

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 AND WINNIPEG, DECEMBER 21, 1904

No. 45

THE CANADIAN CONTRACT RECORD

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VITRIFIED BRICK AND BRICK PAVEMENT

Bids will be received by the undersigned up to 5 O'CLOCK on THURSDAY, 22ND DECEMBER.

(a). For supplying vitrified repressed brick for a pavement on King Street from Wellington Street to Ridout Street, about 13,000 yards.

(b). For supplying, laying and constructing on a 4' concrete base a vitrified brick pavement on said King Street from Wellington Street to Ridout Street.

(c). For laying and constructing with 5 inch concrete base the said pavement, Corporation of London to supply the brick.

Plans, specifications and form of tender at this office.
A. O. GRAYDON,
City Engineer,
London, Canada.

TENDERS

Tenders addressed to the undersigned will be received until noon THURSDAY, THE 22ND DECEMBER, 1904, for the labor and material required for the proposed West End Trunk Sewer and Watermains in the City of Edmonton—

LABOR—Excavation, Pipelaying and Back-filling on 13,200 lba. ft. Sewer and Watermains.

Building Manholes, Valve Chambers and Catchbasins.

Setting Hydrants.

MATERIAL—Cast Iron Pipe and Specials, 4 inch to 12 inch diameter.

Hydrants, 8 ft. Trench, 2 way and steamer Gate Valves, 4 inch to 12 inch.

Brass Goods, Service Boxes, Galvanized and Lead Pipe.

Vitrified Pipe from 6 inch to 24 inch diameter with bends and junctions.

Prices for material to be F. O. B. Edmonton in carload lots, delivered in city yard not later than April 1st, 1905.

Plans and specifications may be seen and forms of tender and other information obtained at the office of the undersigned. The lowest or any tender not necessarily accepted.

A. J. McLEAN,
City Engineer.

DEBENTURES FOR SALE

Tenders are invited by the undersigned until DECEMBER 31ST NEXT, for the purchase of fifteen thousand dollars worth of water works debentures of the Town of Red Deer, N.W.T.

L. C. FULMER,
Secretary-Treasurer.

TENDERS WANTED

Tenders will be received up till 5 o'clock, 20th instant, for all Trades required in the erection of BrickTown Hall in the Village of Ailsa Craig. Plans and specifications may be seen on and after MONDAY, THE 19th, at the office of E. B. Smith, Ailsa Craig, or J. A. Humphries, St. Mary's.

The lowest or any tender not necessarily accepted.

E. B. SMITH,
Village Clerk, Ailsa Craig.

Tenders for Debentures

Tenders will be received at the Town Clerk's Office, Town of Whitley, up to FRIDAY, 23rd DECEMBER, 1904, for \$3000 Local Improvement Debentures (cement walks) bearing interest at 4%—repayable in 20 years in equal annual payments of \$74.95.

Dated 5th Dec., 1904, and guaranteed by Municipality.

JOSEPH WHITE,
Clerk Town of Whitley.

CITY OF WINNIPEG

TENDERS

FOR

Waterworks Valves.

Sealed tenders, addressed to the Chairman of the Fire, Water and Light Committee, for the supply of 200-6 and 150-4 waterworks gate valves, will be received at the office of the undersigned up to 8.30 p. m. on MONDAY, JANUARY 2nd, 1905.

Forms of tender and all necessary information may be obtained from H. S. Ruttan, City Engineer, Winnipeg, Can.

Each tender must be accompanied by an accepted cheque, cash deposit or draft 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 successful tenderer to enter into a written contract 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.

Winnipeg, December 14, 1904.

The Manitoba Pressed Brick Company, Limited, has been granted incorporation by the Manitoba Legislature, the headquarters to be in Winnipeg, and the capital stock to be \$60,000. A. G. Akin, builder, of Winnipeg, is one of the promoters.

CONTRACTS OPEN.

APPLE HILL, ONT.—A movement is on foot to build a Catholic church here

IRON BRIDGE, ONT.—Government engineers have taken surveys for a bridge to be built here.

STE. CUNEGONDE, QUE.—Alterations and additions to the town hall are proposed.

LADYSMITH, B.C.—The City Council have just passed a by-law to raise \$15,000 for electric lighting.

COURTRIGHT, ONT.—It is said that the Pere Marquette Railway Co. will build an elevator here.

NEWMARKET, ONT.—George Thompson has decided to build four more houses on Ontario street.

TILSONBURG, ONT.—The Woodstock Wind Motor Co. propose to locate in this town if given a bonus.

THAMESFORD, ONT.—The advisability of building a new hall is being considered by the I. O. O. F. Society.

NORTH BAY, ONT.—John Ferguson intends rebuilding in the spring the block destroyed by fire last week.

ORILLIA, ONT.—It is probable that steps will be taken in the near future to erect a new Y. M. C. A. building.

HARRIETSVILLE, ONT.—S. E. Facey has decided to enlarge and improve his cheese and butter factory.

BROCKVILLE, ONT.—F. I. Richie has purchased the Opera House here and will spend \$10,000 on improvements.

THORNHILL, ONT.—H. Parkinson has purchased property on which he intends building a residence next summer.

EDMONTON, N.W.T.—The Council are now perfecting arrangements for carrying out the west end sewerage system.

TEMAGAMI, ONT.—It is understood that a company, headed by Dan O'Connor, will build a large hotel at this place.

CHATHAM, ONT.—The County Council will grant \$6,000 for a new bridge over Jeannette's creek on the Tecumseh road.

NIAGARA FALLS, ONT.—The Trustees of the Niagara Falls General Hospital have purchased a site for the proposed building.

SMITH'S FALLS, ONT.—A by-law to raise \$12,000 for a waterworks intake pipe will be placed before the electors on January 2nd.

ST. MARY'S, ONT.—Church & Watt, Limited, are offering for sale \$10,000 4 per cent. bonds guaranteed by the town. Tenders received up to 27th inst.

ESSEX, ONT.—W. D. Beaman, Town

Treasurer, will receive offers up to the 24th inst. for the purchase of \$3,500 5 per cent. local improvement debentures.

SHERBROOKE, QUE.—A by-law to grant a bonus of \$15,000 to the Modern Bedstead Co. was voted down last week by the ratepayers.

WEST SELKIRK, MAN.—A waterworks system for fire protection purposes and an extension of the sewerage system are proposed.

WETASKIWIN, N. W. T.—J. S. Orr is asking for tenders up to February 1st, 1905, for furnishing 350 school desks for the Public School Board.

NAPANEE, ONT.—W. T. Waller, Chairman Finance Committee, will receive bids up to 24th inst. for purchase of \$5,000 20-year 4 per cent. debentures.

SALT STE MARIE, ONT.—The building of the new Methodist church will be continued in the spring and it is hoped to have it completed next year.

ALEXANDRIA, ONT.—Alex. L. Smith, Municipal Clerk, will receive bids up to December 28th for purchase of \$14,620.89 local improvement debentures.

RIVER JOHN, N. S.—Hugh Campbell will receive tenders up to December 31st for the construction of a school building here, to be completed by July 1st, 1905.

CALGARY, N. W. T.—The Alberta Club has been organized here and will erect a fine building. J. J. Young is president and G. C. Porter secretary-treasurer.—The C. P. R. yards here will be considerably enlarged.

FORT WILLIAM, ONT.—J. C. Hunter, the promoter of the proposed smelting industry here, states that a site has been selected on the banks of the Kaministiquia river.

KATWOOD, ONT.—It is understood that W. W. Forest purposes erecting a new mill next year in which he will install an electric light plant for the purpose of lighting the village.

ARCOLA, N. W. T.—Bids for the purchase of \$12,000 5½ per cent. debentures will be received by J. J. Murison, Secretary-Treasurer of the Corporation, up to February 15th.

RENFREW, ONT.—W. F. Thomson, of the Rose Point Hotel, Parry Sound, is negotiating with the Board of Trade regarding the erection here of a hotel to cost about \$40,000.

BRANTFORD, ONT.—By-laws will be submitted to the ratepayers on January 2nd to raise \$60,000 for construction of a drainage system and \$50,000 for waterworks purposes.

MILVERTON, ONT.—Arrangements have been completed to build a shoe factory in this village, for which purpose a joint stock company will be formed. J. G. Grosch & Sons are interested.

PRINCE ALBERT, N. W. T.—Lamont & Turgeon, solicitors, are applying, on behalf of the Battleford and Lake Lenore Railway Co., for permission to change the location of the proposed railway.

COLLINGWOOD, ONT.—The Council have passed a by-law authorizing the issuing of \$9,000 of debentures.—A by-law to raise \$5,000 for extension of the waterworks system was considered at the last Council meeting.

FREDERICTON, N. B.—C. H. LaBillois, Commissioner of Public Works, is asking for tenders up to January 3rd, 1905, for rebuilding the Forest City bridge and the Five Mile Brook bridge, both in York County.

PORTAGE LA PRAIRIE, MAN.—Drs. F. B. and J. E. Lundy have purchased the property east of Hill's store

and intend building thereon a two-storey brick block with offices on the ground floor and apartments above.

NEW WESTMINSTER, B. C.—It is reported that James J. Hill, the American railway magnate, is negotiating for the purchase of the water rights at Bridle Falls, on Harrison Lake, with the object of developing the power.

KINCARDINE, ONT.—Bids for the purchase of \$4,500 20-year 4 per cent. debentures, issued for extending the waterworks and electric light plants, will be received by J. C. Cook, Chairman Finance Committee, up to December 27th.

ST. ALBERT, N. W. T.—The ratepayers of this place will vote on a by-law December 31st to raise the sum of \$30,000 for the purpose of building a grist mill and establishing in connection therewith an electric light plant and fire protection system.

STRATFORD, ONT.—It has been definitely decided to build the proposed armories on the north-west corner of Albert and Waterloo streets.—Several thousand dollars have been subscribed towards the erection of a new skating and hockey rink.

ST. JOHN, N. B.—The surveys now being made by F. A. Barbour, C. E., of Boston, for waterworks extension to Loch Lomond will be completed within two weeks, when plans and specifications will be prepared so that the work may be started early in the spring.

LONDON, ONT.—The question of constructing a new sewer on Dundas street, between Wellington and Adelaide street, is under consideration.—Sergeant Farnsworth will build a brick veneer cottage on Piccadilly street, between Adelaide and Elizabeth street.

BERLIN, ONT.—The Waterloo County Council have endorsed the project for the erection by a group of five or six counties of a sanitarium for the treatment of consumptives.—Mr. Breithaupt purposes extending the Berlin and Waterloo street railway to Breslau.

NELSON, B. C.—Estimates for building a new school have been submitted by Messrs. Carrie and Cane. Mr. Cane estimates that a suitable building will cost \$24,900 without heating or ventilating, while Mr. Carrie's estimate for the building complete is \$37,500. The cost is greater than was anticipated and it may be found necessary to adopt a cheaper plan.

ST. CATHARINES, ONT.—L. K. Jones, Secretary Department of Railways and Canals, Ottawa, will receive tenders up to January 3rd for supply of timber, hardware, castings, paints, oils, etc., for use on the Welland canal and its branches for the year 1905. Specifications at the office of the Superintending Engineer, this city.

KEEWATIN, ONT.—The Keewatin Flour Mills Co. have instructed the Allis-Chalmers Co., of Milwaukee, to prepare plans for a first-class flour mill at this place, with elevators, barrel factory, railway sidings, etc. Tenders for the work will be called for at an early date so that the work of construction may be begun in the spring.

HALIFAX, N. S.—The Board of Fire Wardens have prepared their estimates for next year, which include \$23,000 on capital account for the erection of an engine house to replace the Queen street house, purchase of a new steam engine of 1,000 gallons capacity, building an addition to the central fire house and the completion of the fire alarm system.

SARNIA, ONT.—By-laws will be submitted to the ratepayers on January

2nd to raise \$15,000 for the construction of a sewerage system for portions of the North Ward and \$2,000 for purchase of pipe for extension of waterworks main.—The Humphries Manufacturing Co., of Mansfield, Ohio, have made a proposition to establish a factory here for the manufacture of pumps and brass goods.

OWEN SOUND, ONT.—The General and Marine Hospital Trust have decided to take steps towards providing increased accommodation. It is proposed to erect a new main building, of which the present hospital will be an annex.—The Davis-Smith-Malone Co. purpose building a brick warehouse on the east river front, to be 25 x 100 feet, one storey.

GUELPH, ONT.—A by-law will be voted on January 2nd to provide \$33,000 to extend the Collegiate Institute and \$7,000 for extension of waterworks system.—A. H. MacDonald, of this city, has given notice that the Walkerton and Lucknow Railway Co. will apply to Parliament for authority to build an extension from Hanover easterly to a point connecting with the Toronto, Grey and Bruce Railway between Fiesherston and Dundalk and southerly from Lucknow to Wingham, also a branch line from Teeswater to Kincardine.

GALT, ONT.—The Bank of Toronto has purchased property on corner of Main and Waterloo streets and will next year erect a fine block thereon.—Section No. 2 of the lateral sewers may be constructed by day labor, the engineer's estimate for the work being \$5,000 less than the lowest tender received from contractors. Estimates on a sewerage construction plant, engine, etc., will be secured by the Engineer.—A by-law to grant a loan of \$5,000 to the Grand River Metal Co. will be voted on by the people on January 2nd.

HAMILTON, ONT.—The Landed Banking & Loan Co. have purchased the building at the north-east corner of James and Main streets and will establish handsome bank premises there when the present leases expire.—The Eastern Building Co. are about to build 55 more houses. Forty of them will be erected on Keith street and the remaining fifteen near the corner of Sherman ave. and Barton street.—E. B. Wingate, C. E., has been commissioned by the County Council to report on the building of a retaining wall on the D. & W. road above Dundas.—J. Luxton will build a brick residence on Stanley avenue, between Queen and Kent streets.—It is reported that Messrs. Tovell have sold five acres of land at King street and Sherman ave. to a local manufacturer, presumably for building purposes.—T. Beasley, City Clerk, will receive tenders up to 4 p. m. of 21st inst. for supplying one hose wagon.

WINNIPEG, MAN.—By-laws to provide funds to build new police stations and to establish a gas plant were defeated by the ratepayers last week.—Building permits are still being issued in large numbers. The aggregate value to date is upwards of \$9,000,000.—C. J. Brown, City Clerk, will receive tenders up to Monday, January 2, for the supply of 200 six-inch and 150 four-inch waterworks gate valves. Information from H. N. Rutan, City Engineer.—Tenders are being taken this week for the construction of asphalt pavements, sewers and granolithic walks.—The City Council have passed a resolution that the Canadian Pacific Railway Co. be instructed to proceed at once with the construction of a subway at Rachel street.—Robert Howe, inspector of the Canadian Fire Underwriters' Association, has submitted his report on a fire protection system, in which he recommends a number of improvements.—Arrangements are being completed for the erection of two large

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apartment blocks, one on Broadway to cost about \$100,000, and the other adjacent to Portage ave., to cost \$75,000. Oldfield & Gardiner are acting for the promoters.

OTTAWA, ONT.—The Ottawa Humane Society is taking vigorous steps to secure the establishment of a public abattoir.—W. J. Campbell has purchased five lots at the corner of Wellington and Broad streets and is having plans prepared for a boiler manufactory and foundry to be built thereon.—Contractors who purpose tendering for breakwaters and dredging at Rondeau and Port Stanley are notified that they will have to give bidders for two separate amounts in each tender for these works; one amount being for dredging and the other amount for cribwork.—The City Engineer has asked that \$1,200 be provided for the purchase of water meters. He has recommended that an appropriation be made for preliminary surveys in connection with a water supply from Meach's Lake.

VANCOUVER, B.C.—N. Thompson, of N. Thompson & Co., has returned from England, where he is said to have completed arrangements for the construction of a steel drydock for this city. He states that it is likely that an English firm will establish a steel-making plant here.—The Building Committee of the Board of Education have recommended that the fan system of heating be installed in the Mount Pleasant school.—Grant & Henderson, architects, are preparing plans for a brick and stone building, four stories and basement, to be erected on the corner of Pender and Richards streets, to be 50 x 120 feet, containing stores on the ground floor.—Parr & Fee, architects, have prepared plans for a three-storey business block to be built on the north side of Water street, adjoining the Carter House, to be 66 x 132 feet, of brick and stone. Tenders will be invited shortly.—C. F. Mills has commenced the erection of a large cafe and boarding house at the corner of Laurel street and ninth ave., Fairview.

GODERICH, ONT.—The County Council have decided to issue \$20,000 of debentures to meet expenditures in building bridges and an addition to the House of Refuge.—Tenders will be invited immediately for the construction of a bridge across the Sable river between the townships of Bosquet and Stephen.—The Road and Bridge Committee of the County Council have recommended

that the following bridges be erected the coming year, according to the engineer's report, and that tenders be called for and contracts let at the coming meeting of the council in January: A bridge in Ashfield, south of Amberley, over the Eighteen Mile River, on the lake shore, to be 95 feet long and 16 feet wide; on the boundary between Ashfield and West Wawanosh over the Nine Mile River, to be 65 feet long and 16 feet wide; over the Maitland River between Morris and Turnberry, 110 feet long and 16 feet wide; two bridges on the boundary between Tuckersmith and Hibbert, one over the Bayfield river, 65 feet long and 16 feet wide, and the other over Morrison's creek between Huron and Perth.

MONTREAL, QUE.—The DeLano Osborn Engineering Co. have been engaged to inspect and report upon the structural steel to be employed in the construction of the new works of the Canada Car Co. Land has been purchased by this company at Cote St. Paul, near this city, where an extensive steel car manufacturing plant will be erected. It is estimated that the entire plant will cover about eight acres.—George Jannin, Waterworks Superintendent, will receive tenders up to Tuesday, January 31st, 1905, for building and erecting in the pumping station in this city an electrical driven turbine pump of 5,000,000 imperial gallons capacity and one of 12,000,000 gallon high duty steam pumping engine.—The City Clerk will receive tenders up to Thursday, 22nd inst., for the supplying and delivering of about 7,000 square yards of granite paving blocks, 200,000 Scoria paving blocks and 30,000 lineal feet of granite or grey limestone curbstone, the whole to be delivered by May 1st, 1905.—Marchand & Haskell, architects, have prepared plans for the rebuilding of the Notre Dame Hospital, at an estimated cost of \$250,000. The location will be on Sherbrooke street, between Maisonneuve and Champlain streets.—The Market Committee will ask the Finance Committee to provide \$60,000 for improvements at the Eastern Cattle market, including new stables.—The Militia Department at Ottawa have finally decided to erect a military school on Lafontaine Park, work on which, it is said, will be started next spring.—It is now definitely known that the Robert Simpson Co., of Toronto, are negotiating for a site in this city on which to erect a

large departmental store. They are reported to have made an offer for the First Baptist church property at 2,165 St. Catherine street.—The Road Committee have decided to ask for the following appropriations: Repairs to macadamized streets, \$150,000; permanent pavements, \$200,000; permanent sidewalks, \$100,000; gulleys, \$5,000; street crossings, \$5,000; additions to asphalt plant, \$5,000.—The Dominion Government have purchased sites for branch post offices, one on St. Catherine street and the other on Cathedral street.

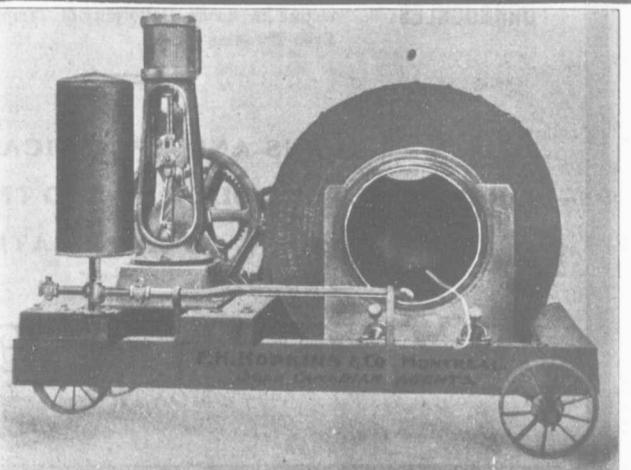
TORONTO, ONT.—The plans submitted by Sproatt & Rolph, architects, have been adopted by the Royal Canadian Yacht Club for a new club house at the Island to cost \$30,000. The construction will be wood covered with clapboarding.—The Dominion Bank have purchased the property on the south-east corner of Dovercourt road and Bloor street for a branch bank.—E. C. Whitney, of Ottawa, has donated \$15,000 to Toronto University as a nucleus of a residential building.—James Bishop, of Markham, has purchased property on Markham street, this city, on which he will build three houses.—The promoters of the proposed hotel on Ward's Island agree to spend \$20,000 on improvements before the lease is signed and \$300,000 within five years.—The A. D. Gall Petroleum & Chemical Co. are looking for a site in this city on which to build a large oil refinery.—The Canada Foundry Co. purpose establishing in connection with their works a plant for the manufacture of steam shovels, pile drivers, wrecking appliances and other machinery necessary for railway work and dock and bridge construction.—The City Architect reports that it will cost \$3,000 to convert the residence on the Gzowski property into a building suitable for a museum.—The City Council have finally selected the Perkins property at the northwest corner of College and St. George streets as the site for the proposed Carnegie library building.—The International Varnish Co. have been given a deed of land 300 x 20 feet on Carlaw ave. as a site for a factory.—Building permits have been granted as follows: Louisa T. Morris, two-storey brick addition and brick case old portion of dwelling, 153 Park road, cost \$3,000; James Dilworth and Walter Braybon, pair of 2½ storey stone and brick dwellings, west side Albany Ave., near Wells street, cost \$6,000; Fred Diver, alterations to ware-

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house, wood and galvanized iron cornice, 70 Pearl street, cost \$2,000; Gutta Percha and Rubber Manufacturing Co., additional brick storey to office building, south-east corner Yonge and Wellington streets, cost \$10,000; Wm. Pudifin, three pair two-story stone and brick dwellings, west side Gladstone ave., near College street, cost \$12,000; J. McGonegal and W. Ward, pair three-story brick veneered dwelling, roughcast kitchens in rear south side Langley ave., near Howland, cost \$2,600; Isaac W. W. Plewes, two-story and attic stone and brick dwelling, south side McMaster ave., near Rathnally, cost \$3,000; S. Lightfoot, 2½ storey brick dwelling, Dundas street, near Roncesvalles ave., cost \$2,600; A. E. Rea, five-storey concrete and brick factory, east side Spadina ave., near King street, cost \$35,000; W. E. Watson & Co., six 2½ storey brick dwellings, stone foundations, south-east corner Waimor road and Dupont street, cost \$18,000; W. H. Hutchinson, 2½ storey stone dwelling, 3 Castle Frank Crescent, cost \$4,000; James Strachan, two-story and attic brick and stone dwelling, 89 Roxborough street east, cost \$4,500; Luke Crocker, pair two-storey and attic brick dwellings, 349 and 351 Ossington ave., cost \$4,000; Wm. J. Walsh, pair two storey brick dwellings, northwest corner Wyatt ave. and River street, cost \$3,400; Mrs. Mary Crozier and Mr. Nightingale, two two-storey roughcast dwellings, south side Muir ave., near Sheridan ave., cost \$2,400; James N. Sinclair, two-storey concrete warehouse, 114-120 Adelaide street west, cost \$3,000; Waters & Elliott, three two-storey and attic brick and roughcast dwellings, west side Palmerston ave., near Vermont ave., cost \$3,500; M. B. Vandervoort, two-storey brick dwelling, corner Logan ave. and Natalie street, cost \$1,600; Charles Bulley, two-storey and attic detached brick dwelling, 18 Withrow ave., cost \$3,000; A. B. Coleman, five pair two-storey stone, brick and plaster dwellings, east side Brock ave., near Moutray street, cost \$13,000; J. Carl Reed, 2½ storey brick and stone dwelling, east side McKenzie ave., near Castle Frank, cost \$4,200; H. H. Snyder, two-storey and attic brick dwelling, north side Chestnut Park road, near Roxborough ave., cost \$6,500; King Bros., two pair two-storey brick dwellings, Rushelme road, near Hepbourne street, cost \$8,000.

FIRES.

Residence of Sheriff Smith at Digby, N.S., totally destroyed; loss \$3,000.—The Campbell House at Cayuga, Ont., owned by J. A. Hoshill; loss \$12,000.—St. Michael's Roman Catholic church at Belleville, Ont.; loss \$75,000.—Brick block on Main street, Winnipeg, occupied by Heintzman Piano Co. and Macdonald & Fleming's hardware store,

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damaged to extent of \$25,000.—Four buildings at Reserves Mines, Glace Bay, N.S., owned by W. J. McDonald & Co.; loss \$20,000.

CONTRACTS AWARDED.

WHITBY, ONT.—The Town Council have sold \$65,000 electric light and

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waterworks debentures to E. H. Gay & Co., at 98 and accrued interest.

VANCOUVER, B.C.—Residence for S. L. Howe : McLean & Wilson, contractors. Building will be erected on Nelson street, near Stanley park, and will cost about \$8,000.

TORONTO, ONT.—The contract for erection of a new warehouse at 133 and 135 Wellington street west for the Nerlich Co. has been let to the Woodruff-Robins Co. Building will be 50 x 150 feet and will cost \$70,000.

BROCKVILLE, ONT.—The James Smart Manufacturing Company, of this city, have been awarded the contract for heating and ventilating the Bank of Ottawa at Morrisburg, Ont., the Baptist church at Snelgrove, Ont., and the Glebe church at Ottawa.

WINNIPEG, MAN.—The contract for construction of new post office has been awarded by the Dominion Government to Thomas Kelly, a local contractor, his tender being \$529,000. The building will be five stories and basement, the front of cut stone from the Tyndall quarries.

ST. JOHN, N.B.—The contract for the new building for the Evening Times has been let to B. Moony & Sons. The sub-contractors are : Carpenter work, G. R. Green ; iron work, John Wilson ; painting, S. & J. McGowan. Building will be four stories, with plate glass front. F. N. Brodie is the architect.

GODERICH, ONT.—Five other contracts in connection with the new North street Methodist church have been let as follows : Glass, M. W. Howell, \$325 ; tin and galvanized iron work, C. C. Lee, \$154 ; seating, etc., Valley City Seating Co., Dundas, \$2,600 ; electro-glazing windows, Luxfer Prism Co., Toronto, \$580.

COLCHESTER SOUTH, ONT.—The Dolson Creek drain debentures amounting to \$11,255.40, have been sold to H. O'Hara & Co., of Toronto, at a premium of \$360.53 and accrued interest. Other tenderers : Dominion Securities Co., Toronto, premium of \$246.60 ; Aemilus Jarvis & Co., Toronto, \$207.60 ; Wm. C. Brent, Toronto, 185.60 ; George A. Stimson & Co., Toronto, \$149.60 ; Brouse, Mitchell & Co., Toronto, \$95.60.

BUSINESS NOTES.

Abraham I. Wallace, builder, Waterloo, Ont., is dead.

Wm. LaBarre, painter, Grand Forks, B.C., is removing to Bremerton, Wash.

The National Construction Company, Limited, has been incorporated at Montreal.

Read & Kilmer, dealers in electrical machinery, Hamilton, are removing to Toronto.

There is a movement on foot to form a company in Peterboro, Ont., to manufacture sand brick.

The plant of the Fader's Screwless Doorknobs, Limited, Orillia, Ont., is advertised for sale.

Paulhus & Vidal, contractors, Montreal, have dissolved, and the business will be continued by S. Paulhus.

The E. S. Harrison Company, Limited, electrical contractors, Winnipeg, are reported to have assigned.

Henri Gervais has registered as proprietor of the business of John Galipeau & Cie, plumbers, Montreal.

V. V. A. Rheume has registered as

proprietress of the business of O. Papillon & Cie, plumbers, Montreal.

The death took place last week of A. J. Humphrey, of the firm of Humphrey & Wright, builders, London, Ont.

Mr. John Robinson, 72 East Ave. North, Hamilton, purposes organizing a company for the manufacture of road machinery, steel tile moulds for concrete culvert pipe, contractors' bottom dumping wagons, etc. He represents the Climax Road Machine Company, of Marathon, N.Y., who have for some years manufactured a line of rock crushers, road rollers and graders, etc. It is the intention to build a factory in Hamilton.

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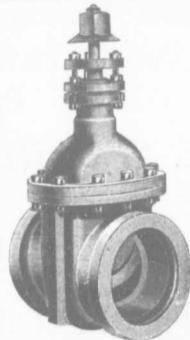
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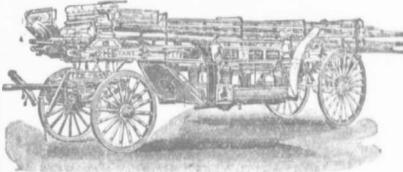
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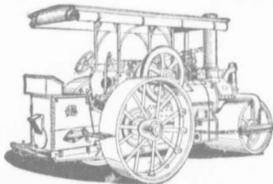


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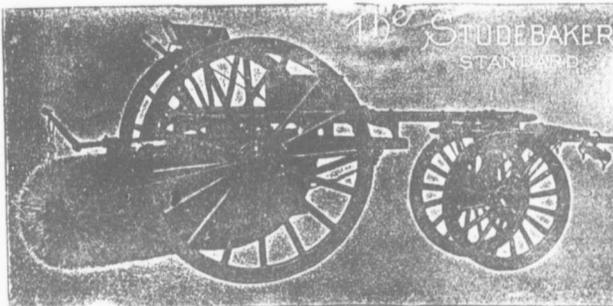
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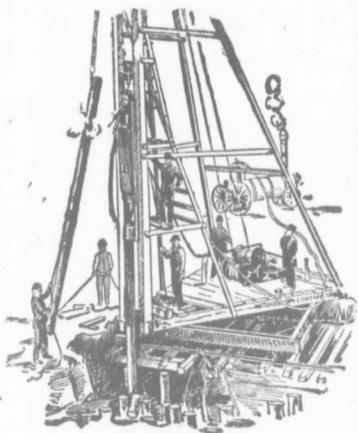
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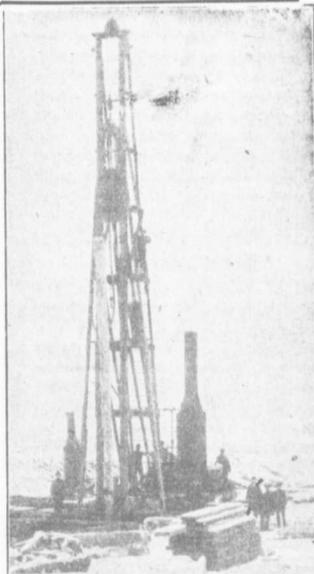
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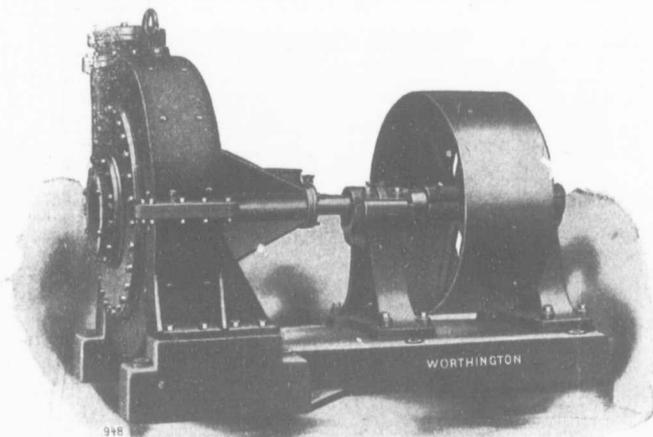
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TIME LOST BY WORKMEN.

The last report of the Massachusetts Bureau of Statistics of Labor contains some interesting information on the matter of the amount of time that is lost by workmen, which, as things are, means an inevitable loss of income. The report presents the situation as a matter of averages only, and deductions are of value only when this fact is kept in view. It appears, then, that the average time lost by those who depend on weekly wages amounts to very nearly twenty-two per cent., of which loss a little more than half, or to be exact eleven and one-half per cent., is due to being absolutely out of work. These figures make it all the more astounding that workmen who must average a loss of nearly twenty-two per cent. of possible income should voluntarily lose still more through unreasonable and costly strikes.

BRICK BONDING.

One of the oldest subjects connected with brick laying is the style of bonding, and though so much has been written about it, and though every mason claims to know exactly what the various styles of bonding imply, it requires the closest supervision to obtain thoroughly bonded brick walls in ordinary practice. In late years the so-called Flemish bond has come largely into favor. We say so-called, says the Brickbuilder, for the reason that a wall is seldom laid up throughout in the regular old Flemish bond. Usually the headers are clipped so that an outer screen of 4 inches of brick face is carried up for at least seven courses and then full headers put in to tie to the backing. As the interior of the wall is composed simply of parallel rows of stretchers, it will be seen that the only tie, aside from the seventh course of headers, is thus afforded by the adhesion of the mortar. In many cases this is insufficient to give a very solid wall, but if anything but the very best of cement mortar is used and joints are not thoroughly filled throughout, the wall loses a great deal of its strength. The better way is to carry the bond up with every header full. This means carrying up the outer 8 inches of the wall solid through seven courses and then successively heading over through the wall to get a tie clear to the inside with headers, constituting thus practically a double wall 8 inches thick on the outer section and the balance on the inner. In the old style Flemish bond, however, each course is complete clear through the wall, and as it is impossible to carry up face work or backing in advance one of the other, it is for that reason very little used. Furthermore, with full Flemish bond the bricks of the backing and the face work must of necessity be the same size, and this is rarely possible in modern work; but for solidity of construction there is no method of building a brick wall so satisfactorily as a full Flemish bond carried clear through the wall in every course.

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Architectural Sculptors. Holbrook & Mollington	Cements. Owen Sound Portland Cement Co. III The Rathbun Co. vii	Mouldings. Decorators' Supply Co.	Stained and Decorative Glass Crown Art Stained Glass Co. IV Horwood & Sons, H. v Mackay Stained Glass Co. v St. George, H. E. v Robert McCausland v Stained Glass Co. v
Architectural Iron Work. Canada Foundry Co. xiii Dunsmuir, Irvine Co. i Locomotive & Machine Co. iv	Creosote Stains Cabot, Samuel. i	Ornamental Iron Work. Canada Foundry Co. xiii Dennis Wire & Iron Co. vii	Sanitary Supplies James Morrison Brass Mfg. Co. xv
Blue Print Paper. Hughes Owens Co. IV	Drawing Instruments Thomson, A. G. iii	Ornamental Plaster Hynes, W. J. IV Freuk Walton IV	Shingles and Siding Metallic Roofing Co. ix Ormsby & Co., A. B. i Roofers Supply Co. II
Burlaps Richter Mfg. Co. IV	Drawing Inks Wagner, Gunther. ii	Painters. Montreal Directory... xvi Toronto Directory... xvi	Roof Pipes. Toronto Foundry Co. II
Bridges Canadian Bridge Co. xl Dominion Bridge Co. i	Elevators Ferguson, John. I Otis Elevator Co. I Parkin Elevator Co. i Turnbull & Russell Co. vii	Plasters. Toronto Pate Glass Co. viii	Sheathing and Deafening Material. Cabot, Samuel.
Builders' Supplies. Lusifer Prism Co. xiv Montreal Directory. xvi Morrison, T. A. xvi Ontario Lumber Association. xvi Rhodes, Curry & Co. xvi Robinson & Co. D. vi Rice Lewis & Son. IV Smith-Warren Co. i Sand & Dredging. xv Toronto Directory... xvi	Engravers. Alexander Engraving Co. v	Parquet Floors Elliott & Son Co. viii	Shingles and Deafening Material. Richmond Conduit Co. xiii
Building Stone Dealers. Amherst Red Stone Quarry Co. vi Credit Forks Stone Co. vi Hoad & Son. vi Hoad & Son. vi Hoad & Son. vi Kline, J. E. vi Myers, Oakley. vi Niagara Quarry Co. vi O'Connor & Co. D. vi Roman Stone Co. vi	Folding Partitions. Springer, O. T. II	Plate Glass Queen City Plate Glass & Mirror Co. vii Toronto Plate Glass Importing Co. viii	Tiles. American Enamelled Brick & Tile Co. i Craven, Dunhill & Co. I Holbrook & Mollington i Permanent Decorative Glass Co. ii Toronto Plate Glass Co. viii Wooliscroft & Son. ii
Builders' Hardware. Rice Lewis & Son. IV	Grilles and Railings. Dennis Wire & Iron Co. viii	Plumbers Montreal Directory... xvi Toronto Directory... xvi	School and Church Furnitures. Globe Furniture Company. v Can. Office & School Furniture Co. v
Bricks American Enamelled Brick & Tile Co. i Beamsville Brick & Terra Cotta Co. II Dan Valley Brick Works. x Toronto Pressed Brick & Terra Cotta Co. III Milton Brick Co. xv	Granite Brunet, Jos. vi	Roofers Duthie & Sons, G. xvi Douglas B. Co. xvi Forbes Roofing Co. xvi Nicholson & Co. D. xvi Rennie & Son, Robt. xvi Ormsby & Co., A. B. i Rinzham, George. xvi Stewart & Co., W. T. vi Williams & Co., H. xvi	Wall Plaster Albert Mfg. Co. II
Contractors. Toronto Contracting & Paving Co. III	Hardwood Flooring. Seaman, Kent & Co.	Rubber Tiling. Gutta Percha Rubber Co. II	Wire Lathing The B. Greening Wire Company. xvi
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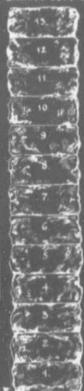
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UNUSUAL FOUNDATION FOR SEWER.

An oval brick sewer has been constructed in Alpena, Mich., which presents some unusual features in connection with its foundation. The sewer is about 7,800 feet long and empties into Thunder Bay river near its mouth, as described by the Engineering Record. The river is dammed about 4,000 feet above the outlet of the sewer, and its water level is raised in this way about 12 feet. As the sewer has a total fall of but 11 feet, and is built along the north bank of the river, it is thus possible to flush it with water from the river, introduced through a suitable connection at its head.

The lower portion of the sewer for about a mile is three feet high and two feet wide. The invert has a radius of 6 inches and the arch a radius of 12 inches, which makes the distance between the centers of these arcs 18 inches. The upper portion of the sewer has a similar cross-section, but is somewhat smaller, being 30 inches high and 20 inches wide. The concrete base for the larger section is 30 inches wide and 8 inches high, and the concrete is carried up half way to the springing line of the arch. The sewer itself is built of a single ring of brickwork and its exterior is plastered with half an inch of cement mortar above the level of the concrete haunches.

The lower half mile of the sewer is about 6 feet below the street grade, which is here about 6 or 7 feet above the water level of the bay. This depth gradually increases to 13 feet near the upper end, where the river connection for flushing purposes is located. The soil along the line is everywhere sand, which becomes a sort of quicksand at a depth of about 5 feet. Hence the special concrete foundation had to be provided, even in the shallowest part of the trench. The concrete was kept in place by means of shallow boxes 12 to 16 feet long and of the same cross-section as the finished base. They were carefully set to grade in the bottom of the trench and then filled rapidly with the concrete. Before the latter had set a depression of about 2 inches depth was made along the center line to receive the ends of the brick forming the invert of the sewer.

The boxes were made of 1-inch hemlock lumber and their ends were butted together in the trench so as to form a continuous mold. The concrete was mixed dry on the bank, wheeled in barrows to a chute, and dumped down this to the box, which was often half full of water. The level of the latter was kept under control by hand pumps during working hours, but allowed to rise at night, for it was found that no injury was done by the water to the concrete after the latter was two hours old.

House connections of 6-inch tile were placed at every lot line and connections

were made for lateral sewers at the street crossings. The cost of the sewer for the lower mile was about \$2.25 per foot, and for the remainder, where the depth of the trench is greater, it has been about \$3 per foot.

ELECTROLYSIS OF WATER MAINS.

Electrolysis of water mains in the Boston Metropolitan District continued at a serious rate during the year 1903, according to the report recently issued by the Metropolitan Water and Sewerage Board. On 90 linear feet of 48-inch pipe in Cambridge uncovered for examination 525 pittings were located, varying from 1/16 to 3/8 inch in depth. Portions of two lines of 36-inch cast-iron pipes crossing under the Charles River were examined by a diver and eleven pittings from 2 to 6 inches in diameter and from 3/8 to 3/4 inch in depth were found. These pipes in the river are being destroyed very rapidly. At several other river crossings the conditions have been found to be favorable for electrolytic action, and at several points damage has been discovered. In the city of Chelsea an examination of a 24-inch cast-iron pipe line disclosed 250 pittings, from 1/16 to 9/16 inch in depth, on 280 square feet of pipe surface. In Lynn at one point 387 pittings, from 1/32 to 7/16 inch in depth, were found on 175 square feet of the surface of a 12-inch pipe line, and at another place 200 pittings on an area of 44 square feet; the deepest pittings were .45 inch in depth, leaving but .24 inch of the original thickness of the pipe. It has become

necessary to replace some of these pipes during the current season. In order to prevent the flow of quite a large amount of electricity from the Metropolitan pipes to the pipes in the city of Cambridge at a connection, an insulating joint, made of a rubber gasket 1/2 inch in thickness placed between two flanges, was used.

C. J. Sharp, contractor, of Portage la Prairie, Man., has purchased a cement block making machine for the manufacture of building blocks.

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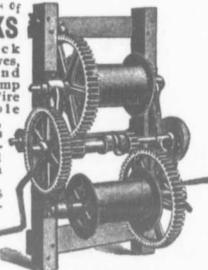
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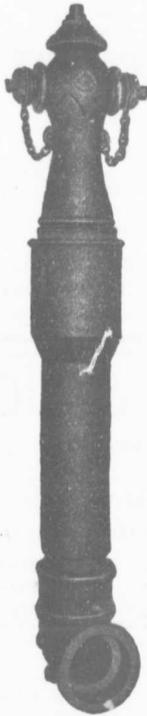
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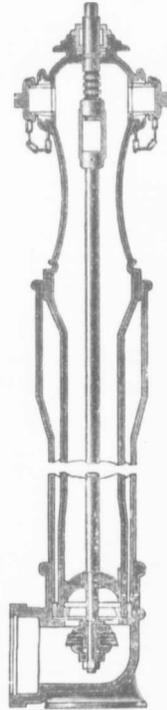
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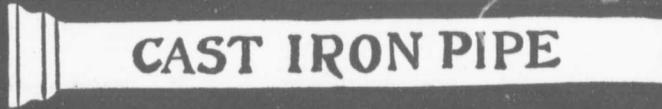
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