazing, Henry O'Brien & Co.—St. Denis Ward sewer: M. A. Campeau & Co., contractors; cost \$15,000.

TORONTO, ONT.—Messrs. Simpson & Ellis, architects, have accepted the following tenders for a residence for Dr. Bascom: Masonry, Law & Co.; carpenter work, Walker & Robinson; plumbing, Robert Ross; heating, John Paterson; painting, James Stacey; plastering, Hodge & Sons; roofing, A. Mathews; electric wiring, R. L. Gray.—J. F. Brown, architect, has recently let the following contracts in connection with the new building for the Eckardt Casket Co.,

Esplanade street: Carpenter work and hardwood fittings, W. F. Petrie; roofing, Geo. Duthie; galvanized iron and metal ceilings, W. Dillon; plastering, Hoidge & Son. Considerable office furniture will be required. The building, when completed, will cost \$6,500.—The Confederation Life Association have accepted the following tenders for a two storey store building on south side of Queen street, between Yonge and Victoria streets, from plans by J. Wilson Gray, architect: Brick and stone work, McCurly Bros.; carpenter work, Young & Co.; roofing, W. D. Hutson & Sons; printing and glazing, J. McIntosh; furnaces, Pease Furnace Co.; plumbing, Purdy, Mansell & Mashinter; hot water heating, J. Ritchie Co. The building will have eight stores, of Romanesque style, with an attractive front, brass columns, and other modern improvements. The upper flat will be occupied by the J. F. Brown Co., wholesale furniture, and the lower stores will be for rental.

THE DOMINION ESTIMATES.

The Dominion estimates for 1898 were presented to parliament on Monday of last week. Among the appropriations are the following:

RAILWAYS.

Inter-colonial Railway: Increased accommodation at Halifax, \$135,000; extension to deep water at North Sydney, \$30,000; increased accommodation at Moncton, \$20,000; increase strength of iron bridges, 15c. 0.0. passenger and freight shed at Richmond, Que., \$1,500; dredging at Pictou landing wharf, \$3,000; dredging at Pictou wharf, \$1,000; improving accommodation at Mulgrave, \$5,000; providing electric light apparatus for steamer Mulgrave, \$3,000; providing increased station and other accommodation at various points, \$6,000; extension to Montreal \$20,000.

CANALS.

Soulanges canal, \$1,617,000; Cornwall canal, \$150,000; Farran's Point, \$227,000; Rapide Plat, \$60,000; Galops, \$1,225,000; North Channel, \$250,000; Galops Channel, \$50,000; River reaches, \$60,000; Lake St. Francis, removal of boulders, \$50,000; Trent, construction \$600,000; Sault Ste. Marie \$42,000; Lachine, enlargement, \$125,000; Lachine, deepening River St. Pierre, \$15,000; Lake St. Louis channel, \$60,000; Grenville, enlargement, \$40,000; renewing Black's bridge at Montreal, Lachine canal, \$15,000; swing bridge at Therese Island, Chambly canal, \$2,000; to repair recess platforms and tail lays, locks Nos. 15 and

THE PHENIX BRIDGE & IRON WORKS

Civil Engineers and Contractors

BLACKSMITHS AND MACHINISTS

STEEL AND IRON STRUCTURAL AND ARCHITECTURAL WORK

Beams, Channels, Angles and
Tees always in stock.

29 to 49 McGill Street,

P.O. Box 893.

MONTREAL

CHARLES HUGHES - *Milton West, Ont.*

All Kinds of Municipal Work

CURBING, CROSSING, CHANNELLING, FLAGGING, ETC.

Rough Heavy Lime-stone for Breakwater Cribbing, Etc.

Credit Valley Grey Dimension, any size, Sills, Steps, Coursing, Bridge Blocks, Engine Beds.

— Estimates Given for All Kinds of Cut Work —

JOSSON CEMENT

Manufactured at.
NIEL ON RUPELL

Is the Highest Grade Artificial Portland Cement and the Best for High Class Work. Has been used largely for Government and Municipal Works.

TO BE HAD FROM ALL CANADIAN DEALERS

C. I. de Sola, Manager in Canada .. 180 St. James Street, MONTREAL

For Artificial Stone Pavements, Roofing Gravel,
Concrete, Etc.

USE "CRUSHED QUARTZITE"

LAURENTIAN SAND & GRAVEL CO.

Telephone 2491.

MONTREAL

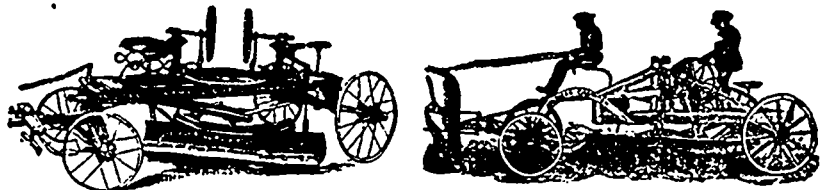
18 St. Alexis Street.

Write for Prices delivered in your town.

Good Roads Machinery

HERE'S A PAIR OF

CHAMPIONS



Steel **CHAMPION** Reversible. American **CHAMPION** Reversible.
SIMPLE IN CONSTRUCTION. STRONG IN EVERY PART. EASY TO OPERATE.
THE MOST POWERFUL AND DURABLE ROAD GRADERS MANUFACTURED.

GOOD ROADS MACHINERY CO. - Hamilton, Canada

MUNICIPAL DEBENTURES

wanted for foreign clients. We can place Debentures direct with foreign clients without charge to municipalities.

: : : Commission allowed to persons introducing new business : : : :

ÆMILIUS JARVIS & CO.

(Member Toronto Stock Exchange) — 23 King St. West, TORONTO

ELECTRIC RAILWAY BONDS PURCHASED.

STOCK EXCHANGE ORDERS PROMPTLY EXECUTED

17 Cornwall canal, \$10,000; to provide a combined gate and stone lift to be used on river reaches, Williamsburg canals, \$5,000, pair of lock gates for lock, Williamsburg canals, \$4,000.

PUBLIC BUILDINGS.

Nova Scotia—Halifax drill hall, \$18,000; Kentville public building, \$5,000; Liverpool public building, \$1,000; New Brunswick—Marysville public building, \$8,000; Quebec—Grise Isle quarantine station, \$2,000; Montreal public buildings, improvements, alterations, renewals, repairs, etc., \$5,000; Quebec post office, new wing and repairs and alterations \$3,500; Quebec Immigration buildings on Louise embankment and breakwater and Queen's wharf buildings, \$2,000; Montmagny post office, custom house, etc., \$7,500; Ontario—Toronto Dominion public buildings, improvements, etc., \$7,000; Arnprior post office, custom house, etc., \$4,900; Kingston drill hall, \$10,000; Major's Hill Park, to complete stone and iron fence, \$4,500; Ingersoll public building, \$5,000; Port Colborne public building, mansard roof for caretaker's quarters, etc., \$12,000; Woodstock public building, \$5,000; Rat Portage public building, \$5,000; public buildings, Ottawa, grounds, new sidewalks and footways on Parliament square, \$9,000; Sarnia public building, \$5,000; Alexandria reformatory, \$14,000; Manitoba—Portage la Prairie post office etc., \$8,000; British Columbia—Victoria public buildings, treasury vault, \$16,000; William's Head quarantine station, quarters for crew, alterations, improvements, furniture, instruments, etc., \$4,000; Experimental Farms—New buildings and improvements, renewals, repairs, etc., in connection with existing buildings, fences, etc., \$6,000.

HARBORS AND RIVERS.

Nova Scotia—Oyster Pond, Guysboro Co., beach protection, \$1,100; Judique, new wharf, \$4,000; Margaree, extension of pier, \$4,000; North River, St. Anne's wharf at Seymour Point, \$1,000; East Ragged Island wharf, \$2,500; Eastern Passage, Boat harbor, \$2,000; Meteghan breakwater, repairs, \$1,000; Windsor harbor, shear dams, training dykes and deepening channel, river Avon, \$4,000; L'Ardoise, repairs to breakwater, \$3,500; Whycoconagh, wharf \$1,000; Port Joli, repairs to wharf, \$1,800; Port Latour, breakwater, etc., \$4,000; Clarks Harbor, breakwater, etc., \$5,000; Prince Edward Island—General repairs to piers and breakwaters, \$6,000; Souris, strengthening of breakwater, \$15,000; West Point wharf, \$7,100; Tignish, repairs to breakwater and extension \$7,000; Ilex, breakwater, \$1,000, for purchase of creosoted piles for general repairs to wharfs, piers and breakwaters, \$1,000; Red Point wharf, repairs, \$1,000; New Brunswick—Negro Point breakwater, St. John harbor \$5,000; River St. John, including tributaries, \$16,000; St. John Harbor, repairs to and extension of protection works at Base of Fort Dufferin, \$1,400; dredging between St. John river and Grand Lake, \$1,500; Two Rivers wharf, \$3,000; Dalhousie, repairs to ballast wharf, \$3,800; Shippegan harbor, extension of protection works and repairs to same, \$4,000; Cape Toimentine, repairs to breakwater, \$8,000; Quebec—General repairs and improvements to harbor, river and bridge works, \$10,000; Laprairie, works in connection with ice piers, dredging steamboat channel, etc., \$5,000; piers, Lake St. John, including improvement of approaches, \$2,000; River Richelieu, Belœil, channel guide piers, \$5,500; Lower St. Lawrence, removal of rocks, \$3,000; St. Irene repairs to and extension of wharf to shore, \$3,000; Touladié river, improvement of, \$3,000; St. Anicet, wharf wing or return at outer end and repairs, \$1,500; St. Roch des Aulnaies, wharf, \$1,000; Anse à Beaufils, improvement of entrance to harbor, \$1,000; St. Jean des Chaillons, improvement of harbor, \$5,000; Pointe Claire, wharf, \$4,000; Ile Perrot, addition to wharf, north side, \$2,500; Rivière Beauport, improvement of river channel on foreshore of St. Lawrence \$4,000; Cacouna, extension of wharf, \$5,000; Rivière à la Pipe, wharf on Lake St. John near mouth of river, \$2,000; St. Fulgence, pier and improvements, \$1,500; Ste. Anne du Saguenay wharf, works of construction, etc., \$1,000; St. Nicolas, construction of a public wharf, \$7,000; Anse Aux Gascons (Port Daniel East), breakwater, \$5,000; Matane extension of training pier southwardly, \$5,000; Ste. Anne de Sorel ice piers, \$4,600; Bithier en haut, dredging Benthier channel, \$7,000; Iberville, wharf, \$8,000; Ontario—Collingwood harbor, improvement of, \$30,000; Rainy River, improvement of navigable channel, \$15,000; general repairs and improvements to harbor, river and bridge works, \$10,000; Kingston harbor, Lake Ontario, \$15,000; Owen Sound harbor, dredging, etc., \$10,000; Toronto harbor, works at eastern entrance, etc., \$20,000; Burlington channel, repairs to piers, \$8,000; Goderich, reconstruction of breakwater and repairs to piers, \$33,000; Kincardin, repairs to piers, \$2,500; L'Original, reconstruction of wharf, \$6,000; Port Burwell, improvement of harbor, provided interested parties spend a sum of \$50,000, \$25,000; Thornbury, repairs to wharf, \$1,000; Port Stanley, repairs to piers and dredging, \$11,000; Bowmanville harbor, \$2,000; Port Stanley, assistance towards harbor improvements, \$10,000; North Bay, pile wharf, \$15,000; Meaford, pile work and dredging, \$8,500; River Ottawa, improvement of steam boat channel through Narrows at Petawawa, above Pembroke, \$7,200; Port Elgin, extension of breakwater, etc., \$5,000; Mani-

toba—Lake Manitoba, opening of additional outlets to prevent overflow of lake, and maintenance of same at per level for navigation purposes, \$25,000; British Columbia—Nanaimo harbor, improvements of south channel, etc., \$1,000; Columbia river, improvements above Golden, \$1,000; Fraser river, improvement of ship channel, \$10,000; general repairs and improvements to harbor, river and bridge works, \$3,000; Skeena river, \$3,500; Columbia river, removal of rocks above Revelstoke, \$2,000; Duncan river, improvement of, \$3,000; Columbia river, improvements in Narrows between Upper and Lower Arrow Lakes, \$5,000.

DREDGE G.

New dredging plant, \$60,000; dredge vessels, repairs, \$30,000; dredging, Nova Scotia, Prince Edward Island and New Brunswick, \$60,000; Quebec and Ontario \$50,000; Manitoba, \$8,000; British Columbia, \$15,000; general service, \$5,000. Slides and booms, \$5,000.

ROADS AND BRIDGES.

Bridges—Ottawa City, over the Ottawa river, the slides, the Rideau canal and approaches thereto, ordinary repairs, \$7,000; Dominion traffic bridges through out Canada, including appr. aches, \$5,000; bridge across the Saskatchewan at Edmonton, N.W.T., \$25,000; Sappers bridge, Ottawa, extraordinary repairs, \$2,000; Main street bridge over the Rideau canal, Ottawa, reconstruction, \$10,000.

DEBENTURES BOUGHT

Municipalities saved all possible trouble

G. A. STIMSON & CO.

Investment Dealers

24 and 26 King St. W. - TORONTO

ARTIFICIAL STONE PAVEMENTS

SIDEWALKS A SPECIALTY

CORPORATIONS Will do well to consider our work and prices before letting contracts

The Silica Barytic Stone Company of Ontario, Limited.

WALTER MILLS, General Manager.

Head office: INGERSOLL, ONT.

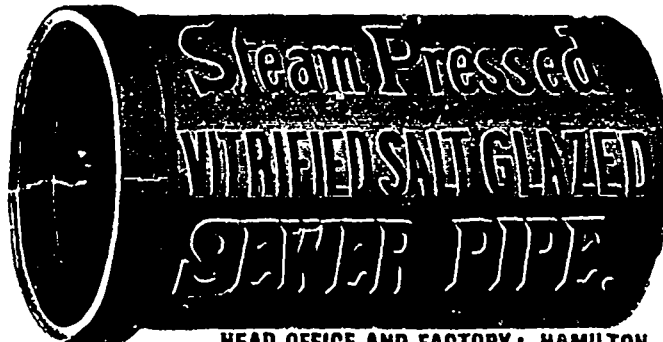
SEE THAT Your Specifications Call For

ST. LAWRENCE VALVES, HYDRANTS, STOP COCK BOXES, VALVE BOXES AND PIPE

Valves from 2" Upwards. Manholes, Covers, etc.
Pipe from 3" Upwards. Architectural Iron and Steel Work.

ST. LAWRENCE FOUNDRY CO. of TORONTO, Limited
TORONTO, CANADA

THE HAMILTON AND TORONTO SEWER PIPE CO. (LIMITED.)

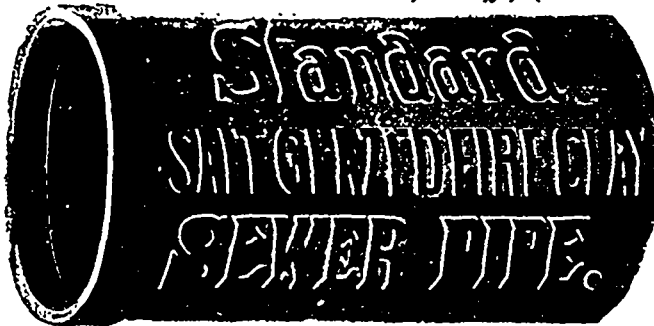


— FOR —
SEWERS,
CULVERTS
AND
WATER PIPES.
INVERTS
For Brick Sewers

Write for Discounts

HEAD OFFICE AND FACTORY: HAMILTON, CANADA

THE STANDARD DRAIN PIPE CO. OF ST. JOHNS, P. Q., (LIMITED)



Manufacturers of
Salt-Glazed
Vitrified
SEWER PIPES

Double Strength
Railway Culvert Pipes,
Inverts, Vents,

AND ALL KINDS OF FIRE CLAY GOODS

WATER WORKS

Excellent Pumps in First-Class Condition, Low in Price, on Easy Terms, and Built for Water Works Service.

Municipalities contemplating the installation of Water Works Plants will do well to communicate with us, as we can offer several

THE NORTHEY MFG. CO.

(LIMITED)

King Street Subway,

TORONTO, ONT.

MUNICIPAL DEPARTMENT

SPECIFICATIONS.*

By JAMES HUTCHISON.

Let the language of your specification be clear, concise and easily understood, and so definite that those tendering will know exactly what will be required of them. Make the arrangement such that the essential requirements will stand out prominently and not be buried among the general conditions or clauses of less importance.

The opening clauses should give a general description of the nature and extent of the work as a whole, and where plans accompany the specifications reference should be made to them. The succeeding clauses should define or describe the work in detail, following as nearly as practicable the order in which it will be taken up in construction.

The length of this description will be governed by the complexity of the work and the nature of the plans. In preparing drawings make them as complete as possible; the specifications will then deal chiefly with the quality of the materials, the nature of the workmanship and the final results to be attained. Following this we should have the general conditions, referring, among other things, to the time and manner of payment, the payment for extra work, and what shall constitute an extra, the appliances to be used, the protection of life and property, etc.

As already stated, the chief aim should be to give a clear knowledge of what will be demanded of the contractor. If the work consists of excavation, state the extent of it, tell how it will be classified and measured, how and where it is to be disposed of. If test pits have been sunk or borings made, give the results of those trials, but in general do not guarantee the accuracy of them. Require the contractor to do all the pumping and shoring, if such are needed.

If you are building masonry, describe the quality of the stone, give the thickness of the courses, the dimensions of the stones, the manner in which they are to be dressed, the proportion of headers and the nature of the backing, i.e., whether it is to be of stones the same thickness as the face stones, or of stones of various thicknesses, or of rubble. If heavy stones are to be used, require them to be handled with a derrick, otherwise you may meet a contractor who will attempt to roll them into place. It is not enough to say that the pointing shall be neatly done, for the contractor's idea of neatness may differ from yours.

It is a hard matter to get ordinary mechanics to change their usual style of work, hence in places where appearance is a secondary consideration, don't attempt

it, but instead, adapt your specifications to the situation, as nothing but vexation will result from trying to get masons accustomed to building rubble only to work to 3/8-inch joints, better in such cases use a higher grade of cement or a richer mortar with good flat-bedded stones well bonded, and dispense with fine dressing. For mortar give the proportions of cement and sand, how they are to be measured and the quality of each. The usual proportions are 1 of cement to 2 of sand, or 1 of cement to 3 of sand. The measuring can be easily done in bottomless boxes on the mixing board; a 350-pound barrel of cement measured loose contains about 4 cubic feet. In small works where the cement will not be tested, name the brand or brands that may be used. If a quantity will be required, specify the quality by naming the strength it must give in a seven-day test, the specific gravity, the fineness of grinding and soundness in the hot test. If water gives trouble use a quick-setting cement, otherwise a moderately slow one.

In excavating or trenching in streets, let the surface metal be kept separate to be used in finishing, have the street left in the same condition that it was before beginning the work, and let the contractor maintain the part trenched in such condition for three or six months.

If you have painting to do state the kind and number of colors to be used, as that affects the labor required. If lead is to form the body of the paint, decide on which brands you will accept, and require it to be brought on the work in the original unbroken package. Ask for pure linseed oil, and forbid the use of benzine and such adulterants. If the honesty of your contractor is not above suspicion, employ an inspector who understands the business. In undertakings where unforeseen conditions are apt to arise, reserve the right to make such changes in the plans as may be deemed advisable.

Changes will affect the amount of labor and material required, therefore provide for the extra payment to be made in case of increase, and for the reduction if the work is lessened.

Make the decision of the engineer final as to the interpretation of the specifications and whether the work is in compliance with them. Remembering that the engineer is only human, do not leave questions to be settled by his opinion where such can be previously provided for.

These suggestions might be extended, but if enough has been said to indicate the line along which the work of preparing specifications should proceed, the object of this paper will have been attained, and for further guidance in the work I would refer you to Johnson's "Engineering Contracts and Specifications."

PROVINCIAL AID IN ROAD BUILDING.

The Department of Agriculture of the province of Quebec has issued the following circular to municipal authorities:

Sir,—In 1897 the Department of Agriculture inaugurated a new policy for encouraging improvements to roads by granting aid to rural municipalities to enable them to purchase special machines for repairing roads.

Notwithstanding the bad weather that prevailed during last summer and last autumn and that was unfavorable for effecting repairs to roads, the results obtained have been most satisfactory.

Seventy-seven municipalities have had their names entered so as to benefit by the advantage offered them, and according to the official reports received up to date at the Department of Agriculture over 150 miles of road have been repaired since last June.

These results justify the department in carrying out the system inaugurated last summer, with the few following modifications:—

A special grant of \$300 was placed last summer at the disposal of each county, to be divided into premiums of \$125, \$100 and \$75 between the first three municipalities that availed themselves of the same. The same grant will be given this year to the counties which shall have claimed it in whole or part between this and the month of July next.

In counties where the total amount of \$300 shall have been distributed between now and July, the department will again grant from and after that date three premiums of \$75 each to the first three municipalities applying for the same. If a single municipality in a county has then availed itself of the offer made to each county, the department will place at the disposal of the same county a bonus of \$100 and two of \$75.

Moreover, in order to encourage the stoning of roads, the department has decided to grant each county municipality, aid towards the purchase of stone-breakers, with engine, roller and sorter, provided that the total cost of such machines do not exceed \$2,400 per county. An amendment to the Municipal Code passed during the last session of the Legislature, authorizes county councils to make arrangements with each parish, village, or town municipality of the same electoral division, for repairing the roads in those various municipalities. The general act respecting town corporations has likewise been amended in the same sense.

Municipal councils of parishes or of counties desiring to avail themselves of the above advantages must draw up their application in the form of a resolution, a copy whereof must be sent to the Department of Agriculture. The premium to which they shall be entitled shall be paid to them after at least two miles of earth road shall have been repaired and after a certificate to that effect shall have been forwarded to the department with a copy of the invoice from the company that sold them the machine.

In the case of the purchase of a stone-breaker, half a mile of macadamized road must have been completed and accepted by an officer of the Department of Agriculture, before the Government contributions shall be paid.

Machines for repairing earth roads that are bought by the municipalities with the help of the Government shall remain the property of such municipalities for at least three years, and the county councils that purchase stone-breakers cannot sell such machines before they have been at least five years in use in the same county.

The resignation of Mr. J. F. Armour, town engineer of Dundas, Ont., is announced.

Mr. Richard Windatt, town clerk of Bowmanville, Ont., died on March 27th, after an extended illness. He was for 40 years clerk of the town as well as clerk of the municipality of Dairlington, and was for 37 years secretary of the West Durham Agricultural Society.

BELLHOUSE, DILLON & CO., 30 St. Francois Xavier St., Montreal

Sole Agents for the Compagnie Generale des Asphaltes de France (Rock Asphalt).

**PORTLAND
CEMENT**

NORTH'S CONDOR

Paving and Fire Brick a Specialty

SITTING LION and WHITE CROSS Brands

NORTH'S "CONDOR" BRAND AWARDED FIRST PRIZE AND GOLD MEDAL AT THE ANTWERP EXHIBITION

* Abstract of a paper presented before the Association of Ontario Land Surveyors, March, 1895.

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

ENGINEERS

WILLIS CHIPMAN

B. A. Sc. (McGill).
Mem. Can. Soc. C. E.
Mem. Am. Soc. C. E.; M. Am. W. W. Ass'n.

Civil and Sanitary Engineer
TORONTO

WM. NEWMAN, C. E.

A. M. Can. Soc. C. E., M. Am. W. Wks. Assn.
CITY ENGINEER OF WINDSOR.

Civil and Sanitary Engineer
Waterworks, Sewerage, Drainage, Pavements, &c.
Fleming Block - WINDSOR, ONT.

VAUGHAN M. ROBERTS

Civil and Sanitary Engineer
Waterworks, Sewers, Electric Light,
Electric Railways.
Plans and Specifications prepared - Work
Superintended. 18 Ontario Street,
ST. CATHARINES

Flush Your Sewers with

THE MILLER AUTOMATIC SYPHON
(PATENTED)

Received HIGHEST AWARD at the World's Columbian Exposition for

- (1) SIMPLICITY OF CONSTRUCTION.
- (2) EFFECTIVENESS. (3) RELIABILITY

Write for Prices and Particulars.

VICTOR HILL, General Agent. 39 D'Arcy St. TORONTO.

SCORIA PAVING BLOCKS are the Best All-Round Paving Material yet discovered.

W. H. KNOWLTON & CO.,
Dealers in Contractors' Supplies, 36 King St. E., Toronto

Advertise in the CONTRACT RECORD.

E. A. WALLBERG, C.E.

BRIDGE ENGINEER

Bell Telephone Building, MONTREAL
Bridges, Buildings, Foundations Plans,
Specifications, Superintendence and Expert
Reports on existing structures . . .

J. McDOUGALL, C. E.,

ENGINEER OF THE COUNTY OF YORK
GENERAL MUNICIPAL ENGINEER

Consulting Engineer for Municipalities in regard to
Electric Railway and other Franchises.
Specialties: Bridges, Foundations, Electric Railways,
and Roads. Surveys made; Plans, Specifications and
Agreements prepared, and work superintended.
COURT HOUSE, - TORONTO.

DAVIS & VAN BUSKIRK

Graduates Royal Military College of Canada.
CIVIL ENGINEERS
SPECIALTY: Municipal Engineering, including
Drainage, Sewerage, Sewage Disposal, Water-
works, Roadways and Bridges.
W. F. Van Buskirk, A.M. Can. Soc. C. E., Stratford
Wm. Mahlon Davis, M. Can. Soc. C. E., Woodstock.

Paving Granite

Granite Sets for Street Paving. CURBING cut
to any shape ordered. - Fine Rich Colors for
Building and Monumental Purposes.
Quarries, St. Philippe d'Argenteuil, P. Q.

Address all communications to
JOS. BRUNET - COTE DES NEIGES, MONTREAL.

MONTREAL PIPE FOUNDRY CO., Limited

Successors to
DRUMMOND McCALL PIPE FOUNDRY CO., LGD.
Manufacturers of

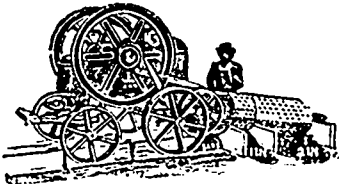
CAST IRON WATER and GAS PIPES

and General Water and Gas Special Castings.

Prices on Application. Offices, Canada Life Building, MONTREAL.

THE JENCKES MACHINE CO.

30 Lansdowne Street, SHERBROOKE, QUE.



Builders of

STONE AND ORE CRUSHERS
and Macadamizing Machinery.

Complete Plants Planned and Erected.

Write us for Catalogue No. 5, relating to Crushing Machinery

THE THREE RIVERS IRONWORKS CO.

Montreal Office: IMPERIAL BUILDING. THREE RIVERS, P. Q.

MANUFACTURERS OF

Cast Iron Water and Gas Pipes

of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

CAST IRON WATER PIPES

From 4 in. to 42 in. Diameter.

BELL AND SPIGOT • FLANGED, TURNED AND BORED
AND EVERYTHING NECESSARY FOR

A Complete Water or Gas System

SUPPLIED BY

The LONDONDERRY IRON CO., Limited

LONDONDERRY, NOVA SCOTIA

THE MOST COMPLETE IRON WORKS IN CANADA (ESTABLISHED 1852.)

Send for Drawings and Estimates of our work.

ALL PIPES CAST VERTICALLY

WE MAKE

- PIG IRON
- WATER PIPES
- BAR IRON
- PUDDLED BAR
- HYDRANTS, VALVES
- PIPE SPECIALS
- HEAVY CASTINGS
- IRON RAILS
- STRUCTURAL WORK
- MACHINE WORK
- CORPORATION SERVICE
- and VALVE BOXES

SIEMENS BRAND

ALEX. GARTSHORE, President. J. G. ALLAN, Secretary and Treasurer. JAS. THOMSON, Vice-President and General Manager.

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO. LIMITED.

Manufacturers of:::

Flexible and Flange Pipe,
Special Castings and all kinds of
Waterworks Supplies.



3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

HAMILTON ONT.

INDEX TO ADVERTISEMENTS

In the "Canadian Architect and Builder."

Prices of Building Materials.

LUMBER.

YARD QUOTATIONS.

Toronto. Montreal.

Table listing lumber prices for various types of wood, including Mill cull boards, Shipping cull boards, Hemlock scantling, and various sizes of flooring and sheathing.

BRICK - M

Table listing prices for Common Walling, Good Facing, and Sewer pipes.

HAND.

Table listing price for Per Load of 1/4 Cubic Yards.

STONE.

Table listing prices for various types of stone, including Common Rubble, Large flat Rubble, Foundation Blocks, Granite, and Marble.

OHIO FREESTONE.

Table listing prices for Ohio Freestone in various sizes and finishes.

CREDIT VALLEY STONE.

Table listing prices for Credit Valley Stone in various sizes and finishes.

LONGFORD STONE.

Table listing prices for Longford Stone in various sizes and finishes.

Large index table listing various building materials and services, including Architects, Cements, Limes, Roofers, Plasterers, and more.

Table listing prices for Dimension, Kent Free stone, River John, Quebec, and Granite paving blocks.

Table listing prices for Slate in Toronto and Montreal.

Table listing prices for Paints in oil and lb.

Table listing prices for Cement, Lime, and other materials.

Table listing prices for Portland Cements and other materials.

Table listing prices for Hydraulic Cements in Toronto and Montreal.

Table listing prices for Hardware, including nails, spikes, and iron pipes.

Table listing prices for Galvanized Iron and other materials.

Table listing prices for Structural Iron, including steel beams and plates.