

CANADIAN Contract Record

*A Weekly Journal of Public Works, Tenders,
Advance Information and Municipal Progress*

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. 15.

TORONTO, MONTREAL, WINNIPEG, FEBRUARY 1, 1905

No. 51

THE CANADIAN CONTRACT RECORD

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CONFEDERATION LIFE BUILDING, TORONTO.
Telephone Main 2365.

Branch Offices:
38 Alliance Building, Montreal,
Telephone Main 2299.
720-721 Union Bank Building, Winnipeg.
21 Great St. Helen's, London, England.

Debentures for Sale

Offers will be received at the Clerk's Office, Seaford, up till noon, FEBRUARY 6TH, NEXT for \$400 Local Improvement Debentures, payable in 15 years. Interest at 4% per cent. payable yearly. The highest or any offer not necessarily accepted. The debentures are \$400 each.

WM. ELLIOTT, Clerk.

CONCRETE PILES

For Procuring Cheap Permanent Foundations in Filled or Soft Grounds I am prepared to put in concrete piles or to furnish contractors with the necessary cores on a Royalty basis, under my Patents. Estimates furnished on application.

A. A. RAYMOND,
Office of Medler & Arnott,
Foot of Berkeley St.,
Toronto, Ont.

Tenders for Debentures

Sealed tenders will be received by the undersigned up to noon of Friday, the 10th day of February, 1905, for the purchase of \$10,000.00 Local Improvement Debentures (cement walks) of the Town of Oshawa, bearing interest at 4% per cent. per annum, and repayable in 20 equal annual installments of principal and interest. Accrued interest to be paid by the purchaser. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.
Oshawa, January 23rd, 1905.

TENDERS FOR DREDGING AND FOUR BRIDGES

Sealed tenders will be received by the undersigned until 2 O'CLOCK P.M. on THURSDAY, FEBRUARY 23rd, 1905, for dredging about 3 1/2 miles in the River Drain, in the Township of Dover, County of Kent. Also for building two steel and two wooden bridges over said drain.

Plans and specifications can be seen at the office of A. McDonald, civil engineer, in the city of Chatham.

The lowest or any tender not necessarily accepted.

Tenders to be marked "Tenders for Dredging, and for Bridges" respectively.

H. N. BECHARD,
Commissioner,
Dover South F.O.

SITUATIONS VACANT.

Wanted by an institution engaged in numerous building operations, young architect or architect's senior student and draughtsman—one possessed of some practical knowledge and with an aptitude for detail. He will be required to scrutinize plans and specifications furnished by architects; keep in communication with the clerk of the different works; see that detailed working drawings are promptly placed in the hands of the various contractors; and generally to exercise a systematic supervision of the operations. Permanent position. The salary will be in keeping with the experience and capability of the appointee. Box 66, CONTRACT RECORD, Toronto, Ont.

Tenders for the Supply of from 1000 to 1500 Tons of Asphalt

Sealed tenders, addressed to the Chairman of the Committee on Works, for the supply of from 1,000 to 1,500 tons of asphalt for street paving for the City of Winnipeg, will be received at the office of the undersigned up to 8.30 p.m. on THURSDAY, FEBRUARY 2nd, 1905.

Specifications and forms of tender may be obtained upon application at the office of Col. H. N. Kuitan, City Engineer, Winnipeg.

Each tender must be accompanied by an accepted cheque or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN, City Clerk.
City Clerk's Office, Winnipeg, Jan. 27, 1905.

Tenders for Bridge

Sealed tenders addressed to R. Nicholson, Esq., Reeve of Arran Tp., will be received up to 6 p.m. FRIDAY, FEBRUARY 17th, 1905, for the construction of following:

- (1) Two Cement-Concrete Bridge Abutments, containing some 124 cubic yards.
- (2) One Steel Bridge 60 foot span C-C, 16 foot roadway, Live Load 80 lbs. per sq. ft., Moving Load 6 tons on 6 ft. axles.
 - (a) Bridge as above with cedar flooring and cedar joists.
 - (b) Bridge as above with cedar flooring and steel joists.
 - (c) Bridge as above with cement-concrete floor and steel joists.

A marked cheque payable to the Treasurer Township of Arran for the amount of 5% of the contract price must accompany each tender, to be forfeited in case of the successful tenderer declining the contract or failing in the performance thereof and to be returned in case of non-acceptance.

Plans and specifications to be seen at the Reeve's or Engineer's Offices.

The lowest or any tender not necessarily accepted.

R. NICHOLSON, ESQ.,
Reeve, Tara.
R. McDOWALL, C. E.,
Township Engineer, Owen Sound.

Wanted — A Competent Draughtsman for Architect's Office; one capable of taking entire charge during proprietor's absence. State salary wanted and give idea of previous experience. Address Box 67, CONTRACT RECORD, Toronto, Ont.

TO CONTRACTORS

Separate or lump tenders will be received until FRIDAY, THE 17TH OF FEBRUARY, for the erection of a

Large Power House Building

which will be built of either cut stone or granite, and will be erected adjacent to Queen Victoria Park, at Niagara Falls, Ont., for the

Electrical Development Co. of Ontario, Limited

Plans and specifications can be seen and all other information obtained at the office of the architect, Toronto, and also at the office of the company, Queen Victoria Park, Niagara Falls, Ont.

R. J. LENNOX, Architect,
Toronto.

TENDER FOR Supplying and Laying Submerged Pipe

Sealed tenders marked "Tenders for Sewer Outlets," and addressed to M. W. Flannery, Town Clerk, will be received by the Corporation of the Town of North Bay, Ontario, not later than 12 o'clock noon of the 20th DAY OF FEBRUARY, 1905, for the supplying of material and labor necessary in connection with the construction of two submerged sewer outlets of cast iron pipe 12" diameter each 650 feet long.

Plans, details, specifications and form of proposal may be seen at the office of the Town Engineer, I. O. Clarke, and from whom copies can be obtained.

The lowest or any tender not necessarily accepted.

M. W. FLANNERY, Town Clerk,
North Bay, Ontario, January 27th, 1905.

TOWN OF EAST TORONTO PROVINCE OF ONTARIO

TENDERS FOR PUMPING STATION

Tenders will be received by the undersigned up to 8 p.m. on MONDAY, FEBRUARY 20th, 1905, for providing the materials and labor required for the erection of a

Reinforced Concrete Pumping Station

at the foot of Beech Ave., East Toronto.

Plans and specifications may be seen and forms of tender obtained at the office of the undersigned, or at the Head Office of John Galt, C.E. & M.E. Chief Engineer, Toronto.

A certified bank cheque for \$500 must accompany each tender.

W. H. CLAY, Clerk,
Town of East Toronto.

CONTRACTS OPEN.

SWIFT CURRENT, N. W. T. — P. Muggleston intends building a new residence.

STRATHBURN, ONT.—John Trestain purposes building a residence in the spring.

KILLYLEAGH, ONT.—David Allan and Levi Mays each intend building brick houses.

FEVERSHAM, ONT.—The Osprey Milling Co. have decided to rebuild their grist mill recently burned.

CORNWALLIS, N. S.—James McGowan intends rebuilding his cooperage mill recently burned.

GALT, ONT.—W. M. Davis, C.E., has been instructed to prepare plans for proposed lateral sewers.

WEYBURN, N.W.T.—J. A. Mitchell purposes building a warehouse and store on corner of Main street.

WOODSTOCK, ONT.—The Canadian Bank of Commerce will erect a bank building here to cost \$20,000.

MASHAM, QUE.—The members of L.O.L. No. 28 are preparing to build a new Orange hall at Lascelles Corners.

PETERBORO, ONT.—It is understood that the Bank of Nova Scotia purpose erecting a bank building here.

LADYSMITH, B.C.—It is understood that Chinese capitalists have decided to build a large saw mill at Canton.

BRANTFORD, ONT.—J. A. Smith, Township Clerk, wants tenders by 4th inst. for supply of cement, lumber and hardware.

ST. CATHARINES, ONT.—B. Welstead intends building a two-storey brick veneer house on William street, to cost \$2,700.

OWEN SOUND, ONT.—It is expected that the Dominion Government will build a new post office here in the near future.

RICHMOND, QUE.—It is reported that the Grand Trunk Railway contemplate the enlargement of the present round house.

ST. JOHN, N.B.—G. E. Fairweather, architect, is this week taking tenders on a brick building to be erected for Raymond & Doherty.

NIAGARA FALLS, ONT.—It is understood that the City Council are about to ask for tenders for auxiliary pumping apparatus.

WHEATLEY, ONT.—William Trembley has purchased a site, corner Erie and Foster streets, and intends building a residence.

SYDNEY, N.S.—A company of English capitalists propose establishing large cement works here and have asked for a bonus of \$10,000.

BURK'S FALLS, ONT.—G. H. C. Swain, Village Clerk, has just taken tenders on extension of 300 feet of 10-inch water main into the lake.

POPLAR, B.C.—The Lardeau Valley Mines, Limited, a Spokane concern, will erect a mill and concentrator about six miles west of this place.

BROCKVILLE, ONT.—Senator Fulford has donated \$10,000 to the Brockville General Hospital for the erection of a suitable home for the nurses.

QUEBEC, QUE.—Steps are being taken by the congregation of St. Matthew's church, of which Rev. F. G. Scott is pastor, to erect an addition to their building.

SEAFORTH, ONT.—Tuckersmith Township Council will not decide upon the location of the proposed steel bridge to replace the Campbell bridge until after the spring freshet.

FREDERICTON, N. B.—It is improbable that the Estey saw mill which was burned last week will be rebuilt. The building was owned by Senator Thompson.

GLACE BAY, N.S.—D. A. Hewitt, architect of the Department of Public Works, Ottawa, was here last week for the purpose of selecting a site for a new public building.

PEMEROKE, ONT.—The Petawawa Power Co. have submitted to the Town Council the terms upon which they desire a franchise for furnishing light and power.

NELSON, B. C.—The School Board will petition the Council to submit a by-law to the ratepayers to raise \$40,000 for a new public school building, which is greatly needed.

EDMONTON, N.W.T.—It is likely that tenders will be invited this week for the waterworks and sewer extension here. Willis Chisman, C.E., of Toronto, is the consulting engineer.

GODERICH, ONT.—Steps are likely to be taken in the near future to improve the water supply of the town. It is probable that the electric light plant will also be modernized.

SELKIRK, MAN.—The Town has applied to the Legislature for permission to issue bonds to the amount of \$100,000 for the establishment of a sewerage system and other improvements.

CARP, ONT.—T. A. Brown, Secretary School Board, desires tenders by Wednesday, February 15, for erection of a school house here, from plans by J. MacLaren, 104 Sparks street, Ottawa.

POINT-AUX-TREMBLES, QUE.—Plans have been prepared for new school buildings to be built here, to cost about \$60,000. Particulars may be obtained from Rev. William Shearer, of Sherbrooke.

MORRIS, MAN.—At a public meeting held last week it was decided to ask the Dominion and Provincial Governments for financial assistance towards the construction of a traffic bridge over the Red river.

EAST TORONTO, ONT.—The Globe Furniture Co., of Walkerville, Ont., are still negotiating with the Town Council for the establishment of a plant here. They are willing to spend \$50,000 on plant and building.

SHELBURNE, ONT.—The Central Dufferin Telephone Association, of which Dr. R. Rooney is president, proposes to extend the line four miles into Amaranth Township and seven miles to Black's Corners.

PORT STANLEY, ONT.—It is understood that the new owners of the Fraser House have extensive improvements in contemplation. The hotel is to be completely renovated, an electric plant installed and an incline railway built, to be operated by electricity.

CAMPBELLFORD, ONT.—The proposed by-law to provide for an electric light plant has not yet been submitted to the ratepayers, as the Waterworks and Electric Light Commissioners are considering a more extensive expenditure than was at first proposed.

COLLINGWOOD, ONT.—Capt. G. Pearsall has decided to build a large brick warehouse on Pine street.—The Department of Public Works, Ottawa, are asking for tenders up to Friday, February 17th, for construction of a wharf here. Plans on application to the Postmaster.

PORT BURWELL, ONT.—Additional work will be undertaken this spring in connection with the harbor here. A breakwater 800 feet long will be built and the east pier will be lengthened

370 feet. Another work that will be undertaken is the diversion of the Otter river.

ST. MARY'S, ONT.—J. A. Humphris has submitted to the Town Council estimates of the cost of a new steel bridge to span Trout creek.—Willis Chipman, C.E., of Toronto, has been commissioned to submit estimates for improvements to the waterworks and electric light plants, including new pumps and new dynamos.

WINDSOR, ONT.—The company which will build an electric railway from this city through Leamington and Kingsville to Chatham will be known as the Windsor, Essex and Lake Shore Rapid Railroad Co. Their American headquarters are at 1020 Chamber of Commerce, Detroit. Work is expected to commence this spring.

BATTLEFORD, N. W. T.—Tenders are invited by the Department of Public Works, Ottawa, up to Monday, February 20, for construction of three concrete piers and one abutment at this place. Plans on application to the Postmaster and at offices at Z. Malhoit, resident engineer, Winnipeg, and Paul Paré, resident engineer, Calgary.

CHILLIWACK, B.C.—The Chilliwack Light & Power Co., of which J. B. Morgan is manager, are planning to commence work early in the spring on their power plant and electric railway, the latter to extend from Chilliwack to New Westminster. The power plant and transmission line is estimated to cost \$125,000.

SASKATOON, N.W.T.—At a meeting of the Board of Trade last week, a resolution was passed asking for Government assistance for the immediate construction of a combined railway and traffic bridge.—The Fire, Water & Light Committee have recommended the erection of a hose tower and purchase of a hook and ladder truck and two ladders.

HAMILTON, ONT.—The directors of the Hamilton, Grimsby and Beamsville Railway have under consideration a plan to extend the road four miles from Vinemount.—The Bay Front Committee of the City Council have decided to petition the Dominion Government to build a revetment wall 1,875 feet in length to protect the shore, it being the opinion that the sheet piling which was proposed would not be sufficient.

VICTORIA, B.C.—There is an agitation in favor of improving the electric light plant and it is probable that some steps in that direction may be taken this year.—Arthur L. Adams has been engaged by the City Council to report on proposed waterworks improvements. He will report on both the Goldstream and Beaver Lake systems.—It is learned that the British Columbia Electric Railway Co. intend constructing a branch line to the Gorge this coming summer.

OTTAWA, ONT.—J. MacLaren, architect, has prepared plans for a new school house to be built at Carp, Ont.—The School Board will, at an early date, consider plans to provide increased school accommodation.—The Central Counties Railway Co. have petitioned the Dominion Government for authority to build a bridge from Point Fortune, on the south side of the Ottawa river, to Carillon, County of Argenteuil, also to construct a railway from Carillon to Montreal.—Plans of wharf to be built at Collingwood, Ont., and three concrete piers and an abutment to be constructed at Battleford, N.W.T., may be seen at the Department of Public Works in this city.

MONTREAL, QUE.—L. O. David, City Clerk, is asking for tenders up to noon on Thursday, 9th inst., or the supply of 5,000 feet of double jacket cotton

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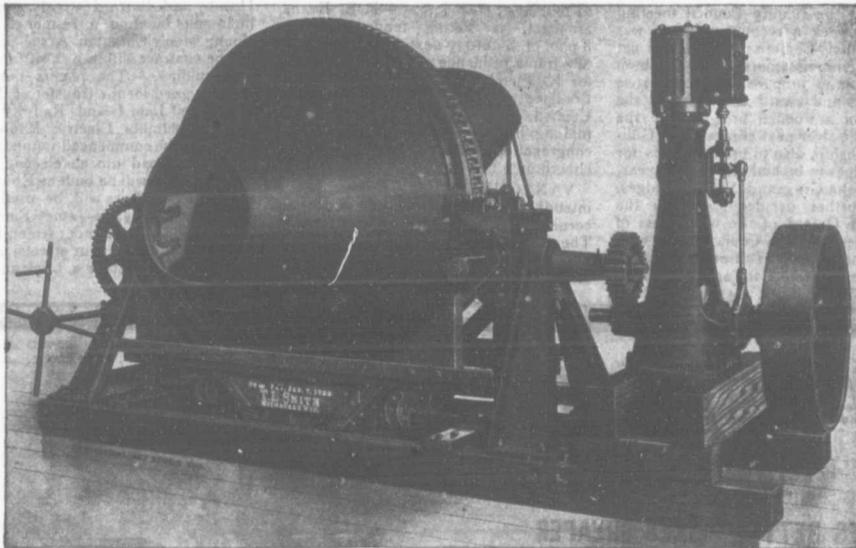
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fire hose 2½ inches in diameter, 50 fire alarm boxes, 1 85-ft. aerial ladder truck, 1 H. & L. truck, 3 hose wagons, 3 hose sleighs and 1,000 hydrant valves; also up to Thursday, March 2nd, for furnishing one 1,000 Imperial gallon steamer.—The City is applying to the Quebec Legislature for power to establish a drainage system for St. Denis ward and the Sewage Farm through the territory of outside municipalities, to empty into the Ottawa river.—It is reported that David Russell is the promoter of the \$3,000,000 hotel which it is said will be built in this city.—The directors of the Annex Presbyterian church have had plans prepared for a new building to be built on the corner of St. Viateur and Hutchison streets; estimated cost, \$15,000. The committee in charge are J. P. Gladston, W. Kennedy and J. Parsons.

LONDON, ONT.—F.W. Farncombe, C.E., is asking for tenders up to February 3 for the construction of a deep tile drain in the townships of London and Lobo.—The City and County will probably join in the erection of a new registry office.—At the County Council meeting here last week a recommendation was adopted that Commissioner Talbot act with the commissioners from Lambton and Huron to prepare plans, advertise for tenders and award contracts for the erection of a wooden bridge over the Aux Sauble river near corner of McGillivray Township, also to prepare plans for other bridges to be built during this year, including the Gray and Sylvan bridges. It was further decided to notify the County of Oxford of the willingness of the Middlesex County Council to join with them in the erection of three new bridges on the line between East and West Nis-

souri and a bridge over the Thames river north of Putnam.—The Sovereign Bank propose establishing a branch bank in this city.

WINNIPEG, MAN.—William Whyte, of the C.P.R., has been in Montreal consulting with the president and directors, and states that about \$4,000,000 will be expended in improving the railroad, including 500 miles of new track between Montreal and Winnipeg. A number of new stations will be built. It has been practically decided to double track the line from Fort William to Winnipeg, but the report that the contract has been given to Foley Bros. is not officially confirmed.—St. Giles congregation are considering plans for the enlargement of their church building.—Tenders are about to be invited for the following works: Macadam pavement on McMillan ave., from Pembina street to Hugo street, cost \$11,720; asphalt pavement on Robert street, from Lily to Edwin street, cost \$2,280; sewers, Kingsway street, from Wellington crescent to Haro street, cost \$3,580; Lipton street, from Portage to Bill ave., cost \$2,225.—F. R. Evans, architect, is taking tenders up to 8 p.m. of Saturday next for the erection of a frame residence on stone foundation for R. Fletcher.—The Canada Malting Co. have submitted a proposition to the Council to erect in this city a four-storey malting house.—The German Lutheran congregation will likely rebuild their church on a new site.

VANCOUVER, B.C.—Edward Lewis intends building a two-storey block on corner of Pender and Seymour streets.—The block to be built at corner of Richards and Pender streets by Dr. Powell, of Victoria, will be started shortly. It is

said that buildings to the value of \$300,000 are planned to be built on Pender street during the coming summer. The portion of this street lying between Granville and Hamilton streets is to be paved.

—The City Engineer has cleared a site for the proposed new reservoir, which will have a capacity of 15,000,000 gallons and will cost about \$30,000. A new main under the Narrows is also proposed.—The prospectus of the proposed Vancouver Athletic Club has been issued. Five different sets of plans have been prepared for the projected building and the promoters hope to be in a position to commence the work within a few weeks.

The proposed site is at the corner of Dunsmuir and Beatty streets.—McWhinney & Lwerke announce their intention of erecting a brick and stone business block on north side of Hastings street, adjoining the Rubinowitz Departmental Stores, to be 3390 feet and three stories high. Plans are being prepared and tenders will be invited shortly.—S. Swabano, of Wetaskiwin, N.W.T., has purchased a lot on Pender streets, between Hornby and Burrard streets, on which he intends building a residence.—The Young Men's Christian Association will let the contract within a short time for a new building.—The papers have been finally signed for the transfer of the Vancouver and Lulu Island Railway to the British Columbia Electric Railway Co.

Work will be commenced immediately to convert the road into an electric system. A sub-station will be built at Eburne and electric locomotives will be used in the handling of freight.—James Findlay has purchased a lot on Pender street, between Granville and Seymour streets, and purposes building thereon a brick and stone

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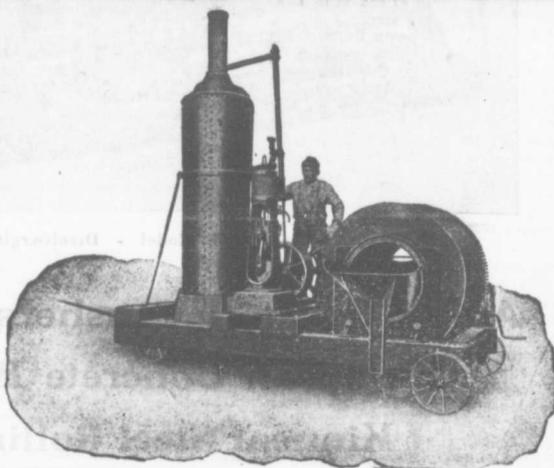
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business block.—E. E. Blackmore and W. T. Whiteway, architects, are jointly preparing plans for a warehouse to be built on corner of Water and Abbott streets by McLennan, McFeely & Co. It will be of white pressed brick with stone trimmings, three stories and concrete basement and will have a frontage of 66 feet on Water street and 132 feet on Abbott street. Tenders will be invited within a few days.—Philip White is arranging to build a three-storey business block on Granville street, to be 85 x 50 feet and built of pressed brick and cut stone. W. T. Whiteway, architect, is preparing plans.—The Vancouver Lumber Co. are having plans prepared for a large addition to their saw mill.

TORONTO, ONT.—It is announced that Mark Fisher & Sons, dry goods merchants, Montreal, intend building a five-storey cut-stone warehouse at 84 Bay street, this city.—Dr. Bond purposes building a brick residence on north-east corner of Yonge street and Roehampton ave.—A. E. West, of Brantford, will build a residence on Broadway, North Toronto.—Plans of wharf to be built at Collingwood, Ont., by the Dominion Government may be seen at the office of H. A. Gray, C.E., Confederation Life Building, this city. Tenders close February 17.—The Board of Control are asking for tenders up to Tuesday, February 7, for the construction of an hydraulic dredge, also pipe sewers on the following streets: Aberdeen ave., from Parliament street to 222 feet east of Ontario street; Royce ave., from Symington ave. to G. T. R. tracks; Hallam street, from Ossington ave. to Shaw street.—The York and Toronto Radial Railway Co. have plans under way for considerably extending the radial railway system around Toronto. The extension from Long Branch to Oakville will be undertaken at an early date and the Metropolitan extension to Lake Simcoe will be commenced as soon as spring opens.—Dr. Sheard has reported that the cost of constructing a public swimming bath near the City Hall would be \$25,000 for a brick building with con-

crete halls and floors and containing 12 bath rooms, 12 shower baths and two plunge baths.—The Management Committee of the Board of Education have recommended that a new school be built in the vicinity of Huron and Bathurst streets, north of Bloor street.—E. J. Lennox, architect, is asking for tenders up to February 17, for the erection of a cut stone or granite power house building at Niagara Falls, Ont., for the Electrical Development Co. of Ontario.—The Canadian Bank of Commerce are about to build three branch banks in this city, the locations being corner College street and Dovercourt road, corner Bloor street and Lansdowne ave., and on Queen street west, Parkdale.—P. S. Gibson & Sons, York Township Engineers, Willowdale, have just taken tenders on building a large bridge on Summerville ave., near Yonge street.—The present contract for lighting the city expires at the end of this year, and the Fire and Light Committee will at an early date consider the question of installing a civic plant for lighting the streets and municipal buildings.—The congregation of St. Cyprian's church, Dupont street, have subscribed \$2,350 for the erection of a new edifice.—Building permits have been granted as follows: R. C. Vaughan, two pairs two-storey and attic brick and stone dwellings, east side Bathurst street, near College, cost \$8,000; K. McKenzie and W. McKain, pair 2½-storey brick ve-

neered dwellings, stone foundations, north side Hallam street, near Preston ave., cost \$2,500; S. J. Graydon, two-storey and attic stone and brick dwelling, 128 Spadina road, cost \$4,500; Dr. John Hoskin, two-storey stone and brick addition to residence, 21 Dale ave., cost \$1,500; Canada Lunch Works, Limited, two-storey office and one storey workshop, frame and steel clad, east side Carlaw ave., near Eastern, cost \$2,000; Mrs. Lela S. Johnson, pair two-storey and attic brick dwellings, north side Langley ave., near Broadview, cost \$3,800; R. Saunders, two pair two-storey concrete, stone and brick dwellings, Concord ave., near Northumberland street, cost \$6,500; McCauley & Bishop, two pair two-storey and attic brick and stone dwellings, east side Markham street, near Harbord, cost \$8,000; William Apps, pair two-storey brick dwellings, 901 and 903 Bathurst street, cost \$4,000; Mr. Cawthra, interior alterations to store, cast bronze and plate glass, south-west

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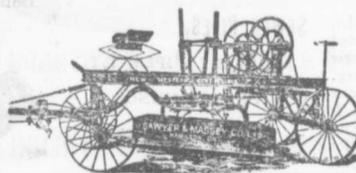
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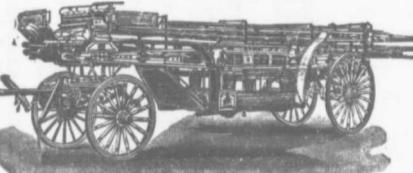
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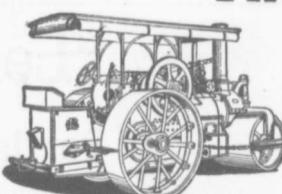
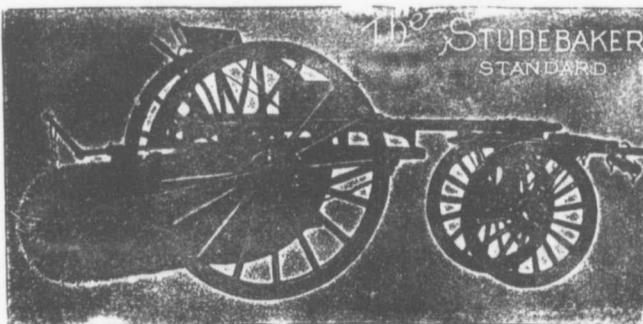
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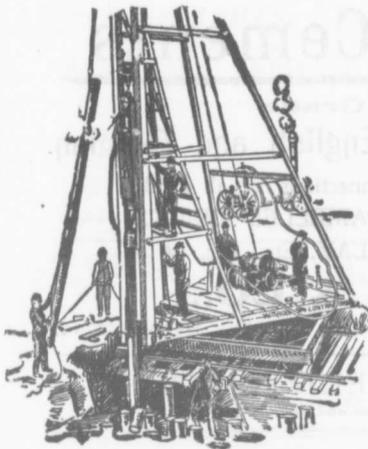
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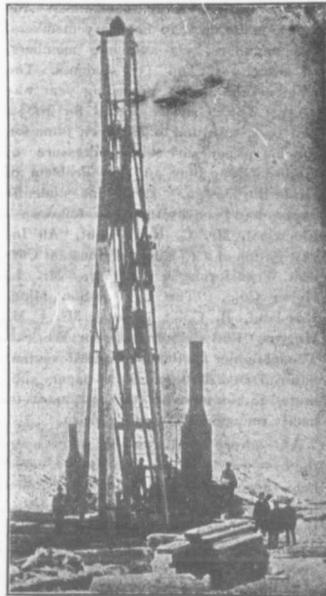
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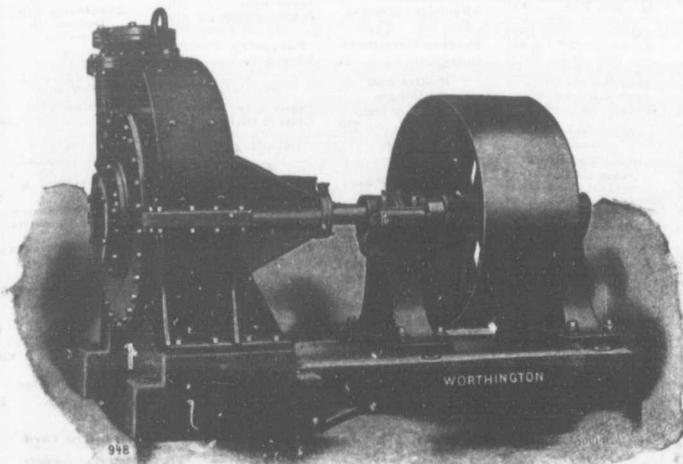
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ANNUAL MEETING OF CIVIL ENGINEERS.

The annual meeting of the Canadian Society of Civil Engineers opened in the Society's rooms, Montreal, on Tuesday, January 24th, with the president, Lieut.-Col. W. P. Anderson, of Ottawa, in the chair. There were probably one hundred members present.

The report of the council was read. It stated that the total membership was 1,253, made up of 10 honorary members, 386 members, 382 associate members, 38 associates, and 437 students. The membership in the preceding year was 1,145. The Gzowski medal for 1903-4 had been awarded to Mr. J. A. Jamieson for his paper on "The Pressure of Grain in Deep Bins, and the Problem of Grain Bin Design." Prizes for students' papers had been awarded as follows:—Electrical, Mr. C. H. Wright, "An Investigation of a 16-Kilowatt Constant Current Transformer"; mining, Mr. L. Heber Cole, "The Centre Star Mine, Rossland, B. C."; general, Mr. J. M. Hogan, "Port Colborne Harbor Works." The examiner for the mechanical section had reported that none of the papers submitted to him were of sufficient merit to justify recommendation for a prize.

A desultory discussion took place upon the best way in which the society could help those residing at remote distance from headquarters and it was decided that the Council should take the matter up and endeavor to formulate plans for making the society more interesting and valuable to outside members.

In the evening the President delivered his annual address, in which he said in part: "As engineers, we have good reason to feel proud of our past achievements, and by them we know that we are justified in looking forward confidently to a brilliant future. This splendid young country owes much to those members of our profession who developed its network of railways, its system of canals, its public works, its mining machinery, and its splendid mechanical and electrical installations. With increased population and resources, the demand for further railway and industrial extension is rapidly growing greater and more urgent."

The President referred to the water powers of the country and pointed out that a further source of prospective riches to Canada was the plentiful presence of the constituents of Portland cement in places convenient for shipment. The inception of another transcontinental railway was spoken of as the most important event of the year in Canada, from an engineering point of view, and it was stated that this great national undertaking would for many years to come create a demand for the services of engineers of all grades, that could not but be stimulating to the profession.

A subject that appeared to demand the immediate attention of the society, was the advocacy of the establishment of some central bureau for the registration of plans of all surveys in Canada, and cognate to this question was that of better surveys of the whole Dominion. Work heretofore done had not been based upon any gener-

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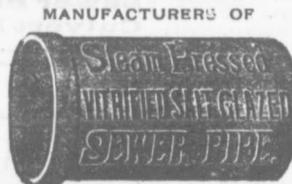
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al comprehensive scheme, but had been undertaken merely to meet exigencies as they arose. Canada had now surely grown sufficiently large and important to warrant the adoption of a general scheme connecting the country geodetically.

The members spent most of the second day in visiting the works of the Dominion Bridge Company, the Dominion Wire Manufacturing Company, the Dominion Wire Rope Works, and the Allis-Chalmers Bullock Company.

Mr. E. M. Archibald, B. Sc., read a paper on "The Effect of Load Factor on the Cost of Electrical Power," and Mr. C. B. Smith spoke on "The Construction of the Canadian Niagara Power Company's Plant, Niagara, Ont."

The election of officers resulted as follows:

President—Ernest Marceau, Montreal.
 Vice-president—C. H. Keefer, Ottawa.
 2nd Vice-president—D. McPherson, Montreal.
 3rd Vice-president—G. A. Mountain, Ottawa.

Treasurer—H. Irwin.
 Secretary—Prof. McLeod, Montreal.
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 Councillors—John Kennedy, Montreal; W. S. Tye, Montreal; D. A. Keefer, New Westminster; C. H. Rust, Toronto; A. E. Doucet, Quebec; Phelps Johnston, Lachine; R. W. Leonard, St. Catharines; P. W. St. George, Montreal; W. B. Mackenzie, Moncton; Dr. Owen, Montreal; M. J. Butler, Ottawa; R. J. Durlay, Montreal; G. J. Desbarats, Sorel; Dr. J. B. Porter, Montreal, and H. C. Burchell, Newfoundland.

Dr. E. Haanel, Dominion Superintendent of Mines, read a paper on "The Electro-Thermic Production of Iron and Steel."

The annual banquet of the society was a most successful event.

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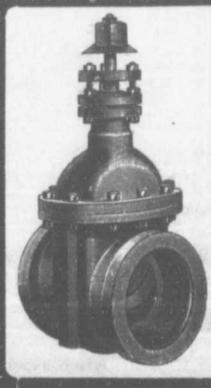


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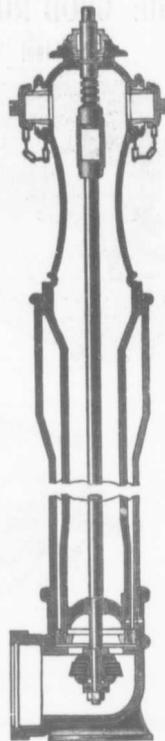
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Our Toronto Hydrants are fitted with frost cases separated from the Hydrant, thereby preventing injury caused by upheavals of the ground by frost.



Waterworks Supplies
OF EVERY DESCRIPTION

**Pumps for Boiler Feeding,
Hydraulic Elevators and all
duties requiring the delivery of
liquids under heavy pressure**

**CANADA FOUNDRY COMPANY
LIMITED**

Head Office and Works: TORONTO, ONT.

District Offices: MONTREAL HALIFAX OTTAWA WINNIPEG CALGARY VANCOUVER ROSSLAND

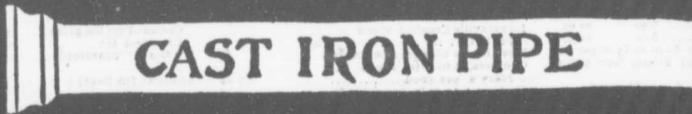
THOS. J. DRUMMOND,
President.

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Vice-President

Montreal Pipe Foundry Co., Limited

Special
Castings
Flange Pipe
Branches
Hydrants
Valves



CAST IRON PIPE

Valve Boxes
and
general
Water
Works
Supplies

Works at: { LACHINE, QUE.
THREE RIVERS, QUE.
LONDONDERRY, N. S.

Combined daily capacity:
175 Tons Pipes and Castings.

HEAD OFFICE CANADA LIFE BUILDING. MONTREAL

JAMES THOMSON, President. J. G. ALLAN, Vice-President. JAMES A. THOMSON, Secretary. JOHN GARTSHORE, Treasurer.

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO. LIMITED.

Manufacturers of

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



CAST IRON PIPE

3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

HAMILTON, ONT

THE GOOD ROADS MACHINERY COMPANY, LIMITED, Hamilton, Canada

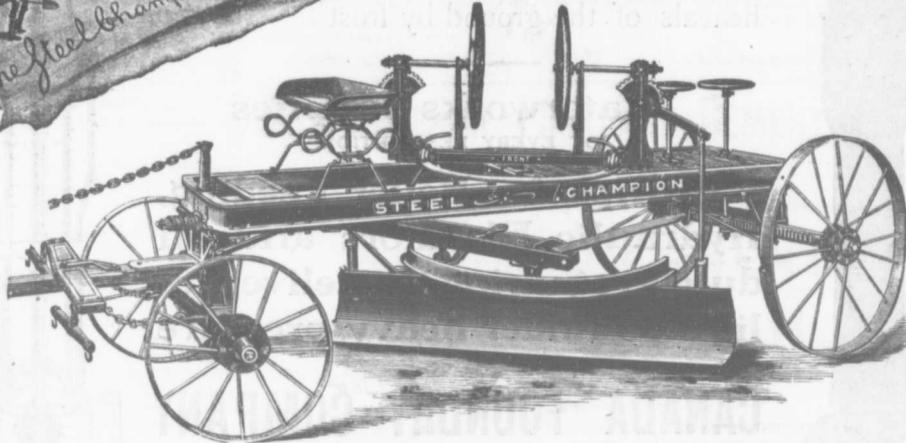
The Steel "CHAMPION" Reversible Food Machine

The Simplest, Strongest and Best. Don't it look it? Built for service. A strictly High-Grade Road Machine.



"CHAMPION"

Rock Crushers, Elevators, Revolving Screens, Street Mud Cleaners, Sweepers, Road Graders, Road Rollers, Macadam Spreading Wagons, Road Plows, Portable or Stationary Engines, Wheel and Drag Scrapers, Etc.



The Steel "CHAMPION" is the King of Graders.

All mechanics agree that the simpler the machine the more valuable it is. In complicated machines look out for trouble and expense

Send for latest printed matter and our 1905 Calendar to

Good Roads Machinery Company, Limited, JOHN CHALLEN, President and General Manager.

Address—Late Killey Beckett Works, 144 York Street, HAMILTON, ONT.

Prices of Building Material

(Continued from page 12.)

TORONTO PRESSED BRICK AND TERRA COTTA WORKS		F.O.B. F.O.B.	
		Milton, Ont. Montreal.	
Red No. 1	12 50	12 00	12 00
" 2	10 50	10 00	10 00
" 3	8 50	14 00	14 00
Buff No. 1	15 00	30 00	30 00
" 2	13 00	18 50	18 50
Brown	20 00	25 50	25 50
Roman Red	30 00	30 50	30 50
" Buff	30 00	33 50	33 50
" Brown	35 00	40 50	40 50
Hard Building	6 50	12 00	12 00
" Sewer	6 50	12 00	12 00
" Back-fig.	6 00	11 50	11 50
Moulded and Ornamental from \$2.00 to \$5.00 per 100.			
Terra Cotta String Courses and Friezes, from 50c. to \$2.00 per ft. run.			
Roofing Tiles, \$2.00 per 1,000, \$25.00 Montreal.			
SEAMSVILLE BRICK AND TERRA COTTA CO.		F.O.B. F.O.B.	
		Seamsville, Montreal.	
Red Peerless Facing	\$15 00	\$21 50	\$21 50
" No. 1	14 00	17 50	17 50
" No. 2	12 00	17 50	17 50
" No. 3	10 50	15 00	15 00
Brown Peerless Facing	20 00	25 50	25 50
" No. 1	18 00	22 50	22 50
Buff Peerless	20 00	25 50	25 50
" No. 1	18 00	23 50	23 50
" No. 2	15 00	20 50	20 50
Moulded and Ornamental Brick from \$2 to \$10 per Ct.			
Roman Red (Size 12 1/2 x 4 1/2 in.)	39 00	35 50	35 50
" Buff	30 00	35 50	35 50
" Brown	34 00	39 50	39 50
Vitrified Paving Brick No. 1	18 00	23 50	23 50
" No. 2	14 00	20 50	20 50
Sewer	8 00	13 50	13 50
Roofing Tile	22 00	28 00	28 00
FIRE BRICK		F. O. B. Toronto	
TORONTO POTTERY CO.		Car lots	
Bord.	30 00 M.	25 00 M.	25 00 M.
W. W. Co.	22 50 M.	27 50 M.	27 50 M.
Savage Crown	28 50 M.	35 00 M.	35 00 M.
Ramsay	30 00 M.	30 00 M.	30 00 M.
STONE		Toronto. Montreal.	
Common Rubble per 1 cu. yd., delivered at building	13 50	11 00	
Large Flat Rubble, per 10 cu. yd., delivered	14 00	18 00	
Foundation Blocks, per c. ft.	4 1/2	5 1/2	
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 3 in., per ft.		15	
Amherst Red Sandstone Ash-west. N. S., per cub. ft. on cars at quarry 40c. at quarry		40	
Back " N. B., brown or red stone f. o. b. Quarries Montreal	45	45	
Myers-Northport Red or River	30	41	

Philip Gray Sandstones f.o.b. per cubic foot	75	65
Stanstead granite paving blocks, 8 in. to 12 in. x 6 in. x 4 1/2 in. per M.		50 00
Granite curbing stone, 6x 8 in. per lineal foot		70
Boutouche Olive Freestone	85	65
Oliver Sandstone (Indian-town, N. B.)	80	
Brown Sandstone (Sackville, N. B.)	80	70
Most red sandstone, per cu. ft.		60
Black Pasture buff stone per cu. ft.		50
Hagerston Crushed Stone per ton	1 25	
Nova Scotia blue grey, per cu. ft.		45
Course, 6 to 8 in. f. o. b. St. Mary's, per cord		7 00
Roofing, 6 to 12 in. per cubic ft.		15
Dimension Stone, f. o. b. St. Mary's, per cubic foot		35
Granite (Laurentian Pink) Ashlar, 4 to 12 in., rise 3 in., per c. ft.		25
Dimension Stock Granite (Laurentian Pink) for building purposes, per c. ft., f. o. b. quarries		40
Do., for polishing purposes, up to 2 tons weight, per cubic foot		70
Dimension stock granite for building purposes, per cu. ft. Do., for polishing purposes, up to 2 tons weight, per cubic ft.		60 00
Paving sets, per thousand block		60 00
CREDIT VALLEY STONE.		
Rubble, per ton		60
Brown Coursing, up to 12 per sup. yard		1 75
Brown dimension, per cub.		70
Grey central g., per sup. yard		1 25
Grey dimension, per cub. ft.		40
ROMAN STONE, F. O. B. Factory.		
6" x 3" Silla, tooled seated and throated 50c. per lineal foot		
Window Heads and Ashlar, 40c. per square foot.		
Window and Door Quoins tooled 40c. per superficial foot.		
String Courses, Moulded or Ornamental, 6" to 12" rise 50c. to \$1.50 per lineal foot.		
Hollow wall tooled finish 14" thick 40c. per square foot.		
SLATE.		
Roofing (W square).		
red.	20 00	20 00
purple	9 00	11 00
to 10 c.		
unfading green	11 00	11 00
black	9 00	9 00

Terra Cotta Tiles, per sq. ft.	23 00	21 00
Ornamental Black Slate Roofing		77 50
PORTLAND CEMENT		
(CARLOADS.)		
Canadian (Packages, 350 lbs. net.)	Toronto.	Montreal
Rathbun's Star	1 70	1 80
Trowel	1 85	1 95
Samson	1 75	1 85
Magnet	1 55	1 65
Monarch	1 80	1 90
Hercules	1 75	1 75
Imperial		1 80
Crescent 375 lbs. gross	2 50	2 65
Diamond 350	2 20	2 50
" Giant" Brantford	1 75	2 00
American (in Bags):		
"Helderberg"		1 90
Alsen		2 00
Lehigh, in bbls., 375 lbs. cotton sacks, 350 net	2 35	2 10
" " 350 net	2 00	2 10
" " 350 net	2 10	2 10
"Iron Clad" in bags 350 lbs.		1 80
"Invicta" " " "		1 65
"Adirondack" " " "		1 50
Vulcanite (The Toronto Pottery Co., Limited. Toronto) 35 lbs. per bbl.		1 80
" in paper bags		2 00
" wooden bbls.		2 10
" cotton bags		2 10
English (in Barrels):		
Brook's Shoobridge Anchor	2 35	2 40
Belgian (in Barrels):		
"Jossion"	2 60	2 70
"North's Condor	2 05	2 10
"White Cross"	1 90	2 00
Hammer	1 75	1 80
White Star	2 15	2 25
Samson	1 80	1 90
German (in Barrels):		
Offenbacher		2 35
Alsen	2 65	2 95
Dyckerhoff	2 65	2 75
Hercules	2 35	2 35
Kenne's Superfine "Whites"	10 00	12 00
Kenne's Coarse "Whites"	6 50	7 00
Fire Bricks, Newcastle, per M	27 00	33 00
" " Scotch	28 00	33 00
Plaster Calcined, N.B.	1 70	1 60