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# THE CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF CONTRACTING AND MUNICIPAL PROGRESS

EVERY

PUBLIC WORKS • TENDERS •  
ADVANCE INFORMATION •  
AND MUNICIPAL PROGRESS

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. 10.

AUGUST 16, 1899

No. 29

## THE CANADIAN CONTRACT RECORD,

PUBLISHED EVERY WEDNESDAY

Intermediate Edition of the "Canadian Architect and Builder."

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

H. MORTIMER PUBLISHING COMPANY  
of Toronto, Limited,  
Publishers.

CONFEDERATION LIFE BUILDING, TORONTO.

Telephone 3762.

Branch Office:

New York Life Insurance Building, Montreal.

Bell Telephone 2799.

Advertising Rates on application.

## SEALED TENDERS

Will be received by the undersigned up to WEDNESDAY, AUGUST 23rd, for all trades, excepting plumbing and heating, required in the erection of a Residence in Rosedale. Plans and specifications may be seen at the office of the architects, to whom tenders are to be addressed. Lowest or any tender not necessarily accepted.

GOULINLOCK & BAKER, Architects,  
714 Temple Building, Toronto.

## FOR SALE

600 feet of 1 1/2 inch Cast Iron Flexible Pipe—the Ward joint; new. Apply JOHN LANTON, 1457 Queen Street West, Toronto.



## Notice to Contractors

### TENDERS FOR ROADWAYS AND SIDEWALKS

Tenders will be received, by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on WEDNESDAY, AUGUST 30th, 1899, for the following works:

#### BRICK PAVEMENTS:

Denison Square, from Augusta to Bellevue Avenue Fuller Street, from Queen to Pearson.

#### MACADAM ROADWAY:

Pembroke Street, from Spater to Wilton Avenue.

#### ASPHALT PAVEMENT:

Churchill Avenue, from Dovercourt Road to a point 715 feet east.

Contents of envelopes containing tenders must be plainly marked on the outside.

Conditions and specifications may be seen and forms of tender obtained at the office of the City Engineer on and after Wednesday, August 16, 1899.

A deposit, in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of 2 1/2 per cent. on the value of the work tendered for, must accompany each and every tender, otherwise they will not be entertained.

Tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

Lowest or any tender not necessarily accepted.

JOHN SHAW (Mayor),

Chairman Board of Control.

City Hall, Toronto, August 14th, 1899.

## TENDERS

### ALGOMA CENTRAL RAILWAY.

This road is now being located from Michipicoton Harbor eastwardly. Contracts will be let privately for

#### GRADING AND ROCK WORK

to contractors having teams and small outfits, as fast as the road is located.

For further information apply in person or by mail to

H. E. TALLOT,

Superintendent of Construction,  
Michipicoton River, Ontario.

## TENDERS

Sealed tender will be received by the undersigned until 12 o'clock, noon, of the 21st DAY OF AUGUST, INSTANT, for the construction and completion of certain

### GRANOLITHIC SIDEWALKS

in the town of Smith's Falls, in accordance with plans and specifications prepared by J. H. Moore, C.E., copies of which will be forwarded to applicants if asked for.

No tender will be considered unless accompanied by a marked cheque for \$500.00, and containing the signature of the proposed sureties, and in the form to be furnished by me upon application. The \$500.00 will be returned if tender not accepted, and forfeited if tender be thrown up by contractor.

Lowest or any tender not necessarily accepted.

B. E. SPARHAM,

Town Clerk.

Smith's Falls, Ont., Aug. 8th, 1899.



## TENDERS FOR

### Telegraph Wire

SEALED TENDERS, addressed to the undersigned and endorsed "Tender for Telegraph Wire" will be received at this office until FRIDAY, EIGHT TEENTH AUGUST, 1899, for the supply of Three Hundred and Thirty Thousand Pounds, or One Hundred and Sixty Five tons (of 2,000 lbs.) of No. 8 S.W. G. Galvanized Iron Telegraph Wire (144 to 265 lbs. per mile), delivered in bond at the C. P. R. Station at Vancouver, B.C., within five weeks from the time the contract is awarded.

The quality of the wire and galvanizing must be such as will afford a test corresponding to the Fellen-Guillaume standard E. B. B., having a constant (resistance x weight, per mile) under 5,700; breaking strain over 1,000 lbs., and taking not less than 20 twists in six inches. Weight of lengths without joint 90 to 115 pounds.

Also for delivery with the above, 10,000 lbs., or five tons (of 2,000 lbs.) No. 9 S. ft. Annealed Galvanized Iron Telegraph Wire. The coils to be distinctively tagged.

Tenders to state the price per 100 lbs., all charges included, in bond at Vancouver as above.

Each tender to be accompanied by an accepted bank cheque for an amount equal to ten per cent. of the bulk sum of the tender.

The Department does not bind itself to accept the lowest or any tender.

By Order,

E. F. E. ROY,

Secretary.

Department of Public Works,

Ottawa, August 2nd, 1899.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

## Sealed Tenders

Will be received by the undersigned to 5 p.m. 21st SEPTEMBER NEXT, for building Superstructure of a Steel Bridge, 100 feet span, in the Township of York, County York, Ont. For further information apply to the undersigned. The lowest or any tender not necessarily accepted.

P. S. GIBSON & SONS,

Engineers Toronto York.

Willowdale, Ont., 14th August, 1899.

## TENDERS WANTED

Sealed tenders will be received by the undersigned up to 6 o'clock p.m., FRIDAY, AUGUST 25th, 1899, for the construction of about

### 10,000 Square Feet of Granolithic Walk

Specifications can be had on application to the Town Clerk.

The lowest or any tender not necessarily accepted.

WM. MITCHELL,

Town Clerk.

Goderich, Ont., August 14th, 1899.

## TOWN OF BERLIN

Sealed tenders, addressed to E. Bricker, Esq., Chairman Board of Works, will be received up to noon, TUESDAY, 22nd INST., for the construction of about

### 7,000 SQUARE YARDS OF MACADAM ROADWAY.

Plans and specifications may be seen and forms of tender obtained at the office of the Town Engineer.

The lowest or any tender not necessarily accepted.

WM. MAHLON DAVIS, M. Can. Soc. C.E.

## TOWN OF LINDSAY

Separate tenders, addressed to the Chairman of the Board of Works, will be received up to twelve o'clock, noon, on WEDNESDAY, 17th 23rd DAY OF AUGUST, A. D., 1899, for the construction of the following works, viz.:

1. A Tile Sewer about 1,500 feet long on Lindsay and Melbourne Streets, together with Fifty Lateral Sewers each 33 feet long.
2. A Tile Sewer about 1,500 feet long on William and Russell Streets, together with the necessary side and cellar Drains to the street line.
3. A Tile Sewer about 2,400 feet long on Cambridge, Wellington and William Streets, together with the necessary House Drains to the street line.
4. A 12-foot Granolithic Walk along the north side of Kent Street, from William to Lindsay Street, a distance of about 530 feet.

Each tender must be accompanied by a deposit in the form of a marked cheque for five per cent. of the tendered price, which will be returned upon a contract being entered into.

Plans and specifications may be seen after Friday the 12th day of August, 1899, and forms of tender obtained at the office of the Town Clerk, or at the office of the Engineer, W. T. Ashbridge, C.E., Temple Building, Toronto.

The lowest or any tender not necessarily accepted.

GEORGE INGLE,

Chairman Board of Works.



## Notice to Contractors

### TENDERS FOR THE SUPPLY OF OAK AND ELM LUMBER

Tenders will be received, by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on THURSDAY, AUGUST 24TH, 1899, for the supply of Oak and Elm Lumber.

Contents of envelopes containing tenders must be plainly marked on the outside.

Conditions and specifications may be seen and forms of tender obtained at the office of the Street Commissioner, New City Buildings, on and after Monday, August 14, 1899.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of \$20 on the value of the material tendered for must accompany each and every tender, otherwise they will not be entertained.

Tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

JOHN SHAW (Mayor),  
Chairman of Board of Control.

City Hall, Toronto, Aug. 10, 1899.



## Notice to Contractors

### TENDERS FOR SEWERS AND SHEET PILING

Tenders will be received, by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on WEDNESDAY, THE 23RD INSTANT, for the following works:—

12-inch Tile Pipe Sewer, Dupont Street, from Huron St. to Howland Avenue.  
2 x 3 feet Brick Sewer, Spadina Road, from Dupont Street to north city limits.  
Sheet Piling on Keating's Channel, north side, west of Lamb's Bridge.

Contents of envelopes containing tenders must be plainly marked on the outside.

Conditions and specifications may be seen and forms of tender obtained at the office of the City Engineer, on and after Monday, August 14th, 1899.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of 2½ per cent. on the value of the work tendered for, must accompany each and every tender, otherwise they will not be entertained.

Tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

Lowest or any tender not necessarily accepted.

JOHN SHAW (Mayor),  
Chairman Board of Control.

City Hall, Toronto, August 9, 1899.

### CONTRACTS OPEN.

COLUMBIA, B. C.—A system of sewerage is about to be put in.

TOTTENHAM, ONT.—An agitation is on foot for a system of waterworks.

DIGBY, N. S.—Plans will likely be prepared at an early date for a new town hall.

MILLTOWN, N. B.—The St. Croix Cotton Co. intend building a brick warehouse.

SUSSEX, N.B.—The Sussex Mineral Springs Company purpose enlarging their premises.

RAT PORTAGE, ONT.—Thos. Walsh has purchased property on which to erect another block.

BERLIN, ONT.—The corporation will shortly invite tenders for roadwork, to cost about \$6,000.

BRUCEFIELD, ONT.—Pittsburg township council is considering the purchase of a stone crusher.

TILBURY, ONT.—A committee has been appointed to secure site for proposed Church of England.

PORT ARTHUR, ONT.—Geo. Clavet

has purchased the Northern Hotel, and purposes remodelling same.

CARLETON PLACE, ONT.—J. A. Goth has invited tenders for heating and ventilating the High School.

WINCHESTER, ONT.—The council is negotiating with Eager & Sanderson to light the streets of the town.

ST. ANTOINE DE LONGUEUIL, QUE.—The School Board is about to undertake the erection of a new school.

INGERSOLL, ONT.—The Board of Works will engage an engineer to oversee the construction of sidewalks.

SHOAL LAKE, MAN.—A proposition has been made to the council to borrow \$30,000 for the building of roads.

LONDON, ONT.—The Sewage Committee will call for tenders for filling in about the conduit at the Coves.

THURSO, QUE.—The town has invited bids for purchase of debentures. Address, A. McLean, secretary-treasurer.

CHESTERVILLE, ONT.—The ratepayers have granted \$10,000 for establishment of pork packing and canning factory.

VICTORIA, B. C.—The Victoria theatre building will be converted into an hotel. The proprietor is Joseph Boscoquitz.

DAUPHIN, MAN.—Plans are said to be in course of preparation for a large freight house to be built by the railway company.

TORONTO JUNCTION, ONT.—The Toronto & Suburban Railway will probably be extended to Islington and Cooksville.

PELEE ISLAND, ONT.—J. S. Laird, C. E., of Essex, will report to council on required improvements to pumping plant.

ARNPRIOR, ONT.—At meeting of council on August 9th a franchise for electric street lighting was given to R. Anderson, of Ottawa.

KOSTOCK, ONT.—The council of Ellice desire tenders by August 21st for erection of stone or cement abutments under Gardner's bridge.

LACHINE, QUE.—The ratepayers voted on a by-law on Monday last authorizing the construction of a sewerage system, at cost of \$155,000.

ROSSLAND, B. C.—Bids for purchase of 150 debentures of \$500 each are wanted by August 28th. Address, Wm. McQueen, city clerk.

BROCKVILLE, ONT.—B. Dillon, architect, wants tenders by 6 p. m. to-day (Wednesday) for fan system of ventilation for Victoria school.

MACOG, QUE.—J. H. Lefebvre & Co., proprietors of the waterworks, are about to make a proposition to the council for improving the system.

BRANTFORD, ONT.—Tenders have been invited for building Roman Catholic church, from plans by Robert Clohocy, architect, Hamilton.

DUNDAS, ONT.—James Moore, town clerk, will receive tenders up to August 26th for construction of cement sidewalks and crossings.

ALVINSTON, ONT.—H. McKellar will receive bids up to September 2nd for construction of Chambers drain. Plans at clerk's office, this village.

AYLMER, QUE.—The council has received a communication from a firm in Montreal regarding the establishment of a canning factory in this town.

HULL, QUE.—The city engineer will shortly submit to council plans for utilizing water instead of steam power at the waterworks pumping station.

ROXTON FALLS, QUE.—The Roxton Novelty Chair Co. has been organized, to manufacture furniture, etc. Wilfrid Wood, this village, is interested.

ALMONTE, ONT.—On September 25th a vote of the ratepayers will be taken on a by-law to raise \$50,000 by debentures for installing a civic electric light plant.

TEESWATER, ONT.—The council is considering the purchase of the existing electric light plant and the erection of a stand pipe for waterworks purposes.

KAMLOOPS, B. C.—Yesterday the ratepayers voted on a by-law to raise \$27,000 to improve the waterworks system, and \$10,500 to extend the electric light plant.

LIVERPOOL, N. S.—New tenders for furnishing an arc and incandescent lighting plant for the town are invited up to August 21st. Address, D. C. Mulhall, Mayor.

KENTVILLE, N. S.—The Nova Scotia Carriage Co. wants bids for supplying 20,000 feet of 1 and 1¼-inch basswood 8 inches and up wide, delivered by October 10th.

DARTMOUTH, N. S.—The Water Committee has recommended that the council invite tenders for the supply of water pipe for extension of system along Upper Water street.

BALA, ONT.—It is reported on what seems to be reliable authority that the Grand Trunk Railway authorities have decided upon the erection of a summer hotel here, to cost about \$15,000.

GUELPH, ONT.—The council will lay a water main to St. Joseph's hospital, cost \$1,600.—The city engineer has submitted to council a list of streets on which cement sidewalks should be constructed.

NIAGARA FALLS, ONT.—Mr. E. Baxter, of Fort Erie, is said to be looking into the question of building an electric railway along the Canadian bank of the Niagara river from Fort Erie to Chippewa.

VANCOUVER, B. C.—The sum of \$7,000 has been promised towards proposed Homer street Methodist church; Rev. E. E. Scott, pastor.—N. S. Hoffar, architect, has invited tenders for building brick block for Thos. Dunn.

ORILLIA, ONT.—Tenders will be let on August 28th for blasting out rock in North River, also for repairs to abutments of bridge of town line, North Orillia and Matchedash. Particulars from R. H. Jupp or D. M. Harvie.

GODERICH, ONT.—The corporation is about to invite tenders for construction of granolithic walks.—E. Heaton has submitted to council a proposition made by Mr. Francois Lennox for the establishment of a glass factory in town.

NELSON, B. C.—The London & British Columbia Gold Fields Co. will erect a two-storey brick and stone building on Baker street, cost \$10,000.—Thomas Madden is about to commence a brick block, two storeys, cost \$12,000.

KINGSTON, ONT.—Messrs. Power & Son, architects, are preparing plans for the proposed opera house, and tenders for the work will be invited at an early date. The county council will probably invite tenders for rebuilding the jail wall.

WALLACEBURG, ONT.—The town council has decided upon the Martin site for proposed fire hall, and plans for same will be prepared at once.—The trustees of Presbyterian church are obtaining information with a view to rebuilding.

CALGARY, N. W. T.—Reports have been made to council by Willis Chipman, C. E., of Toronto, and Col. Ruttan, C. E., of Winnipeg, as to the cost of necessary improvements to existing waterworks system, also as to the cost of building an entirely new system.

HALIFAX, N. S.—Mr. Laurie has a scheme in view to reclaim marsh property in Cumberland county. It is understood that the work will be quite extensive.—J. C. Dumareq, architect, wants bids by 17th inst. for building proposed Infant's Home.

TOIHOUE RIVER, N. B.—Prof. Grover, of Orono, Maine, has completed his hydraulic survey of the Tobique river from its mouth to a point about three miles above the Narrows. Upon his report will depend the carrying out of the proposed scheme for the erection of pulp and paper mills.

GREENWOOD, B. C.—Paul Johnson, M. E., of London, Eng., will superintend the construction of a large smelter at this

place. The smelter will be built by the British Columbia Copper Smelting Co., an English syndicate with a capital of \$3,000,000. It is probable that the electric power for the smelter will be transmitted a distance of nine miles.

ST. JOHN, N. B.—Magee Bros. want bids by 19th inst. for alterations to brick dwelling 29 Meleckenburg street; T. C. McKean, is architect.—Engineer Knipple will shortly arrive from England to select a site and prepare plans for the proposed dry dock. Particulars may be obtained from Geo Robertson M. P. P.

WINDSOR, ONT.—Tenders are invited by J. E. D'Avignon, chairman Finance Committee, for site for proposed armory.—The committee have not yet selected a site for proposed House of Refuge, although plans for building have been submitted by eight architects, the cost ranging from \$16,000 to \$30,000.

HUNTSVILLE, ONT.—M. C. Dickson, District Passenger Agent of the Grand Trunk Railway, has purchased Faith island in the Lake of Bays, and will erect a fine residence thereon next summer.—The Public School Board have appointed Messrs. Whiteside and Weir a committee to purchase site and secure plans for a new school house.

WINDSOR, N.S.—The Dominion Cotton Co. is about to extend its plant here.—There is an agitation in favor of building a dock, the cost of which is estimated at \$200,000.—The Windsor Calcium Carbide Co. have secured an option on a valuable water power near this place, and will likely establish extensive works for the manufacture of calcium carbide. An engineer will shortly make surveys.

FORT WILLIAM, ONT.—Graham, Home & Co. have acquired from the Bank of Montreal the mill formerly owned by them. It will be refitted for operation next spring.—The Ogilvie Milling Co. are considering the establishment of a large flour mill at this place.—The proposed C. P. R. roundhouse here, the bridges and the station at Rat Portage will cost in the neighborhood of \$100,000.

SMITH'S FALLS, ONT.—Mr. Martin, architect, of this town, has a scheme on foot for connecting the summer resorts along the Rideau river with an electric railway. He has secured a lease of the water power at Jones Falls.—A vote was taken on Monday last on a by-law to raise \$20,000 for purchase of steam road roller and grader and for permanent street improvements; result not learned.

ST. CATHARINES, ONT.—Plans submitted by Mr. Welsh have been accepted for heating collegiate institute.—The council will shortly undertake the construction of a sewer on Church street.—The St. Catharines Hydraulic Co. has been incorporated, capital \$40,000, to produce and distribute electricity. T. R. Merritt, W. H. Merritt and J. H. Ingersoll are provisional directors.—The council is considering the raising of \$4,000 by debentures and the granting of a site for proposed drill hall.

QUEBEC, QUE.—David Ouellet, architect, is preparing plans and specifications for the decoration of the R.C. church of Grande Riviere, Gaspé county. He is also preparing plans for the R.C. church of St. Peter, Gaspé county. These two churches are to be constructed in pine or basswood, with Pedlar stamp steel mouldings and ornaments. Same architect is preparing plans and specifications for a residence for the Rev. J. A. Larouche, pastor of the church of St. Bruno, Lake St. John. It will be frame inside, lined with pine, galvanized iron roof, etc.

HAMILTON, ONT.—Plans for introducing electricity as a motive power at the sewage disposal works are under consideration by the city engineer.—Wm. & Walter Stewart, architects, have been granted a permit for cattle and sheep pens for stock yards, cost \$8,000.—In connection with the acquisition of the street railway systems by the Cataract Power Company syndicate, it is stated that another transmission line will be constructed between the power house and Hamilton.

WELLAND, ONT.—Tenders are wanted by the corporation for the purchase of \$40,000 of debentures.—The Market Committee has been instructed to obtain plans for a town hall.—Mr. Nichols, architect, is taking tenders on Major Cohoe's new residence, which will be three storeys, frame, furnace, hot and cold water fixtures, etc.—C. H. Reilly, chairman Street Committee, invites tenders up to August 18th for construction of 1,100 feet of sewer, and until August 26th for about 120,000 square feet of concrete sidewalks. Particulars from E. R. Hellemis, town clerk.

WINNIPEG, MAN.—J. H. G. Russell, architect, is preparing plans for additions to the Queen's hotel at Saltcoats.—Thos. John purposes erecting a large grocery warehouse on Market street east.—The council will probably submit to the rate-payers at the next civic elections a by law to establish a crematory plant.—C. W. Millican, of the Public Works Department, has prepared plans and estimates for the erection of several bridges, and also for the drainage of one or two small swamps in the south-western part of the province.—The proposed Orange Hall to be erected by a joint stock company will cost about \$25,000. It is improbable that building operations will be commenced this year, although a committee is now looking into the question of plans.—The C.P.R. will next spring commence the construction of a branch railway to Lac du Bonnet, where extensive brick yards have been established.

TORONTO, ONT.—The Robert Simpson Co. are announced to have purchased the two stores on Yonge street just north of the property on which they are now building. It is evidently the intention to extend their departmental store at a later date by taking in these premises.—Tenders are invited up to August 20th for the construction of 100 miles of the Ontario and Rainy River Railway. Plans may be seen at Port Arthur and at the offices of the company in this city.—It being the intention of the Independent Order of Foresters to establish an I.O.F. home, offers of free sites have been made by the councils of Beaverton and Collingwood.—The city desires tenders by Thursday, 24th inst., for the supply of oak and elm lumber.—The question of building an overhead bridge at Sunnyside is under consideration by the council.—The J. D. King Co., hoot and shoe manufacturers, of Levis, Que., are negotiating with the council for the removal of their factory to this city.—The Massey-Harris Co. are

having plans prepared for a club house and library for their employees, to be built on King street opposite their works. The building will cost about \$50,000 and will include baths, reading room, halls for public recitals, etc.—The Langmuir Manufacturing Co. have been granted a building permit for two-storey, brick factory on Niagara street near King, cost \$3,000.

MONTREAL, QUE.—Additional meters will be purchased by the Waterworks Department.—Mr. Laforest, superintendent of waterworks, has made a report regarding a new method of regulating the water taken from the high level reservoir. He suggests that valves be placed on the pipes of the Water & Power Company.—Plans have been prepared by Edward Maxwell, architect, for a club house for the Montreal Street Railway Company, to be built at corner of Harbor and St. Catharine streets.—The Demerara Electric Co. has been organized in this city, for the purpose of doing business in Demerara. The company has purchased the franchises of the British Guiana Light & Power Co. and the Georgetown Tramway Co., and will convert the street railway system at Georgetown to electricity. W. B. Chapman, James Hutchison and B. V. Pearson are provisional directors.—The Richelieu & Ontario Navigation Co. are understood to have decided to erect a first-class summer hotel at Murray Bay.—The Road Committee will ask the city council to grant money for construction of pavements on Ottawa, St. Lawrence, Soulanges' Island and Parthenais streets.—Edward Maxwell, architect, is preparing plans for the new C.P.R. station at Rat Portage.

OTTAWA, ONT.—Plans have been prepared by the Dominion Public Works Department for proposed Maria street bridge, and it is said that construction will be proceeded with at an early date.—Referring to the item of \$13,000 voted by parliament for an additional wing to Rideau Hall, Mr. Fielding states that it is intended to build a wing 52 x 36 feet, two storeys and basement, brick, on stone foundation. There will be 19 rooms, with toilet and bath room on each floor.—A company, composed of A. G. Sleeman, of Guelph, and others, have purchased the Abbott carriage factory and the Booth property in the rear, and purpose establishing a large brewery. The building will be remodelled and additions made thereto.—The Separate School Board have purchased property, corner of Chapel street and Anglesea square, on which to build a girls' school. Plans have also been prepared for a new school in Dalhousie ward.—The Ottawa Electric Railway Co., at a meeting held last week,

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Electric Light Engines  
Boilers**

**The Smart-Eby  
Machine Co.  
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decided to commence immediately the extension of its line to Britannia. The distance is about seven miles.—The Klondike Mines Railway Co. has been incorporated, to construct a railway from Klondike City to Dawson and other points. J. A. Seabold and L. H. Bate, of this city, are among the promoters.—The city engineer recommends the purchase of another steam fire engine.—Perkins & Fraser have given notice of application to parliament for incorporation of a company to construct a bridge across the Ottawa river at Bank street.

**FIRES.**

The soda water works of E. O. McIlrohan at Whitby, Ont.—Twenty-five buildings at Inwood Ont., were destroyed by fire on the 10th inst. The burned buildings include W. A. Turner's dwelling, F. Hillis' hotel, Dr. Hodgkin's dwelling and W. T. Fuller's grain elevator and warehouse.—The Pacific and Windsor hotels at Greenwood City, B.C., burned on August 3rd; loss, \$15,000.—James Robson & Sons tannery at Oshawa, Ont.; loss \$45,000, insurance \$20,000.—The Delhi Hotel at Delhi, Ont.; loss on building \$3,000.—The Palace Hotel at Manotick, Ont., owned by H. Doyle, loss \$8,000.—Hotel of C. C. Burns at Brown's Corners, fourth concession of Markham, Ont.

**CONTRACTS AWARDED.**

WINDSOR, N. S.—Town hall: E. F. Munroe, contractor, \$8,286.

SEAFORTH, ONT.—Granolithic sidewalks and crossings. Frank Gutteridge, successful tender, 10 cents per foot.

CRANBROOK, B. C.—The C. P. R. have let contracts for construction of branch line to North Star mine to Brekenridge & Lund and Grant & Shady.

ST. CATHARINES, ONT.—Concrete sidewalks: Newman Bros., St. Catharines, 11 1/2 cents (accepted); John Riley, 12 2-5 cents; S. McLean, 18 cents.

SACKVILLE, N. B.—University residence; Rhodes, Curry & Co., Amherst, N.S., successful tenderers, \$43,000. This is exclusive of plumbing and heating.

FORT WILLIAM, ONT.—John R. Turnbull, C. E., has been given the contract for bridges and trestles on the Ontario and Rainy River Railway from Stanley to the boundary line.

KINSTON, ONT.—Power & Son, architects, have let contracts for a building for the Gananoque Spring & Axle Company's works to Mitchell & Wilson; also an addition to J. B. Abbott's residence.

GOBERICH, ONT.—The council has accepted the tender of Goldie & McCulloch Co., Galt, for engine for electric light plant, at \$3,450, and that of the United Electric Co., Toronto, for dynamo and fixtures at \$2,150.

WINNIPEG, MAN.—The contract for side tracking and grading on C. P. R. between Winnipeg and Rat Portage has been awarded to John Sinnott.—The Northern Pacific Railway Co. have let

the contract to A. Guthrie & Co., of St. Paul, for construction of twenty-eight mile extension to Lake Manitoba.

PETERBORO', ONT.—Sunday school building for St. Johns' church: Ald. Langford, contractor; cost about \$3,000.—Tenders for construction of granolithic walks were received as follows: H. Evans and W. Langford, jr., 14 45-100 cents per sq. ft. (accepted); J. E. Hayes, 14 1/2 cents; R. Sheehy, 15 3/8 cents; J. Bogue and T. E. Wade, 15 3/4 cents; T. M. McFadden, 15 13-16 cents.

NELSON, B.C.—Construction of 4,340 feet of sewer: McBeath & Co., contractors, 79 cents per lineal foot for earth and \$6.05 for rock excavation.—The Washington Brick, Lime & Manufacturing Co. have secured the contract for furnishing the pressed brick, terra cotta and fireproofing for the new Bank of Montreal buildings at Nelson and Rossland.

SERRINGVILLE, ONT.—Ellice township council received tenders as follows for construction of Cawston drainage work. Armstrong & Smith, \$2,498; M. Pigeon, \$2,315; Pascal Pigeon, \$2,439; Bohan & Nicholson, \$2,649; Connelly & Curtis, \$2,666; Wm. Galleny and L. Coucane, \$2,333; Charles Schenck, \$2,323; Peter Nicholson and John Reid, \$2,125 (accepted).

APPLETON, ONT.—Ramsay council has accepted tender of Geo. Bradford for mason work of iron bridge over Mississippi river, at \$1,450, and that of Hamilton Bridge Works Co. for iron work, at \$2,560. Other tenderers were; Mason work—W. J. McDowell & Son, Pakenham, \$1,575; James F. Munro, Arnprior, \$1,596. Iron work—Weddell Bridge Works, Trenton, \$2,980; Imperial Bridge

Works, Montreal, \$3,115; King Bridge Co., Cleveland, Ohio, \$4,066.

OTTAWA, ONT.—Improvements to St. Jean Baptiste school: Heating and plumbing, R. Paulin, \$732; painting, E. Lemogies, \$185; wood work, Gauthier Bros, \$285.—Pavement of McLaren street: Bellehouse, Dillon & Co., successful tenderers, \$4,366. The Warren Schaff Co. tendered at \$4,665.—Only two tenders were received by the waterworks committee for addition to pump house, viz., G. A. Crane, without iron work, \$19,980, and Hallbrook & Sutherland, including iron work, \$27,707. The latter tender has been accepted.

MONTREAL, QUE.—The Montreal Pipe Co. have received an order from the city of St. John, N.B., for 1,000 feet of 8 inch and 1,000 feet of 10 in. pipe.—McDuff & Lemieux, architects, have accepted tenders as follows for Tooke Bros' factory: Excavation and drainage, A. Bray; masonry, Louis Ouimet; carpenter and joiner work, U. Lamoureux; bricklaying, A. Ledger and S. Gosselin; painting and glazing, Mr. Bartholemew; plumbing, heating and tinsmithing, Mr. Ballantyne.—The Road Committee has awarded contracts for Boyer street sewer to C. Bellehumer, and that for Frontenac street sewer to M. Gosselin.—David Brown, architect, has let the masonry contract of a house at Carterville for James C. King to M. Trodeau; other trades not awarded.—Joseph Venne, architect, has accepted the following tenders for alterations and embellishment to Monument National: Bricklaying, O. Deguise; carpenter and joiner work, Joseph Lambert & Son; marble and mosaic work, M. Mariotte, iron stairs, E. A. Manny; plastering, painting and plumbing not let.

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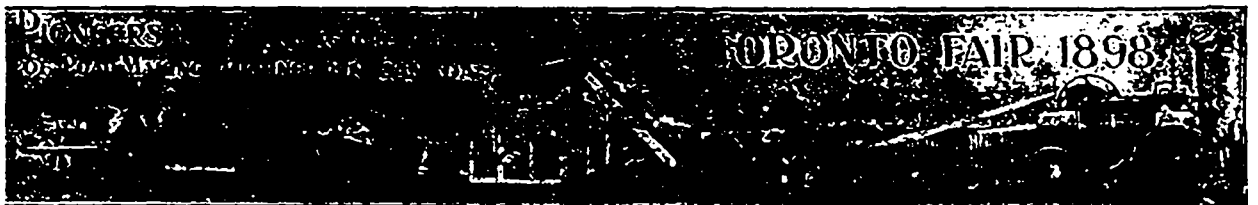
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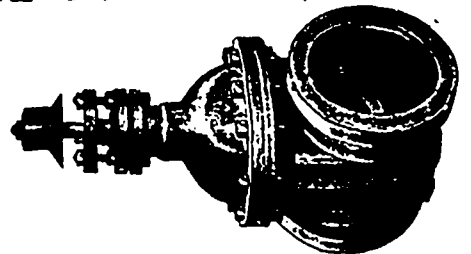
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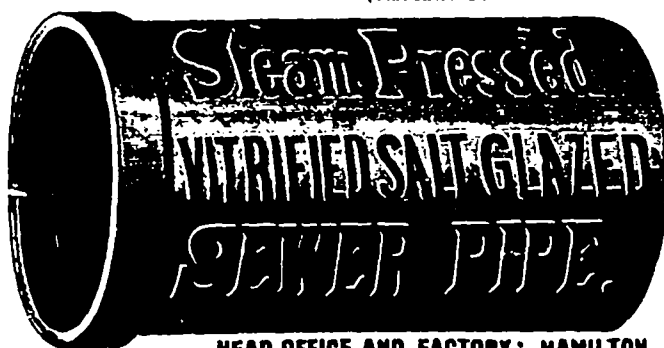
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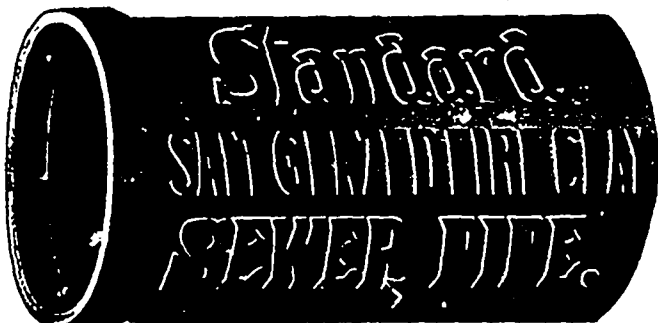
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superintendent of construction for the Ottawa Electric Company, along with a representative of the City Engineer, conducted the experiments in Ottawa. Two Packard transformers, type F, made for 1,000 and 2,000 volts on the primaries, ratio of transformation of one to twenty, 125 cycles, were mounted on a sleigh and driven around where required. It was usually drawn up to the foot of the pole and primary wires carrying about 1,000 volts were brought down to the transformers by means of flexible wires. The transformers were worked in parallel and had the connections so made as to obtain a ratio of transformation of forty to one, so that about 25 volts were obtained on the secondary. With this arrangement it was found possible to do without the reactive coil and other means of regulations which had been used in the first trials, so that the pipe-thawing outfit consisted simply of the two transformers above referred to and an amperemeter which was inserted in the primary, there being no portable instrument with large enough range to put on the secondary; a voltmeter was connected across the secondary coils.

Following is the data of five trials which were made:

1st. Secondary volts 17, primary amperes 8. Connections made from water pipe 25 feet of 3/8" lead pipe to a hydrant at the door. Water flowed in three minutes and came out at full pressure in six minutes.

2nd. Secondary volts 21, primary amperes 5. Connections from water pipe in one house through about 100 feet 3/8" lead pipe and 16 feet 5" iron pipe to water tap in next house. One of the services only was frozen. Water flowed in eight minutes and with full pressure in ten minutes.

3rd. Secondary volts 22, primary amperes 9. Connections made to water tap inside and to iron main pipe in street, which was reached by opening a manhole. Current passed through 25 feet 3/8" lead and 4 feet 5" iron main. Water flowed freely in two minutes.

4th. Secondary volts 23, primary amperes 7. Connections made from water tap in one house through about 60 feet 3/8" lead and 24 feet of 5" iron pipe to the water taps in next house. Water flowed in one minute and full pressure was on in 3 minutes.

5th. A lead pipe service between a residence and a stable being frozen, connection was made between the water taps in each place and water flowed freely in one

ed by Mr. Jones, Superintendent of Waterworks, by the aid of current and a transformer and 100 amperes capacity supplied by the Gas and Electric Co. Using a current of 52 volts, two frozen hydrants were thawed in 45 minutes.

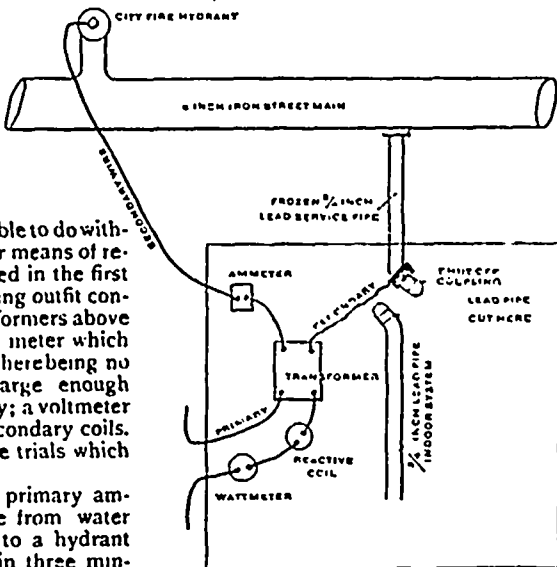
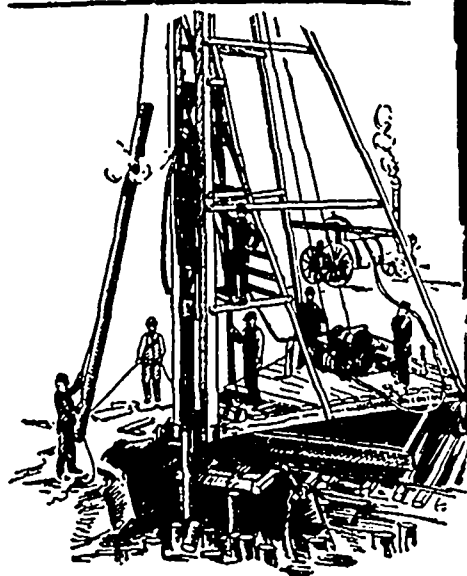


FIG. 2—APPARATUS FOR THAWING OUT WATER PIPES.

minute. No reading of current was taken in this last case.

By the time the pipes completely thawed out the water in some parts of them had become very hot. In some cases it was found impossible to get any current through at all. This was due to the style of the joints made in some of the main iron pipes where there was no electrical contact between the different lengths.

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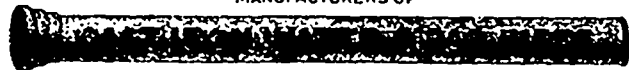
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" Buff.....	22 00	33 50	
" Brown.....	35 00	40 50	
Hard Building.....	6 00	11 50	
" Sewers.....	6 00	11 50	
Roofing Tiles, \$20 00 per 1,000, \$22 50 Montreal.			

#### DON VALLEY PRESSED BRICK WORKS.

	F.O.B.	F.O.B.	
	Don Valley.	Montreal.	
Red A.....	18 00	24 00	
Red B.....	16 00	20 00	
Red C.....	13 00	17 00	
Trojan and Co. in thian.....	21 00	28 00	
Pompeian.....	22 00	29 00	
Athenian and Egyptian.....	25 00	31 00	
Tyrian.....	35 00	41 00	
Sicilian.....	40 00	45 00	
Roman.....	35 00	40 00	
Carthaginian.....	40 45	45 00	
Ornamental.....	30 00 100 00	30 00 105 00	
Common sides.....	6 00		
Hard sewers.....	7 50		
Vitrified pavers, 1sts.....	16 00	22 00	
" 2nds.....	10 00	15 00	

#### COMMON BRICK, Per M.

	F.O.B.	F.O.B.	
	Toronto.	Montreal.	
Common Walling.....	7 00 8 02	7 50 8 00	
Good Facing.....	3 00 9 03	8 50	
Sewer.....	8 00 9 03	8 50 0 00	
<b>STONE.</b>			
Common Rubble, per ton, delivered.....	10 0	11 00	
Large flat Rubble, per ton, delivered.....	14 00	18 00	
Foundation Blocks, per c. ft. Granite (Stanstead) Ashlar, 6 in. to 22 in. rise on, per ft. Amherst Red Sandstone. Amherst, N.S., per cub. ft. Kent Free stone Quarry, Moncton, N.B., per cu. ft. River John, N. S., brown Freestone, per cu. ft.....	1 00	95	95
Port Philip, N. S. Brown Sandstone.....	90		

"Scoria" Paving Blocks, 8"x3 1/2"x5.....	55	
"Scoria" Paving Blocks, 8"x3 1/2"x4.....	45 00	
Masilcon and Vermont rough granite for building purposes, per c. ft. f.o.b. quarry	40	1 00
For ornamental work, cut. ft. Granite paving blocks, 8 in. x 12 in. x 6 in. 1/4 in. per M. Gran. te curbing stone, 6 in. x 20 in. per lineal foot.....	40	50 00
		70

#### CREDIT VALLEY STONE.

F.O.B. Quarries.		
Rubble, per car of 12 tons... Brown Consing, up to 10 in., per sup. yard.....	7 00	
Brown Dimension, per cub. ft. Grey Consing, per sup. yard	1 50 1 75	60
Grey Dimension, per cub. ft.	1 00	45

#### LONGFORD STONE.

Rubble, per 30 M. car.....	5 00	
Ashlar, per cub. yd.....	2 00	
Dimension, per cub. ft.....	18	

#### SLATE.

Toronto. Montreal.			
Roofing (W squares).			
" red.....	17 50	20 00	
" purple.....	8 5	10 00	
" unslating green.....	8 50	7 00 8 00	
" black.....	7 50	6 50	
Terra Cotta Tile, per sq.....	20 00	25 00	
Ornamental Black Slate Roofing	8 80	6 50	

#### CEMENT, LIME, etc.

German per 100.....	2 90 3 10	2 55 2 65	
London.....	2 95 3 00	2 25 2 45	
Newcastle.....	2 70 3 00	1 95 2 10	
" Joseph Bra Portland " Dyckerhoff.....	3 05 3 25	2 75 2 80	
Norfolk's "Condor".....	3 05 3 15	2 65 2 80	
English, artificial, per bbl.....	2 85 3 05	2 35 2 45	
Belgian, natural, per bbl.....	2 50 2 75	2 00 2 20	
Canadian, artificial,".....	2 85 3 00	2 60 2 70	
Parian.....	5 25 5 25	5 75 5 75	
Superfine.....	2 95 3 10	8 25 9 00	
"Karlstadt" (German).....	3 05 3 25	2 75 2 90	
"Germania" (German).....	3 05 3 25	2 75 2 90	
"Rooster" (Belgian).....	2 45 2 50	2 15 2 20	
"Keystone" (Belgian).....	2 45 2 50	2 15 2 20	
"Anvil" (Belgian).....	2 95 3 00	1 95 2 05	
"Burham" (English).....	2 95 3 00	2 25 2 45	
<b>Hydraulic Cements.</b>			
Thorold, per bbl.....	1 50	1 65	
Queenston, ".....	1 50	1 50 1 60	
Napanee, ".....	1 50	1 50	
Hull, ".....	1 50	1 50	
Ontario, ".....	1 25		

Keene's Coarse "Whites"....	5 50	6 00	50 0	5 50
Fire Bricks, Newcastle, per M. Scotch	30 00	35 00	16 00	21 00
" " " "	30 00	35 00	19 00	21 00
Lime, 100 lbs., Grey.....		25		
" " " White.....		30		30
Plaster, Calcined, N. B.....		2 00		1 50
" " " N. S.....		2 00		1 50
Hair, Plasterers', per bag....	80	1 00		0 00

#### HARDWARE.

The following are the quotations to builders for nails at Toronto and Montreal:

Cut nails, 50d & 60d, per keg	2 25	1 85
Steel " " " "	2 25	1 95
<b>CUT NAILS, FENCE AND CUT SPIKES.</b>		
40d, hot cut, per 100 lbs....	2 15	1 85
20 to 22 1/2, hot cut.....	2 25	1 95
8d, 9d, " " " "	2 30	2 00
6d, 7d, " " " "	2 45	2 15
4d to 5d, " " " "	2 55	2 25
3d, " " " "	2 60	2 25
2d, " " " "	3 15	2 85
Cut spike, 10 cents per keg advance.		
Steel Nails, 1cc, per keg extra.		
Wire nails, 2 75 base price.		

#### Iron Pipe:

Iron pipe, 1/2 inch, per foot..	6c.	6c.
" " 3/4 " " " "	7 1/2	7 1/2
" " 1 " " " "	8 1/2	8 1/2
" " 1 1/4 " " " "	12	12
" " 1 1/2 " " " "	17	17
" " 2 " " " "	24	24
" " 2 1/2 " " " "	30	30
" " 3 " " " "	43	43
Toronto, 65 per cent. discount.		
Montreal, 70 per cent. discount.		

#### Lead Pipe:

Lead pipe, per lb.....	7c.	25 per
Waste pipe, per lb.....	7 1/2	cent. dis.

#### Galvanized Iron:

Adam's—Mar's Best and Queen's Head and Opello:			
16 to 24 gauge, per lb.....	4 1/2c.	4 1/2c.	4 1/2
26 gauge, " " " "	4 1/2	5	4 1/2
28 " " " "	5	5 1/2	4 1/2
<b>Gordon Crown—</b>			
16 to 24 gauge, per lb.....	4 1/2	4 1/2	4 1/2
26 gauge, " " " "	4 1/2	4 1/2	4 1/2
28 " " " "	4 1/2	5	4 1/2
Note.—Cheaper grades about 1/2 c. per lb. less.			

#### Structural Iron:

Steel Beams, per 100 lbs.....	2 75	2 30
" channels, ".....	2 85	2 30
" angles, ".....	2 30	2 60
" tees, ".....	2 80	2 65
" plates, ".....	2 55	2 00
Sheared steel bridge plate....		2 30