

# CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF PUBLIC WORKS

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. 12.

FEBRUARY 13, 1901

No. 2.

## THE CANADIAN CONTRACT RECORD, PUBLISHED EVERY WEDNESDAY

As an Intermediate Edition of the "Canadian Architect and Builder" (including "Canadian Contract Record"), \$2 per annum, payable in advance

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## FOR SALE.

A splendid chance for investment—the well-known "Kline" Granite Quarries, situated about 2 miles from the centre of the city, containing over 200 acres, with 3 good quarry openings, well equipped with derricks and tools; steam and horse hoists; also stone saw and polishing. Easy access to any part of the property. As there are 3 good sized lakes on the property, there could be a profitable ice business established.

For further particulars address:  
JOHN KLINE,  
Granite Dealer, Halifax, N. S.

## Town of Chatham, N.B., Water Works TO CONTRACTORS

PROPOSALS FOR  
WATER PIPE, GATES AND  
HYDRANTS AND PUMP-  
ING MACHINERY  
ALSO  
ERECTING STANDPIPE

Separate sealed proposals for Cast Iron Water Pipe and Special Castings, Gates and Hydrants and Pumping Machinery, to be respectfully endorsed "Proposals for Furnishing Water Pipe and Special Castings for the Town of Chatham," "Proposals for Gates and Hydrants for the Town of Chatham," and "Proposals for Pumping Machinery for the Town of Chatham." Proposals for erecting Standpipe for the Town of Chatham will be received at the office of the Town Clerk in Chatham, N. B., until 4 o'clock p.m. on WEDNESDAY THE 20TH DAY OF FEBRUARY, A. D., 1901.

The amount of security required will be fixed by the Mayor and Council after the bids are opened, said amount to be not less than one-fourth, nor more than one-half of the amount of the contract.

The Mayor and Council also expressly reserve the right to reject any or all bids should they deem it in the interests of the Town of Chatham to do so.

Specifications may be obtained of the undersigned Town Clerk or of the engineers, Lea & Coffin, 53 State Street, Boston, Mass., by sending a deposit of two dollars for each specification, which deposit will be returned to any party making a bona fide bid accompanied by the cheque.

By order of the Town Council.

T. M. GAYNOR,  
Town Clerk.

Chatham, January 25, 1901.

## TENDERS WANTED

Separate or bulk tenders will be received by the undersigned up to TUESDAY, FEBRUARY 26TH, for the erection of a Brick School Building in School Section No. 2, Scarborough. Plans may be seen at the office of the Architect. The lowest or any tender not necessarily accepted.

JAMES A. ELLIS, Architect,  
9 1/2 Adelaide Street East, Toronto.

## TENDERS.

Tenders, in whole or part, will be received by the undersigned up to WEDNESDAY, FEBRUARY 20TH, for a Brick Residence for David Kennedy, Esq., to be built at Kennedy Park, Toronto Junction. Plans may be seen at the office of the Architect. The lowest or any tender not necessarily accepted.

JAMES A. ELLIS, Architect,  
9 1/2 Adelaide Street East, Toronto.

## Debentures For Sale

Sealed Tenders, marked "Tender for Debentures," will be received by the undersigned up to noon on WEDNESDAY, FEBRUARY 27TH, 1901, for Local Improvement Debentures of the Town of Lindsay, aggregating \$32,017.14 (\$15,849.14 repayable in ten years and \$16,168.00 repayable in twenty years), all at four per cent in equal instalments of principal and interest.

No tender necessarily accepted.

F. KNOWLSON,  
Town Treasurer.

Lindsay, February 8th, 1901.

## NOTICE TO CONTRACTORS

The Board of Works of the City of Brantford will receive up to twelve o'clock, noon, THURSDAY, THE TWENTY-EIGHTH DAY OF FEBRUARY, 1901, tenders for a

## 15-Ton Road Roller

Contractors to supply full specifications and photographs of their respective rollers, to be delivered on the streets of Brantford not later than First day of May, 1901.

The lowest or any tender not necessarily accepted.

Tenders to be addressed to Robert Hall, Esq., Chairman of Board of Work, in care of H. F. Leonard, Esq., City Clerk, and marked "Tenders for Road Roller."

H. F. LEONARD,  
City Clerk.

## TENDERS WANTED

For the supplying of materials for, and the construction of, a steel trestle addition or approach to a bridge across the River Thames in the County of Kent, at the Town line of Harwick and Howard Townships.

Length, about 130 feet in four spans with a clear roadway of 16 feet.

Concrete abutment concrete base to each trestle. Specifications and plan prepared by W. G. McGeorge are at the office of the County Clerk at Chatham.

Tenders for concrete and superstructure separately or as a whole.

No tender necessarily accepted.

Tenders to be accompanied by a market cheque for one hundred dollars as a guarantee of good faith, and to be in my hands or in Chatham post office on the 27TH DAY OF MARCH, 1901.

Cheque of unsuccessful applicant will be returned.

J. C. FLEMING,  
Clerk County of Kent.

## Tenders Wanted

Sealed tenders will be received up to 12 o'clock, FEBRUARY 15TH, for the erection of a Manse for the Presbyterian church in the town of Whitby. For plans and specifications apply to

JOHN BURNS, Sec. of Com.,  
Whitby, Ont.

## TENDERS WANTED

Sealed tenders will be received up to MARCH 15TH, 1901, for the supplying of a Rock Crusher of a capacity of 30 to 40 tons per hour, and also of a double cylinder, 15 ton Steam Road Roller.

All necessary description and details to accompany tender, also length of time required to deliver.

Both machines to be of the most approved and modern patterns and delivered, freight and duty paid, at Vancouver, British Columbia.

THOS. H. TRACY,  
City Engineer.

Vancouver, B. C., Jan. 31st, 1901.

## Tenders Wanted

Sealed tenders will be received by the undersigned, on behalf of the counties of Huron and Perth, until 4 o'clock p.m. on WEDNESDAY, THE 20TH INST., at the Wingham post office, for erecting the

## Superstructure of a Steel Bridge

over a branch of the Maitland river, on the boundary line between the townships of Howick and Wallace, on bridge to be of one span of fifty (50) feet clear between the abutments; roadway to be 16 feet clear between the trusses, to have Steel Joists pipe railings, three tiers, 12 in. thick, of oak elm or tanbark. The bridge to be completed on or before the 31st day of July next, 1901, not more than 10 feet from bed of stream to floor; but little water; hard bottom to stream; good place to build a bridge; about seven miles from railroad station. Security required for the due completion of the contract. The lowest or any tender not necessarily accepted.

Tenders will be received at the same time and place for two Concrete Abutments for the said bridge.

JOHN ANSLEY,  
County Commissioner.

Wingham, February 4th, 1901.

## DATE OF PUBLICATION.

Architects, engineers, municipal authorities and others are reminded that the CONTRACT RECORD is printed every Tuesday afternoon, and that advertisements should reach the office of publication not later than 2 o'clock p.m. on that day to ensure insertion in the issue of the current week. Advertisements are frequently received too late for insertion, to avoid which special attention is directed to this announcement.

## BUSINESS NOTES.

Thomas Forest, plumber, Montreal, is reported to have assigned, with liabilities \$6,000.

W. B. Marshall has opened in the plumbing business at Medicine Hat, N. W. T.

## CONTRACTS OPEN.

**FERNIE, D.C.**—A new fire hall will probably be built here.

**VANCEBORO, ONT.**—There is talk of erecting a large pulp mill here.

**EXETER, ONT.**—Ross & Taylor are about to build a new planing mill.

**HOLLAND, ONT.**—A new residence will be built next summer by Robert Story.

**CHARLESTON, ONT.**—R. Foster is preparing to build an addition to his hotel.

**NORTH WAKEFIELD, QUE.**—Mr. Pritchard purposes building a new store in the spring.

**STOUFFVILLE, ONT.**—A. Grubin purposes erecting a new brick building on Main street.

**LACOMBE, N.W.T.**—The Merchants' Bank is negotiating for a site for a bank building here.

**CARGILL, ONT.**—The Rife Co., of Walkerville, will probably establish a factory at this place.

**KEMPTVILLE, ONT.**—The Federal College Co. will erect a brick building here this summer.

**CHEMAINUS, B. C.**—Subscriptions are being collected towards the erection of a Baptist church here.

**ORILLIA, ONT.**—A by-law has been passed in council authorizing the issue of \$2,700 of debentures.

**MILLARTON, ONT.**—George Clarke invites bids up to the 16th inst. for erection of brick dwelling house.

**PUGWASH, N. S.**—The ratepayers have decided to remodel and re-seat the school building, at cost of \$3,000.

**HEPWORTH, ONT.**—A company is being formed here to bore for gas and oil in Grey and Bruce counties.

**HULL, QUE.**—Fire chief Benoit has recommended the purchase of a steam fire engine and a hose wagon.

**NORMAN, ONT.**—It is stated that work will shortly be commenced on the buildings for the Keewatin Power Co.

**LINDSAY, ONT.**—The corporation is about to invite tenders for purchase of \$37,000 local improvement debentures.

**WALLACE TOWN, ONT.**—John C. Campbell will receive tenders up to 20th inst. for remodelling the Presbyterian church here.

**KAMLOOPS, B.C.**—The council will be petitioned to secure the services of an engineer to prepare plans for a sewerage system.

**MATTAWA, ONT.**—Chapin & McVittie, who own an extensive pulp wood limit north of this place, intend erecting a large pulp mill.

**GOULD, QUE.**—Tenders are asked by G. F. Cowan, municipal treasurer, up to March 4th, for building a town hall in this village.

**NEWMARKET, ONT.**—The Mayor is about to issue a prospectus and take preliminary steps towards establishing a beet sugar factory.

**COWICHAN, B.C.**—Price Bros., proprietors of the summer resort at Cowichan Lake, intend erecting a large modern hotel at Duncan's.

**PORT ARTHUR, ONT.**—Secretary Langworthy, of the public school board, has been instructed to obtain plans for a new school building.

**BRANTFORD, ONT.**—Steps have been taken to organize a new Presbyterian congregation in the east ward, and a church will likely be erected.

**FREELAND, ONT.**—D. Murphy has sold property to a joint stock company, which purposes erecting a large hotel and several cottages.

**MIDLAND, ONT.**—A memorial has been presented to the Minister of Public Works asking that the harbor here be deepened and improved.

**NORWICH, ONT.**—William Fairley, municipal clerk, invites bids up to 7 p. m. of 23rd inst. for purchase of \$3,960.89 4½ per cent. debentures.

**HALIFAX, N.S.**—The city council at a meeting held last week decided to install a municipal electric light plant, at an estimated cost of \$100,000.

**WEBBWOOD, ONT.**—It is stated that as soon as spring opens the Spanish River Pulp & Paper Co. will commence work on their projected pulp mill.

**BROCKVILLE, ONT.**—A by-law to raise \$50,000 for improving the waterworks of the town will be submitted to the ratepayers on March 3rd.

**RAT PORTAGE, ONT.**—The council will memorialize the Provincial Government to erect an iron bridge over the east branch of the Winnipeg river.

**EDMONTON, N.W.T.**—Twenty-six sets of plans have been received for the proposed new \$20,000 school building. A selection will be made this week.

**QUEBEC, QUE.**—The Wolfe, Megantic & Lotbiniere Railway Co. is seeking incorporation, to build a railway from Line Bridge to the proposed Quebec bridge.

**ST. THOMAS, ONT.**—Elgin county council has agreed to bear half the cost of building a bridge over the Thames river, on the town line between Dunwich and Aldborough.

**ISLINGTON, ONT.**—A. Macpherson, treasurer of township of Etobicoke, has just taken bids for \$5,000 of debentures, issued for building steel bridges and for road improvements.

**BRANDON, MAN.**—It is reported that a project is on foot to erect a six story hotel on property recently occupied by D. A. Reesor's building.—The Brandon Machine Works Co. will this year erect new machine shops.

**PEMBROKE, ONT.**—Bids are asked by Rev. L. D. Zimmerman, Box 16c, up to February 18th, for erection of brick church for the Lutheran congregation in the township of Alice. Plans by M. Gorman, architect, this place.

**NORTH BAY, ONT.**—It is understood that Mackenzie & Mann will commence work this spring to build a railway from this town to the Temiscaming country. The road has been surveyed to Lake Temagami, a distance of 68 miles.

**MEGANTIC, QUE.**—A by-law will be submitted to the ratepayers to raise \$36,000 for the construction of a waterworks system, according to plans prepared by J. O. C. Mignault, civil engineer, of Montreal. A. Beigneul is municipal secretary.

**SHFRBROOKE, QUE.**—At the last council meeting the erection of a city hall was discussed. It is proposed to purchase the Merchants bank property and to endeavor to induce the Government to build a court house, to cost \$60,000, adjoining the city hall.

**PARRY SOUND, ONT.**—The proposed electric railway project from this town to Ahmic Harbor is making satisfactory progress. A survey of the route has been made by W. T. Jennings, C.E., of Toronto, and J. B. Miller, W. W. Keighley and others are about to apply for a charter.

**LISTOWEL, ONT.**—W. E. Binning, architect, is preparing plans for a school in section No. 5, township of Morris, and one in section No. 8, township of Morningson.—The contract for pressed brick residence for James Fox, of Brussels, has not yet been let.

**WINCHESTER, ONT.**—Plans have been prepared for a two-story and basement addition to the building of A. Sweet & Co.—Beach & Co. intend increasing their foundry, and will erect two buildings, one 40x120, four stories high, and the other 60x75, the latter to be used as a moulding shop.

**SYDNEY, N.S.**—It is stated that the New York syndicate which last week purchased property on Charlotte street intend erecting a modern office building on the site.—A new county building, costing over \$60,000, will be erected here in the spring. Plans have already been prepared.

**TWERD, ONT.**—The county council has decided to build a bridge over the Mora river, on the boundary between the city of Belleville and the county.—The Frankfort Electric Co. have asked for the privilege of erecting poles for the purpose of supplying electric light to the residents of Frankfort.

**FREDERICTON, N.B.**—A vote of the ratepayers will be taken on March 11th on a by-law to raise \$80,000 by debentures for the construction of a sewerage system.—The Provincial Secretary invites tenders up to February 27th for purchase of \$200,000 of debentures, issued for the purpose of building bridges.

**ST. JOHN, N.B.**—The city council has adopted the recommendation of the water and sewerage board that water mains be laid on portions of Smythe, Mill, Cobourg, Metcalf, Canard and Pitt streets, at estimated cost of \$6,550, also that \$10,000 be spent in renewing the water main in Carleton.

**AMHERSTBURG, ONT.**—The annual meeting of the directors of the South Essex Electric Railway Co. was held here last week. A discussion took place as to the route of the new road, which is likely to follow the lake shore from here to Leamington. It is proposed to extend the road to Point Pelee, and to build a large summer hotel there.

**ST. CATHARINES, ONT.**—The county council has granted a franchise to the Niagara, St. Catharines & Toronto Railway Co. to build an electric railway through the county to Beamsville, Smithville and St. Anne's.—Estimates are being made of the cost of a new structure to replace the Queenston street bridge.—The Shaw Milling Co. has commenced the erection of a flour mill here.

**VANCOUVER, B.C.**—It is reported that the Great Northern Railway Company intends to connect the British Columbia coast with the Eastern States, via the Kontenay mine camps, and have secured a site here for terminal wharves and stations. They will also build a canal to deep water, Vancouver Harbor, a quarter of a mile in length.—It is proposed to erect an agricultural hall at Central park.

**HAMILTON, ONT.**—It is said that representatives of the Shea syndicate have been negotiating for the purchase of a lot on King street east, with a view to building a theatre thereon. J. Harris, of Buffalo, was in the city last week in that connection.—A new Sunday school building will be erected in connection with the church of Ascension.—Geo. P. Dennis has secured a permit for two brick dwellings on Hannah street, cost \$2,200.

**WELLAND, ONT.**—The treasurer has been instructed to dispose of \$2,000 of debentures.—Mr. Hooker will give notice in council of by-laws to provide for the purchase of a steam road roller, to macadamize north Main street, and to complete the work on East Main street.—The council will present a memorial to the Minister of Railways and Canals asking that a sum be placed in the estimates for the purpose of deepening the raceway, giving a direct water supply from the Welland canal for municipal purposes, also to build a new bridge over the canal at Main street.

**LONDON, ONT.**—Herbert Matthews, architect, is preparing plans for three new residences on Piccadilly street for J. G. Ruchie, manager of the London Life Insurance Company.—A. O. Graydon, city engineer, will receive tenders up to 5 p. m. of 14th inst. for annual supply of sewer

pipe, cement, lumber, cedar blocks, nails, iron castings, etc., and until 5 p. m. of 13th inst. for supply of a new water cart.

A committee of the county council went to St. Thomas last week to confer with the authorities of Elgin county regarding the construction of the Carradoc bridge over the Thames river.—Fire fighting apparatus will be purchased for the Victoria hospital.

VICTORIA, B. C.—Thomas Hooper, architect, is calling for tenders for a two storey brick residence and office to be erected by Dr. R. L. Fraser on corner of Douglas and Kane streets; hot air heating, electric bells, laundry, etc.—A deputation from Victoria west have asked the School Board to erect a new school in that district.—Following is the estimated cost of projected works to be carried out by the city this year: James Bay causeway, \$100,000; Point Ellice steel bridge, \$50,000; high school building, \$30,000; home for the aged, \$10,000; new water main on Government street, \$10,000; four inch main on Fourth street, \$1,750; new fire hall, \$20,000; sewer extension, \$50,000; additions to electric light plant, \$5,000; street paving, \$20,000; repairs to agricultural hall, \$2,000; and a considerable sum for permanent sidewalks.

OTTAWA, ONT.—M. C. Edey, architect, has prepared plans for an addition to the registry office.—The county of Carleton and village of Hintonburg will ask the city council of Ottawa to act with them in applying for a viaduct to be constructed over the C. P. R. crossings on the Richmond road.—William Hodgson, architect, has completed plans for the new eight room school to be erected on Wellington street, and which will cost about \$45,000. Tenders will be invited immediately.—The city is applying to the Legislature for authority to issue \$50,000 of debentures for the purpose of extending the water mains and enlarging and improving the pumping machinery.—The Board of Health has decided to call for tenders for a contagious diseases' hospital with 85 beds, to cost \$45,000. Plans by Mr. Ewart, architect.—It is understood that Fire Chief Provost will ask the council for an appropriation for another fire engine, water tower and hose wagon.

WINNIPEG, MAN.—Mackenzie, Mann & Company want tenders by Saturday, 16th inst., for building abutments and piers for a railway bridge crossing the Red river.—It is reported that Mackenzie & Mann will erect a new theatre and hotel at the corner of Portage avenue, the site probably including the Queen's hotel property.—Plans are being prepared by George Browne, architect, for a mammoth department building to be built in the south end of the city, to cost about \$50,000.—J. G. Hargrave has purchased the building immediately south of the Bank of Montreal and will make additions and improvements thereto.—J. A. M. Aikins will erect a residence in the spring.—It is understood that S. Spence, of the Galt House, will at an early date commence the erection of a new hotel on Portage avenue south.—Preparations are being made to commence work on the block to be built by Alloway & Sprague on Portage avenue, east of the Y. M. C. A.—The Toronto Type Foundry Co. have secured the property on Arthur street, having a frontage of 105 feet, for the purpose of building thereon.—Arthur Congdon has purchased property on the west side of King street, and George Greig the property on Albert street on which to erect buildings.

TORONTO, ONT.—The proposed improvements to the Palmer House, corner King and York streets, will cost \$15,000, and will include an additional story, a new elevator, and considerable marble work.—J. A. Ellis, architect, 9½ Adelaide street east, is calling for tenders in this

issue for the erection of a residence for David Kennerly, Toronto Junction, and for a brick school building in School Section No. 2, Scarborough.—A motion has been introduced in the Public School Board that two rooms be added to Borden street school and four to Huron street school.—At a meeting of the executive committee of the National Sanitarium Association, held on Saturday last, plans were submitted for a free hospital for poor patients in the early stages of consumption. Several sites for the erection of a hospital for incurable cases was discussed also.—It is rumored that a New York syndicate is negotiating for the purchase of the property at the south-east corner of Queen and Bay streets. The purpose is said to be to erect thereon either a first-class theatre or an hotel with Turkish baths.—The question of building a residence for lady students of Victoria College was discussed at a meeting of the Barbara Heck Memorial Association held a few days ago. The proposition is to build in a small way at first and enlarge as required.—Henry Simpson, architect, has just taken tenders for a warehouse on Spadina avenue for J. Lester and for a residence on Woodbine avenue for W. Chadd.—William Le Barr has taken out a permit for three attached brick dwellings at 98 102 Dundas street, to cost \$3,000.

MONTREAL, QUE.—The superintendent of the water department has asked for an appropriation of \$400,000 for a filtration plant. He has also recommended the cementing of the bottom of reservoirs, at a cost of \$8,000.—Hutchison & Wood, architects, have in hand the reconstruction of the building of Silverman, Boulter & Company on St. Peter street, which was destroyed by the recent fire.—A. Raza, architect, has completed plans for a new block of stores to be built by P. P. Martin on St. Paul street. The building will be of Montreal limestone, four stories on St. Paul street and five on Commissioners.—The vacant property on St. James street, formerly occupied by the Barron block, has been purchased by the syndicate representing the combination of lighting interests for their offices.—Ald. Hart is strongly urging the city council to purchase six new fire engines, two water towers, several reels, and to build two new fire stations.—The Laing Packing Co. desire permission to erect an abattoir in the city.—Building permits have been granted as follows: A. O. Glameau, repair to two-storey house, Bourgeois and Wellington streets, cost \$1,500; F. Dansereau, two two-storey houses, Deionmier street, cost \$1,200 each, also two-storey house, 26-28 Masse street, cost \$1,200; E. Quain, two two-storey houses, Manufacturers street, cost \$2,000; H. Quain, two two-storey houses, Manufacturers street, cost \$3,000; W. Clark, factory, 83 Amherst street, cost \$1,500.—Hutchinson & Wood, architects, have completed plans for the block to be built by the Royal Insurance Co. on

the west side of Place d'Armes. It will be seven stories, of Ohio sand-stone, and will necessitate the addition of another story to the corner block.

### FIRES.

Young's block at Allenford, Ont.—Grist mill of John Irwin at Warton, Ont.; loss \$3,000.—Residence of J. Gibson on Duffering street, Toronto; loss \$6,000.—Dwelling of Watson Little at L'Orignal, Que.—Tremaine's warehouse at Charlottetown, P. E. I.; loss \$14,000.—Jackson's harness shop, Bartley Bros' store and Smith's blacksmith shop at Wawnesa, Man., loss \$14,000.—Seven dwellings at Ste. Anne de Bellevue, Que.; loss \$15,000.—Brick block of Anderson & Logan at Niagara Falls, Ont., damaged to extent of \$2,000.—Dry goods store of Starr & Sutcliffe at Kingston, Ont., partially destroyed.

### CONTRACTS AWARDED.

BROCKVILLE, ONT.—Addition to Baptist church; John Warrick, contractor.

PORT COLBORNE, ONT.—House on Catherine street for William Hiscott; Augustine & Son, contractors.

WINNIPEG, MAN.—Brick block on Portage ave. for Mr. Alloway. Ritchie & Sharp, contractors; cost \$30,000.

STURGEON FALLS, ONT.—Public school debentures have been disposed of, par to the London Loan Co., of Canada.

OTTAWA, ONT.—The contract for refrigerating machinery for the Ottawa Produce Company's building has been let to the British Linde Refrigerator Co., of England.

MONTREAL, QUE.—Perrault & Lesage, architects, have let the contract for the branch post office at Hochelaga for the Department of Public Works to O. Martineau & Son, this city; price \$27,730.

STRATFORD, ONT.—School in S.S. No. 3, Downie. J. S. Russell, architect; Chas. Muir, mason work and plastering; Kruspe & Hoffmeyer, carpenter work; Alf. Schmidt, heating and galvanized work; Jacob Esch, painting and glazing.

COATICOOK, QUE.—Tenders were received as follows for a new academy building, from plans by Hutchison & Wood, architects: Simoneau & Dion, \$10,500 (accepted); D. G. Loomis & Son, \$12,975 (except heating); T. T. Shurtleff, \$13,500; C. C. Elliott, \$13,500; G. M. Moulton, \$14,500.

LISTOWEL, ONT.—W. E. Binning, architect, has awarded the following contracts: A block for George D. Morrison, Kincardine—brick and stone-work, N. Purcell, Listowel; painting and glazing, Henry Plant, Kincardine; other contracts not let. Residence for T. C. Stevenson: Thomas Newscn contractor, Brussels, contractor.

KINGSTON, ONT.—Additions and alterations to Queens' University Medical building; Arthur Ellis, architect; masonry, brickwork and plastering, Watts & Morley; carpentry and joiner work,

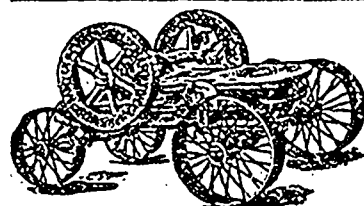
## Good Roads Machinery Co. (Registered)

JOHN CHALLEN, Manager, HAMILTON, ONT.

“CHAMPION” Rock Crushers, Road Rollers, Road Graders, Road Plows, Macadam Spreading Wagons, Street Mud Cleaners, Wheel & Drag Scrapers.

Now introduced in every Province of Canada.

Send for Twentieth Century Catalogue.



STONE Crushers, Stone Spreading Wagons, Wheelers and Drag Scrapers, Plows, Steam and Horse Rollers, Road Graders, &c.

SAWYER & MASSEY COMPANY, Limited - Hamilton, Canada

Joseph Hooper; steam heating, plumbing and metal work, McKelvey & Birch; painting and glazing, T. W. Milo; estimated cost, \$9,000.

TORONTO, ONT.—The Toronto Hotel Co. are said to have accepted the tender of Jas. Howard, Jr., of Pittsburg, Pa., for building the proposed million dollar hotel on King street. The building will be 165x197 feet, six stories, of stone, brick and terra cotta. — Henry Simpson, architect, has awarded to Chas. Rogers & Sons a \$6,000 contract for inside finish of Mr. Harris's residence on Pape avenue.

LONDON, ONT.—H. C. McBride, architect, has let the following tenders for a new store front on Dundas street for Sreaton & Co.: Mason and brickwork, Jas. Luney; carpenter work, R. G. Wilson.—H. C. McBride, architect, has let the following contracts in connection with the new branch office of the Bank of Toronto on Dundas street east: Mason and brickwork, Mattyn & Hammett; carpenter work, John Wilkie & Sons.

**BLASTING.**

The lines of least resistance should be proportional to the diameter of the bore-holes. The following table is given by M. Eissler:

No.	DIAMETER OF BORE-HOLES.		
	1 1/2 in.	1 in.	1 1/4 in.
	Lines of Least Resistance.		
1.	3 1/2 ft.	4 ft.	5 ft.
2	3 1/2 ft.	5 ft.	6 ft.
3	5 ft.	6 ft.	7 ft.

The corresponding depths of bore-holes in the above, as stated by Eissler, are, for No. 1, equal to the line of least resistance; for No. 2, 1 1/2 times that length, and for No. 3 twice that length.

**CHARGING HOLES WITH DYNAMITE.**

Instructions have been given under "Fulgurates and Fuses (Chap. 11) for attaching the cap and fuse, or electric detonator, to cartridges. The cartridge thus prepared is called the "primer." The several cartridges constituting the charge are inserted first, and care must be taken to have the bore-hole of such a size that they may pass freely to the bottom without binding. It should never be necessary to force

them to the bottom. In order that they may be compressed to fill the entire width of the hole the cartridge paper must be cut lengthwise. This is best done with a copper blade. To do so with a steel knife is not unattended with danger. The cartridges should now be firmly compressed with a wooden rammer, but they must never be rammed. Firm pressure only is allowable. No steel or iron instrument must ever be used in charging any kind of explosive in a bore-hole. The cartridges must be so well compressed upon each other that no air spaces may remain between them. This would produce an air cushion, and if it did not cause a portion of the charge to escape explosion,

would at least prevent perfect detonation, weakening the effect of the explosive. The primer is inserted last. The cartridge paper, as previously explained, should be tied firmly above the cap with a string, one end of which should be long enough to admit of lowering the primer into the hole with it.

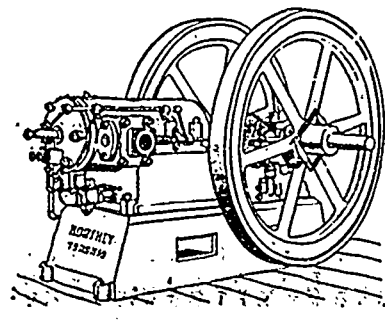
(To be continued next week.)

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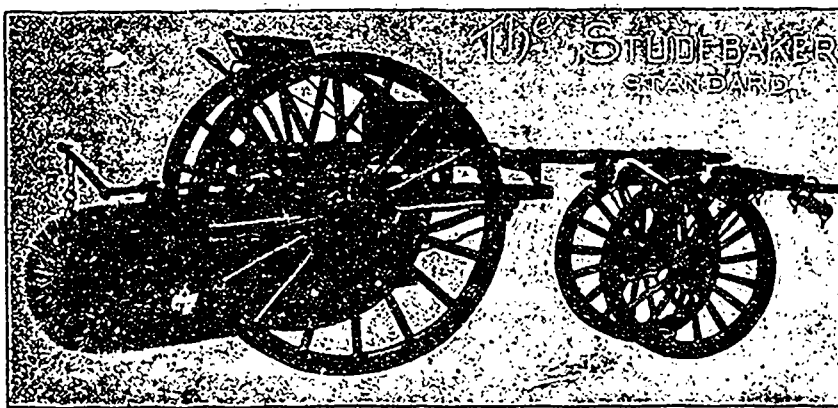
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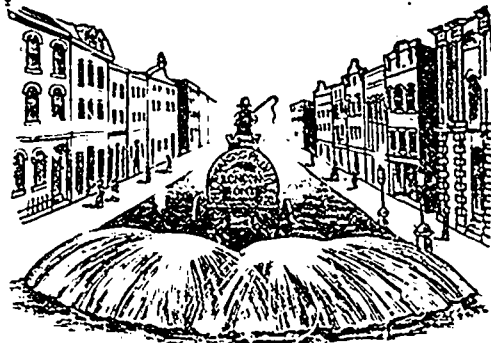
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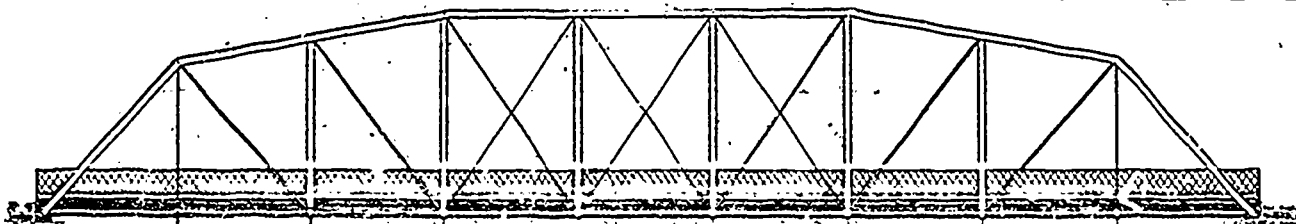
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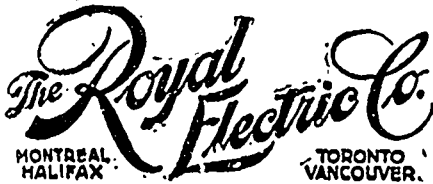
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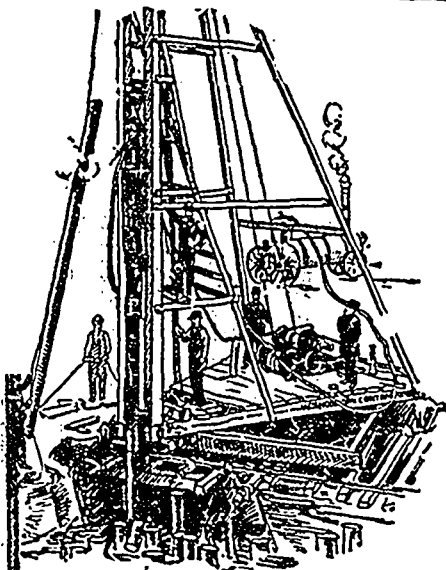
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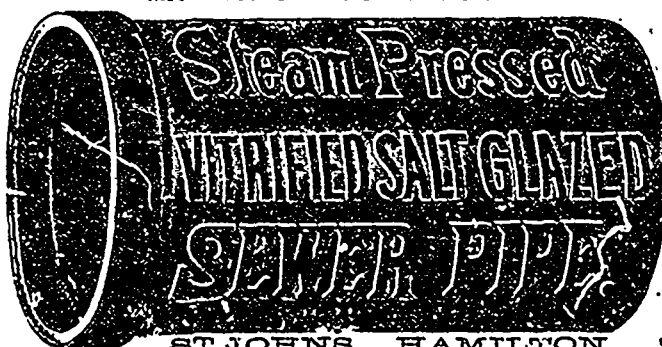
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# MUNICIPAL DEPARTMENT

## INTERPROVINCIAL BRIDGE AT OTTAWA.

The new interprovincial bridge across the Ottawa river connecting the cities of Ottawa and Hull is now practically completed, and is a magnificent structure. It has a single track railway, double track electric road, double track highway, and a double walk for foot passengers. The structure is 62 feet wide, and all the tracks are laid on the same level. The superstructure, which was erected by the Dominion Bridge Company, is composed of a complete cantilever bridge, 1,050 feet in length, with a clear span of 556 feet, which is to-day the longest cantilever span in Canada. There is also another span of 247½, with two shorter spans, making in all 1,500 feet of steel superstructure, the whole supported by six magnificent piers, built in the most substantial manner. One of these sub-structures is placed in no less than 80 feet of water, and its great extent has been a theme of comment amongst all Canadian contractors and engineers for many months past. This monster pier was in course of construction when the fatal accident took place at the Cornwall bridge, and it was only natural that Mr. Schreiber, the government's chief engineer, should realize the great responsibility resting upon him, as well as upon all others connected with the great bridge that was then being built across the Ottawa. In order to convince Mr. Schreiber that the proper material and workmanship was being put into the interprovincial bridge, the contractor and the railway companies interested proposed to the chief engineer that they should put a diamond drill wholly through the centre of the pier, taking out the cores of material thus bored, with the drill, and show him just what the piers

were made of. He consented to this, and about five months after the completion of this big pier, which had been constructed of concrete, the drill was set to work, and the greatest development of this line of construction, so the reports say, the world has ever known was in due time accomplished.

A three-inch hole was drilled down to within a few feet of the bottom of the pier, taking out successfully the cores at each section of the drill, and for the last few feet a hole one inch in diameter was bored through the remainder of the structure down into solid rock. The experiment was of such a highly successful character that the engineer had no difficulty what-in pronouncing upon the splendid quality of the work. The approach from the Ottawa side was of the most heavy and difficult nature, there being an immense rock cutting through Nepean Point, and along the steep cliff between the Major Hill Park and the Rideau canal. This approach is in the neighborhood of 3,000 feet, and the engineers estimate the cost in the neighborhood of \$200,000. The approach to the Interprovincial bridge from the Hull side is composed of a very heavy steel trestle for a distance of about

750 feet until the waterworks are passed, and then the track is carried for a further distance of some 1,100 feet by concrete abutments and steel bridges. Then through East Hull the road goes over the housetops, followed by a heavy embankment of 600 feet, making the complete approach some 2,500 feet long. It may be said, in fact, that the approaches leading up to both the Ottawa and Hull ends of the bridge are practically permanent work, and the rails laid throughout are 75 lbs. to the yard. The cost of the bridge was about one million dollars.

Lieut. Col. John Hogg, clerk of the town of Collingwood, Ont., died on February 10th, after a short illness. Deceased was one of the pioneers of the town.

It was the first time Dorothy had seen a street-sprinkler. "O, mamma," she exclaimed, with wide-open eyes, "just see what that man's got on his waggon to keep the boys from riding on behind!"

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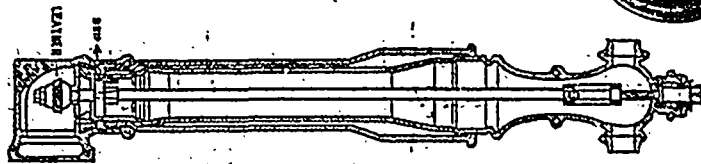
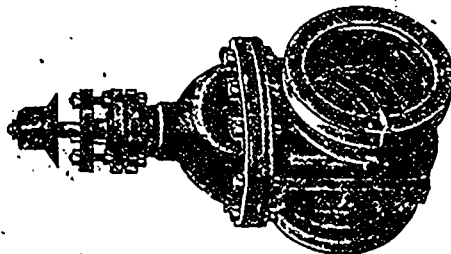
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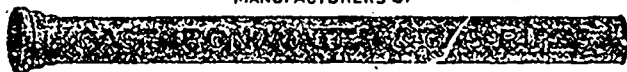
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STONE.

Table listing various stone types (Common Rubble, Large flat Rubble, Foundation Blocks, etc.) and their prices.

INDEX TO ADVERTISEMENTS

In the "Canadian Architect and Builder."

Large index table listing various categories of advertisements such as Architects, Contractors' Plant and Machinery, Cements, Lime, Roofers, etc., with names and page numbers.

CREDIT VALLEY STONE.

Table listing stone types (Rubble, Brown Dimension, Grey Coursing, etc.) and their prices.

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SLATE.

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CEMENT, LIME, etc.

Table listing various cement and lime products (Portland Cement, Roman, Keene's Superfine Whites, etc.) and their prices.

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