

# CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL

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. 13.

JANUARY 28, 1903

No. 50

## THE CANADIAN CONTRACT RECORD, PUBLISHED EVERY WEDNESDAY

AN INTERMEDIATE EDITION OF THE CANADIAN ARCHITECT AND BUILDER.

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## City of Winnipeg

### TENDERS FOR PUMPING ENGINE.

Sealed tenders, addressed to the Chairman of the Fire, Water and Light Committee, for the supply and delivery in Winnipeg of one pumping engine, having a pumping capacity of 5,000-000 imperial gallons per day of 24 hours, will be received at the office of the undersigned up to 8.30 p.m. on MONDAY, FEBRUARY 2, 1903. Specifications may be seen at the office of H. N. Rutan, City Engineer, from whom forms of tender and full information may be obtained.

Each tender must be accompanied by an accepted cheque or cash deposit for the sum called for in form of tender supplied, which will be subject to forfeiture in case of failure 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.

City Clerk's Office,  
Winnipeg, Can., Jan. 8, 1903.

The time for receiving the above tenders has been extended to March 2, 1903.

## City of Winnipeg

### TENDERS FOR 15,000 TO 20,000 BARRELS OF CEMENT

Sealed tenders, addressed to the Chairman of the Committee on Works, for the supply of from 15,000 to 20,000 barrels of cement, will be received at the office of the undersigned up to 8.30 p.m. on TUESDAY, FEBRUARY 17TH, 1903. Specifications and forms of tender may be obtained at the office of H. N. Rutan, City Engineer, Winnipeg, Manitoba, Canada.

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 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, January 9, 1903.

The time for receiving the above tenders has been extended to March 3, 1903.

## BRIDGE TENDERS

Will be received by the undersigned up to 6 o'clock on MONDAY, FEBRUARY 16TH, for the superstructure of a Steel Bridge with foot walk over River Thames in the Town of St. Mary's, Ont., 178 feet long. Plan of bridge must accompany tender. Plan and specifications of piers and abutments may be seen or had from:

L. HARSTONE, Town Clerk.  
St. Mary's, Ont., Jan. 23rd, 1903.



## SHAFTS, BEARINGS, ETC.

—FOR—

## Swing Bridge.

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

Tuesday, February 3rd, 1903.

for shafts, bearings and gear for swing bridge over Keating's Canal.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Drawings and specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto.

The usual conditions relating to tendering, as prescribed by city by-law, must be strictly complied with or the tenders will not be entertained. The lowest or any tender not necessarily accepted.

THOS. URQUHART (Mayor),  
Chairman Board of Control.

City Hall, Toronto, Jan. 22nd, 1903.

### CONTRACTS OPEN.

**RICHMOND, QUE.** — Rev. Father Quinn will erect a residence in the spring.

**GILLIES HILL, ONT.** — The Mayor intends erecting a new residence next summer.

**RAT PORTAGE, ONT.** — The Rat Portage Lumber Company will extend their plant.

**DIGBY, N. S.** — Plans have been completed for a new almshouse at Marshalltown.

**ARNPRIOR, ONT.** — The town council will likely purchase a stone crusher and road roller.

**VARS, ONT.** — Subscriptions are being solicited for erection of a new Presbyterian manse.

**ST. THOMAS, ONT.** — Ingram & Davey, hardware merchants, intend to extend their premises.

**PLEASANT VALLEY, ONT.** — Charles Johnson is preparing to build a residence in the spring.

**DRYDEN, ONT.** — C. B. Campbell is taking steps to secure the erection of a pulp mill at this place.

**ST. GEORGE, N.B.** — The Presbyterian congregation are preparing to build a manse, to cost \$2,000.

**SHAWVILLE, QUE.** — The members of the Holiness Movement have purchased a site for erection of a church.

**INGERSOLL, ONT.** — A by-law has been introduced in council providing for the erection of a new municipal building.

**PETERBORO, ONT.** — Plans have been completed for extensive improvements to the Ontario Bank in this city.

**ST. ANDREW'S, N. B.** — It is the intention of the Canadian Pacific Railway to enlarge the Algonquin Hotel from 160 to 400 rooms.

**MOOREFIELD, ONT.** — Maryborough Council have instructed George Brooks to prepare plans for a bridge on Centre sideroad.

**BARKWAY, ONT.** — Ryde Council will petition the Government for a grant to build a steel bridge over Buck River, near Housey's Rapids.

**KENMORE, ONT.** — Daniel McLachlin will receive tenders up to February 15th for brick and carpenter work on Presbyterian church.

**COLLINGWOOD, ONT.** — The Bryan Manufacturing Company are making extensive improvements to their wood-working factory.

**WINDSOR, ONT.** — It is said that a majority of the residents on Jeannette avenue are in favor of a cedar block pavement on concrete.

**BARRIE, ONT.** — The Council will urge the Dominion Government to proceed as soon as possible with the construction of proposed wharf here.

**Mac GREGOR, MAN.** — E. Downton is taking tenders on a brick school house. Plans at office of G. B. Housser, Portage La Prairie, and H. S. Griffith, architect, Winnipeg.

**WOLFVILLE, N. S.** — Hilsley & Harvey have purchased the business of C. E. Starr & Son, hardware merchants, and will make a number of improvements in the building.

**OTTAWA EAST, ONT.** — A meeting of ratepayers was held last week to discuss the proposed construction of a waterworks system, opinion being in favor of proceeding with the work.

**ESQUIMALT, B. C.** — T. Woodgate, officer in charge of the naval works, will accept tenders up to January 30th for supply of lime, sand, gravel, drain pipes, water pipe and fittings, galvanized iron, gullies, timber, rails, etc.

**AUGUSTINE, MAN.** — Mr. Russell, architect, has prepared plans for a new Presbyterian church with a seating capacity for 1,000 persons, and it has been decided to proceed with the work at once. Particulars from Rev. Dr. Wilson.

**KINGSTON, ONT.** — Inspector John Seath has recommended that an addition of six rooms be built to the Collegiate

Institute.—William Newlands, architect, has taken tenders on improvements to store building, 113 Princess street, for W. J. Mahood.

TRURO, N. S.—At a public meeting held recently it was decided to proceed as soon as possible with the erection of a new hospital. — Colchester County Council will apply to the Legislature for permission to borrow \$30,000 to erect a court house.

HAMILTON, ONT.—The Hamilton Steamboat Company will likely build a new steamer in the spring, as well as rebuild the wharf at the foot of James street.—The residents in the north end of the city have petitioned for a number of macadam pavements.

ANDOVER, N. B. — A committee, composed of C. C. Rogers, Dr. Welling, and A. Stratton, has been appointed to obtain information as to the cost of installing an electric plant for lighting the villages of Andover and Ferth. A water power will likely be developed for the purpose.

RAINY RIVER, ONT. — A new concession has been given to the Rainy River Pulp & Paper Company, in which Hon. George E. Foster and W. J. Elliott, of Toronto, are interested. They have secured a water power on Sand Island river, where the pulp mill will be located.

OWEN SOUND, ONT.—The Canadian Heating & Ventilating Company have purchased a site adjoining the Imperial Cement Company's property and will proceed to erect the necessary buildings at an early date. Plans are being prepared by J. A. Ellis, architect, of Toronto.

NORTH TORONTO, ONT. — The County Council has given notice of the intention to construct the following works: Tar and plank sidewalk on portion of Balliol street, cost \$965.60; 6-inch water main on Davisville avenue, cost \$1,614.09; Gordon street, Briar Hill avenue, cost \$691.31.

LETHBRIDGE, N. W. T. — Plans for proposed waterworks system in this town were prepared a short time ago by G. E. Anderson, C. E., consulting engineer to the Canadian Northwest Irrigation Company. His Worship the Mayor is now in the east with the plans getting figures for the work.

SYDNEY, N. S.—The Building Committee of St. Andrew's church want competitive designs for brick church building by February 14th. Particulars from W. C. Douglas, Box 484. — Arrangements were completed in Montreal last week for the erection by the Dominion Iron & Steel Company of a small steel rail mill here.

VANCOUVER, B.C.—John Lewerke has purchased a lot on the north side of Hastings street on which he will erect a brick building, to contain stores and offices. The plans for the building have been prepared by Mr. Grant.—A preliminary survey has been made of the route of the proposed Kootenay Central Railway.

LONDON, ONT.—Mr. Moore, waterworks engineer, will report upon a scheme for increasing and conserving the water supply. It has been suggested that a new storage reservoir and separate pumping station be built. — Application will be made to the Ontario Legislature for authority to raise funds for granolithic sidewalks, tile sewers and macadam pavements.

CHATHAM, ONT.—J. L. Wilson & Son, architects, have taken tenders on a brick residence on Richmond street for Albert Knott.—It has been decided to form a joint stock company, with a capital of \$5,000, to build a rink. Dr. J. L.

Bray and J. G. Kerr are interested.—Mr. Walker, representing a produce firm, has submitted a proposition to the Council to erect a large cold storage plant in this city.

REGINA, N. W. T.—One of the proposed waterworks schemes is to obtain the supply from Boggy creek, at a cost of \$155,500, including \$71,270 for main pipe, \$10,000 for distributing pipes, \$5,000 for pump house and boilers and \$1,500 for pump. The well system is estimated to cost \$89,000, the sewerage system \$15,000 and the electric light plant \$20,000. An engineer will likely be engaged immediately to prepare plans.

QUEBEC, QUE.—It is reported to be the intention of Price Bros. to build a pulp mill at Ha-Ha Bay, also to develop a water power of 250 feet head on Aux Sables river and build a pulp mill.—The Atlantic, Quebec & Western Railway Company has finally decided to rebuild a railroad through the Gaspé Peninsula.—Plans are being prepared for a new building in connection with St. Andrew's church, to be built on the site of the Minor Manse.

FORT WILLIAM, ONT. — The Methodist congregation contemplate the erection of a church the coming summer, to cost about \$18,000.—James Conmee intends to do considerable building this year. Besides a number of residences he will build a business block on Arthur street.—The council propose to take steps to secure to the town the right to the waters of Lake Lamond with a view to the establishment of a more adequate water supply.

WINNIPEG, MAN. — H. S. Griffith, architect, will let the contracts this week for alterations to Nos. 222 to 228 Main street for S. Spence.—The Canadian Elevator Company will build 70 new elevators this year along the lines of the Canadian Northern Railway.—The time for receiving tenders for the supply of a pumping engine for the city has been extended to March 2, and that for cement to March 3.—At the last meeting of the Board of Works it was decided to call for tenders for a granite crusher.

WOODSTOCK, ONT.—A. J. Bonnett, architect, has prepared plans for two stores for Chas. Lewis, to be built on the corner of Dundas and Victoria streets also for two semi-detached houses on Princess street for Butler Bros.—The Bain Wagon Co. are building a large addition to their already large plant.—Plans have been completed for new G. T. R. station here. — It is proposed to have plans prepared at once for addition to the hospital building.—Application is about to be made for the incorporation of the Embro Radial Railway Company, to construct radial lines out of Embro.

TORONTO JUNCTION, ONT. — Building operations in this town promise to be brisk this spring. C. J. Boon, W. Joy and J. Hall have started the foundations for residences. The latter gentleman will erect twenty houses on North Keele street.—The waterworks superintendent has recommended that the intake pipe be extended 1,500 feet further into Humber Bay, at an approximate cost of \$15,000.—Plans have been prepared for a brick station for the C. P. R., to cost about \$5,000, work on which will be commenced as soon as the weather will permit.

STRATFORD, ONT. — T. Harry Jones, city engineer, has recommended additions and improvements to the waterworks plant, including the following: 12 inch main from pump house along Douro street to connect with present main near College street, distance 4,800 feet; 12

inch main from Front street to Downie street, 1,850 feet; 10 inch main on St. Patrick street, 800 feet; 4,830 feet of 8 inch main; 7,060 feet of 6-inch main. The estimated cost of these extensions, including valves and hydrants, is \$27,000.—J. T. Russell, architect, has prepared plans for the new hotel to be built by A. F. McLaren, M.P.

ST. JOHN, N. B. — The sum of \$50,000 has been subscribed towards the proposed Y.M.C.A. building.—Plans have been completed for an addition to the building of the Union Club on German street; estimated cost, \$7,000. J. G. Taylor is president of the club.—The County Council have decided to issue \$25,000 of debentures for improvements to the public hospital, to be expended as follows: Birch floors, \$1,200; repairs to walls, \$2,765; roof, \$4,000; plumbing, etc., \$2,000; windows and ventilation, \$4,000; addition nurses' home, \$5,000; furniture, \$1,000; repairs to interior, \$2,000; outside repairs, \$4,000.

OTTAWA, ONT.—The Ottawa Improvement Commission propose to construct a 24 foot macadam roadway on Concession street, between the Rideau Canal and Ryan street, and on Ryan street between Concession street and Dow's Lake.—Plans for the enlargement of St. Patrick's Hall, Maria street, are under way and the work will probably be proceeded with during the coming summer.—The Underwriters' Association have recommended that the city purchase four additional fire engines, two chemical engines and one water tower, and construct several additional mains.—New tenders will probably be invited by the Department of Railways and Canals for steel rails.—The advertisement inviting competitive plans for Carnegie Library building will shortly be issued. The architect is to receive 5 per cent. on \$85,000 if the final cost does not go beyond 10 per cent. in excess of the accepted tender.—Mr. Watts, architect, has prepared plans for an addition to St. Matthew's Anglican church, to cost about \$2,000.—John Huckell, proprietor of the Brunswick Hotel, intends erecting a commercial building on the east side of Bank street, between Lisgar and Cooper streets.

MONTREAL, QUE.—L. O. David, city clerk, will receive bids up to January 29th for supply of 5,000 feet of double-jacket cotton fire hose, rubber-lined, and 50 salvage covers 9x12 feet, also for repairs to the old water tower and alterations to No. 12 fire station, Seigneurs street. Plans of latter work at office of Joseph Sawyer, architect, 621 St. Antoine street.—The City and District Savings Bank have purchased the Hall property at corner of McGill College avenue and St. Catharine street. The building will be converted into modern banking premises.—Temporary buildings to be used during the construction of the Montreal Locomotive & Machine Company's works at Longue Pointe are being put up, and by spring work on the construction

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**DEBENTURES**

of the general buildings will be under way. The motive power will be entirely electrical. G. P. Brophy, of Ottawa, is managing director of the company. — Finley & Spence, architects, will prepare plans for the new building proposed to be erected by the governors of the Western General Hospital. — Tenders are again invited by the city for supply of one or more steel stone crushers for the city quarry at Outremont. The date limit is February 2nd. — R.M. Rodden, architect, is preparing plans for residence and livery stable on Mountain street for Mr. McGarr. — Huot & Payette, architects, are preparing plans for a three-storey house, corner Rachel and Sydenham streets, for Dr. L.A. Lacombe. — Building permits have been granted as follows: Jesse Joseph, alterations to five-storey factory, rear 68-70 McGill street, cost \$8,000 (Robt. Neville, contractor); Sherwin, Williams Co., alterations to factory, rear St. Patrick street, cost \$2,600.

TORONTO, ONT.—J. Francis Brown, architect, is this week taking tenders on a five-storey warehouse on Bay street for the C. H. Westwood Company. — Chadwick & Beckett, architects, will receive tenders up to 31st inst. for six houses. — Tenders are wanted at 243 Beverley street to erect cottage on the island. — Henry Simpson, architect, is preparing plans for a large factory to be erected on the old Upper Canada College grounds. — The new building to be erected on the north-west corner of King and Simcoe streets by the Canadian General Electric Company will be 122 x 186 feet, five storeys and built of brick and stone. The plans have been prepared by Darling & Pearson. — Tenders are invited by the Board of Control up to February 3rd for shafts, bearings and gear for swing bridge over Keating's Canal. — The Bank of Toronto will eventually erect a fine banking building at the corner of King and Bay streets, although the time when this step will be taken has not yet been decided. — President Loudon, of Toronto University, states that the new residence building will in all probability be built on the north side of Hoskin Avenue, with four frontages of about 200 feet and three storeys high. — The Apartment Building Company, composed largely of British capital, are about to erect a fine apartment building on the south-east corner of Huron and Sussex avenue, from plans prepared by J.A. Ellis. It will be 46 x 120 feet, seven storeys, of pressed brick and stone, and will contain

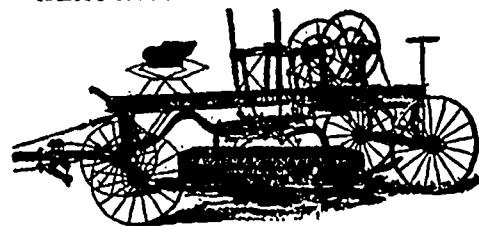
a cafe, billiard room, private dining rooms for parties, banqueting hall (which may be used for private theatricals), palm garden on roof of portion of building, crematory, etc. The building will be steam heated by means of two tubular boilers, decorated in first class style, and equipped with every modern appliance. The building proper is being erected by day labor, but contracts will be let at a later date for steam heating, galvanized iron work and certain other trades. J. A. Berridge is superintendent of buildings for the company. If found expedient, the company may build a number of similar apartment houses. — A new parish house will be built in connection with St. Paul's R.C. church on Power street, at a cost of about \$14,000. — A committee has been appointed to consider the enlargement of the Sun-

day school building at the Dunn avenue Presbyterian church. — The question of rebuilding the Pavilion in Allan Gardens is under consideration by the Parks and Gardens Committee. — The Park Commissioner has been requested to report upon the cost of a new stove building in the Exhibition grounds. — The City Engineer has again recommended concreting the sides and bottom of Rosehill Re-

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reservoir, at a cost from \$35,000 to \$40,000. He estimates the cost of paving Esplanade street as follows: Macadam, \$42,000; brick, \$55,000; asphalt, \$60,000; granite blocks, \$90,000.—The enlargement of Kew Beach school is recommended by Inspector Hughes.—Tenders are wanted by H. Marshall, 4 Carlton street, on brick work.—Motions have been introduced in council to invite tenders for an asphalt pavement on Yonge street, from Davenport road to C.P.R. crossing, and to urge upon the Dominion Government the necessity of the permanent improvement of the harbor on a large scale.—Building permits have been granted as follows: H. F. Squires, pr. semi-detached two-storey and attic brick dwellings, w. side Beatrice street, near College, cost \$5,500 (J. A. Harvey, architect; C. H. Wilson, pr. semi-detached two storey and attic brick and stone dwellings, w. side St. George street, cost \$6,500 (C. Parker, architect).

**FIRES.**

Residence of John Hart at Parry Sound, Ont.—Four-dwelling terrace at Owen Sound, Ont., owned by Robert Christie.—Mill at Stoney Creek, Ont., owned by Stoney Creek Basket Company; loss \$3,800.—Poole Pottery Company at St. John, N. B., damaged to extent of \$16,000.—Block at Manitou, Man., owned by James Huston; loss \$20,000, insurance \$10,000.—St. Paul's Episcopal church at Bury, Ont.; loss \$1,400.—Residence of W.A. Myers, Shoal Lake, Man.; loss \$2,000.—Residence of Mrs. D. Chase, Brighton, Ont.; insurance \$7,000.—Residence of J. S. Kewin near Colborne, Ont.; heavy loss.

**CONTRACTS AWARDED.**

LINDSAY, ONT.—J. J. Miller, this town, has been awarded the contract for construction of granolithic walks as recently advertised in the Contract Record.

RICHMOND, QUE.—The contract for constructing booms on the St. Francis river has been let by the Dominion Government to William Ross and B. Quinn.

TORONTO, ONT.—The contract for supplying a dais, railing, office fittings, etc., for the School Board has been secured by Burton & Baldwin, of Hamilton, at \$2,470.

HALIFAX, N.S.—New buildings for Clayton & Sons: Architect, J. C. Dumaresq; builders J. McInnis & Son; plum-

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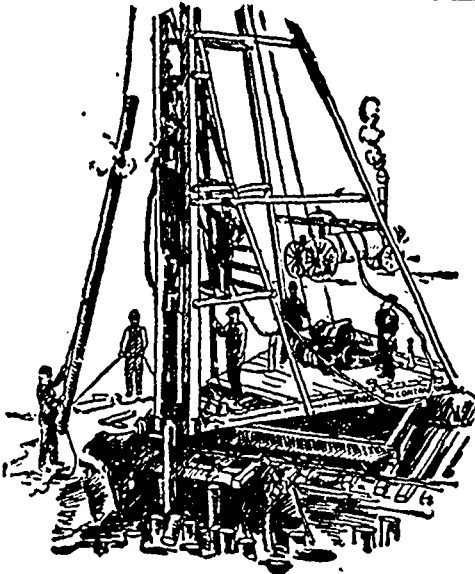
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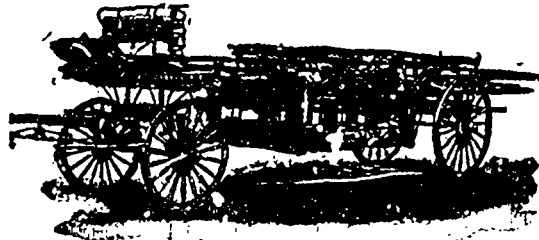
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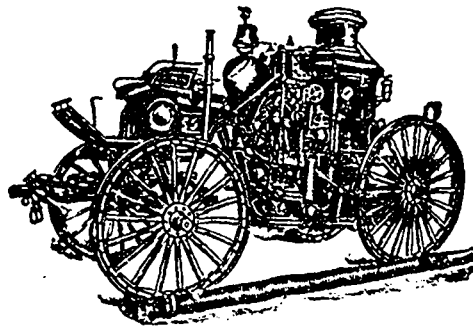


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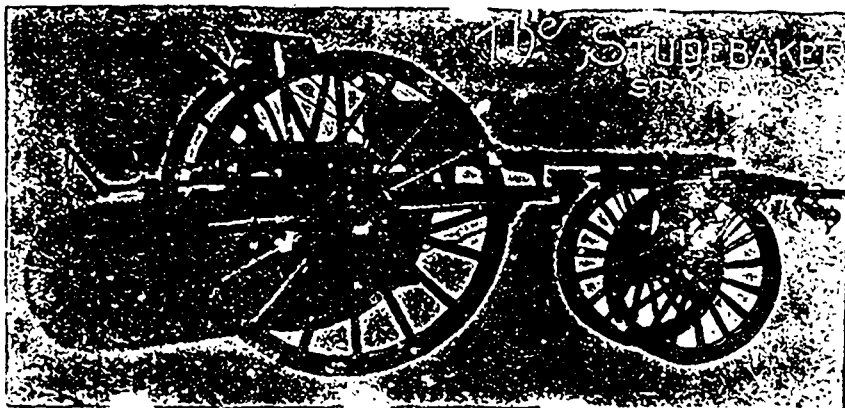
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bers, Hill & Elford; painting and glazing, D. Roche.

PORT ARTHUR, ONT.—It is announced that Barnett & Record have secured the contract for building the 500,000 bushel addition to the cleaning elevator here.

MONTREAL, QUE.—G.A. Monette, architect, has awarded the contract for leather belting for electric plant at convent at Sault au Re collet to J.C. McLaren Belting Co.

VICTORIA, B. C.—Joshua Holland has secured the contract to build the new C. P. R. hotel at Glacier, in the Selkirks. Building will contain 65 rooms, with bath for each, and will be lighted by electricity and heated by steam; estimated cost, \$35,000.

HAMILTON, ONT.—E.B. Patterson, architect, has accepted the following tenders for factory for Dominion Belting Company: general-contractor, T. Launders; sub-contractors, carpenter work, James Hossock; painting, W. Stamp; plumbing, J. Wallace & Son. Building is to be 53 x 155 feet.

P. Loupree, painter, Quebec, is reported to have assigned.

L. Gaudrew, plumber's supplies, Quebec, is reported to have assigned.

Desmaras & Fils, contractors and painters, Shawinigan Falls, Que., have registered partnership.

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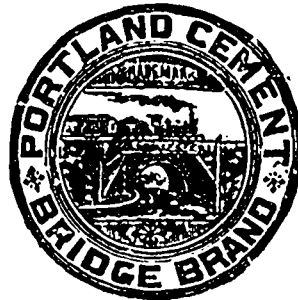
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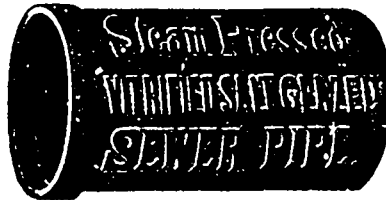


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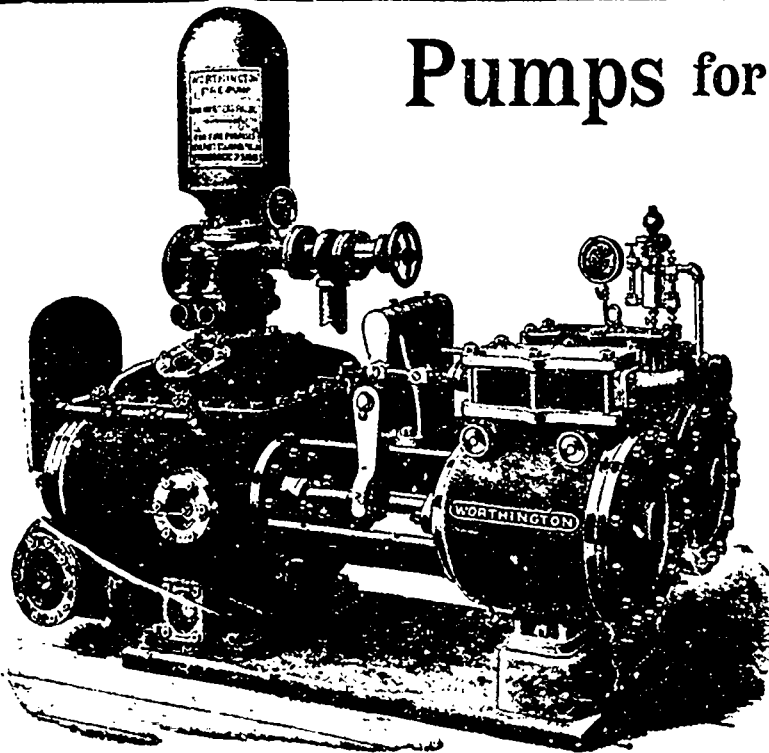
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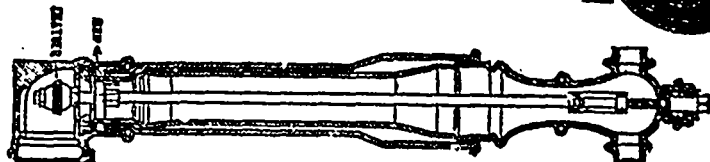
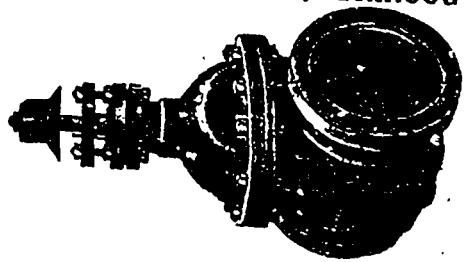
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### THE ENGINEERS' CLUB OF TORONTO.

A special meeting of the Engineers' Club of Toronto was held at their club rooms, King Street West, on Thursday evening, 22nd inst., with Mr. C. H. Rust, the newly elected president, in the chair. The attendance was large and included a number of the leading architects of the city. The business was confined almost exclusively to a discussion on "Concrete Construction". The subject was introduced by Mr. H. F. Duck, who stated in a general way the ingredients which should make a good concrete. In his opinion, 1 part of cement, 3 of sand and 7 of broken stone would make a thoroughly dense concrete if properly tamped. He was not in favor of using broken stone or ordinary limestone unless it was very carefully screened. Field stone was preferable and should be almost as fine as it was possible to get it. The quantity of water should be sufficient only to make the mortar of the consistency of damp leam of raw sugar. For concrete for dams and such work it was necessary to have a better quality of sand. Mr. Duck referred to the excellent quality of Canadian cement, stating that some tests which he recently made of Canadian and German cements had proven the former to be superior.

Mr. J. W. Barrett spoke particularly in reference to concrete work reinforced by expanded metal. A fine grade of concrete such as was required for floor construction should consist of one part of Portland cement, two of sharp sand, and five of clean boiler cinders. When properly tamped it became fairly solid concrete of great strength and capable of resisting fire admirably. He thought the failures of concrete work were in many instances due to faulty construction. If it were attempted to make a cheap concrete by reducing the quantity of cement, a weak concrete would be the result. He submitted the results of tests showing the fire-resisting qualities and strength of reinforced concrete in buildings. One of the objections to terra cotta construction was that the terra cotta and steel showed different degrees of contraction and expansion, whereas concrete and steel were almost identical in that respect. Replying to a question Mr. Barrett said that he would recommend expansion joints where the concrete was over 50 feet square. The King Edward Hotel, however, built of this construction, had no expansion joints. The new Market Building contained the largest open fire-proof floor on the continent, the floor space being 50,000 square feet. Here expansion joints over girders had been put in.

Mr. Burke said that his experience, with the Simpson Building in particular, had been that in concrete floors there was considerable shrinkage, causing cracks in the ceiling after plastering. The work to which he referred was not reinforced. He pointed out that concrete was a preservative of steel and that the tests made in the United States had proven that steel was unaffected by dampness in all cases where the brick-work was built in cement.

Mr. James McDougall said that he had found concrete to be invaluable in wet foundations. It was also economical as compared with ordinary stone construction. He was very favorable to concrete reinforced with expanded metal.

Referring to concrete arches Mr. Rust said that some years ago a railway company built a new bridge of 32 feet span with monolithic arches and the bridge was standing to-day in good condition. The Lake Erie & Detroit River Railway had constructed several large bridges of concrete.

Mr. J. T. Culverwell spoke of the use of concrete in the dams, locks, etc., of the Trent Canal. It was being used in the large lift lock.

Mr. E. B. Jarvis gave some particulars of the new industry which had been started in North Toronto for the manufacture of artificial stone, and Professor G. Mickle gave it as his opinion that a concrete made of cement and limestone would be incapable of withstanding great heat.

The cost of concrete construction was then brought up and instances cited to show the saving as compared with massive construction. In the building of bridges in Toronto, Mr. Rust thought a saving of \$7 per cubic yard had been made by the use of concrete. Machinery was used for mixing the concrete.

Mr. Duck said there was no reason, as some supposed, why concrete would not set in water. Tests of certain piers from one inch above water mark down to the footings, fifty feet under water, had shown a splendid concrete.

Following the discussion, a light luncheon was served, after which the preliminary arrangements were made for holding a curling match between the members of the Engineers' Club and the Ontario Association of Architects.

Mr. R. H. Gilmour, superintendent of the Canada Foundry Company, Toronto, recently tendered his resignation, and has been appointed superintendent of the Brooks works of the American Locomotive Company, Dunkirk, N. Y. He has been succeeded by Mr. J. W. Harkom, Richmond, Que., who was for many years in the employ of the Grand Trunk Railway, and latterly with the Canadian Pacific Railway. Mr. Harkom becomes general superintendent of the Canada Foundry Company and will have as assistant Mr. C. A. Barton, formerly superintendent of the Peterboro works of the Canadian General Electric Company. Mr. A. A. McCallum, late of the William Hamilton Company, Peterboro, has been appointed mechanical superintendent of the Canada Foundry Company.

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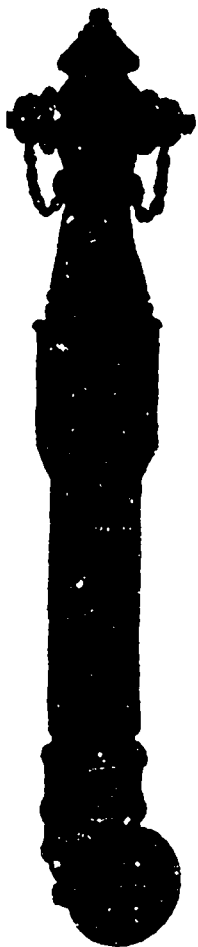
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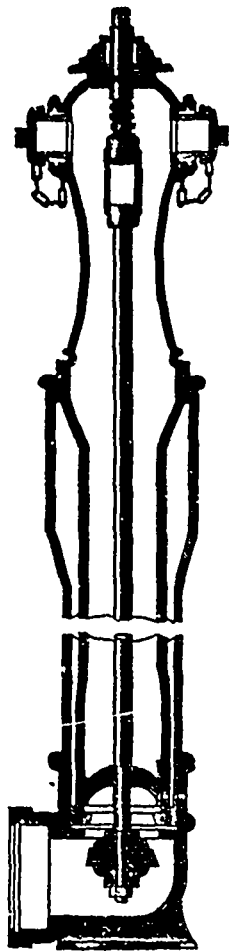
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