



# CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL

PUBLIC WORKS • TENDERS •  
ADVANCE INFORMATION •  
AND MUNICIPAL PROGRESS

EVERY THURSDAY

THIS PAPER REACHES EVERY WEEK THE TOWN AND CITY CLERKS, TOWN AND CITY ENGINEERS, COUNTY CLERKS AND COUNTY ENGINEERS THROUGHOUT CANADA.

Vol. 4.

SEPTEMBER 21, 1893

No. 31

## THE CANADIAN CONTRACT RECORD,

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C. H. MORTIMER, Publisher,

CONFEDERATION LIFE BUILDING, TORONTO.  
Telephone 2732.64 Temple Building Montreal.  
Bell Telephone 2199.

Information solicited from any part of the Dominion regarding contracts open to tender.

ADVERTISING RATES ON APPLICATION.

At its Convention held in Toronto, Nov. 30 and 31, 1889, the Ontario Association of Architects signified its approval of the CANADIAN CONTRACT RECORD, and pledged its members to use this journal as their medium of communication with contractors with respect to advertisements for Tenders.

The following resolution was unanimously adopted at the First Annual Meeting of the Province of Quebec Association of Architects, held in Montreal, Oct. 10th and 11th, 1890: "Resolved by the Provincial Association of Architects of Quebec now assembled in Convention being satisfied that the CANADIAN CONTRACT RECORD affords us a direct communication with the Contractors, Resolved, that we pledge our support to it by using its columns when calling for Tenders."

Subscribers who may change their address should give prompt notice of same. In doing so, give both old and new address. Notify the publisher of any irregularity in delivery of paper.



## Notice to Contractors

Tenders will be received by registered post, addressed to the City Engineer, Toronto, up to 11 o'clock a.m. on SATURDAY, SEPTEMBER 30TH, 1893, for the construction of the following work:

### PAVEMENT ON TRACK ALLOWANCE

on Broadview avenue, from Queen street to Gerrard street, Cedar Block on Concrete, with toothing on track allowance.

Plans and specifications may be seen and forms of tender obtained on and after Thursday, 28th September, 1893, at the office of the City Engineer.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer, for the sum of 5 per cent. on the value of the work tendered for under \$1,000, and 10 per cent. on the value of the work tendered for over that amount, must accompany each and every tender, otherwise it will not be entertained.

All tenders must bear the bona fide signatures of the contractor and his sureties (see specifications) or they will be ruled out as informal. The committee do not bind themselves to accept the best or any tender.

DANIEL LAMB,

Chairman Committee on Works.

Committee Room, Toronto, Sept. 19, 1893.

## BEETON WATERWORKS.

Sealed Tenders will be received by the undersigned up to 9.30 p. m. of the

**2nd October, 1893.**

Plans and specifications will be ready during last week of this month and may be seen at the Clerk's office, Beeton, Ont., or at the office of the Consulting Engineer, John Galt, Esq., Canada Life Building, Toronto.

Tenders to be on forms furnished by the Engineer, accompanied by marked cheque payable to the corporation for 7 per cent. of tender. The corporation reserves the right to reject any or all tenders.

ROBT. SCOTT,

Chairman of Waterworks Committee.  
Beeton, Ont.

## Notice to Contractors

### CANADIAN CONTRACTORS' HAND-BOOK

A new and thoroughly revised edition of the Canadian Contractors' Hand-Book, consisting of 150 pages of the most carefully selected material, is now ready, and will be sent post-paid to any address in Canada on receipt of price. This book should be in the hands of every architect, builder and contractor who desires to have readily accessible and properly authenticated information on a wide variety of subjects adapted to his daily requirements.

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Confederation Life Building, TORONTO.

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64 Temple Building.

### SOME VALUABLE TESTS.

The Austrian Society of Engineers have made an important series of tests of metal with reference to bridge building. Some 216 mechanical tests were made by the committee having the matter in hand to determine the quality of wrought iron, of basic Bessemer and basic open hearth steel, the conclusion being that the latter excels all the others in resistance to the mechanical attack and distortion. Tests were made on lattice girders of thirty-two feet ten inches length and three feet eleven inches depth, the whole number of girders tested, being ten, viz., four of basic open-hearth steel, two of basic Bessemer, and four of wrought iron, some of the latter being Styrian iron, with a tensile strength of 58,000 to 61,000 pounds, and an elongation in eight inches ranging between twenty and twenty-eight per cent. The Bohemian iron used had a tensile strength of 47,300 to 53,500 pounds, and elongation of eight to ten per cent. The basic open-hearth metal was chemically good in quality, and ranged in tensile strength from 50,000 to 66,000 pounds, with twenty-eight and twenty-six per cent. elongation. The basic Bessemer showed extremes of 50,000 pounds, with seventeen per cent. stretch. Notwithstanding the fine quality of the Styrian iron the committee gives a decided preference to basic

open-hearth steel; with basic Bessemer steel the difficulty experienced is in producing uniform material, and the steel is also sensitive to surface injury.

### CONTRACTS OPEN.

PETERBORO, ONT.—Mr. George Matthews will double the capacity of his pork-packing establishment in this town.

DESERONTO, ONT.—Mr. John Dalton has purchased three lots on West Main street on which he intends to erect a factory.

KALSO, B. C.—Over \$3,000 has been subscribed by the citizens towards the cost of constructing a system of water-works.

HALIFAX, N. S.—The Board of Works of the City Council has decided to borrow the sum of \$20,000 for permanent pavements.

HULL, QUE.—The by-law submitted to the ratepayers on the 16th inst. to raise the sum of \$40,000 for extending the waterworks, was defeated.

BRANDON, MAN. The Brandon Electric Light Company invites tenders until the 10th of October for the purchase of eighty bonds of \$250 each, payable in five years.

WATERLOO, ONT.—On the 13th of October the ratepayers will be asked to vote on a by-law to raise the sum of \$16,000 for the purpose of constructing a system of sewerage for the town.

GALT, ONT.—At the last meeting of the Waterloo Township Council the trustees of School Section No. 16 were authorized to borrow the sum of \$1,000 for the purpose of erecting a new school house.

KEPPEL, ONT.—Mr. John Clark, Reeve of the Township of Keppel, invites tenders until the 4th of October for draining Shallow Lake. Plans may be seen at the office of R. McDowall, C. E., Owen Sound.

HEMINGFORD, QUE.—Tenders are invited by J. Ducharme for the erection of a new church and vestry in this town. Plans may be seen at the office of A. Prolontaine, architect, 35 St. James street, Montreal.

BRITTON, ONT.—Mr. James Burke will receive tenders until the 23rd inst. for the erection of a brick cheese factory 32 x 60 feet in size, curing room same size, brick boiler house, stone cellars, etc. Plans may be seen at the office of W. E. Binning, architect, Listowel.

NANAIMO, B. C.—The new wharf to be erected in place of the present structure is to be built and operated by a joint stock company, with a capital of \$10,000. It is expected that work will be commenced early in October. The wharf will have a frontage of 210 feet, and will be built under the supervision of Mr. W. L. Lynn, C. E.

KINGSTON, ONT.—Notice has been given by the Council that artificial stone sidewalks will be constructed on Princess

street, between King and Wellington streets, and on same street between Montreal street, and Lot No. 9, at an estimated cost of \$1,164 and \$1,145 respectively.—F. C. Ireland, City Treasurer, invites tenders until the 2nd of October for the purchase of \$32,000 worth of debentures.

LONDON, ONT.—Mr. J. H. Vanstone will erect a brick residence on Stanley street, to cost \$1,600.—Messrs. Moore & Henry, architects, invite tenders until 5 p. m. to-day (Thursday), for the erection of a brick residence on Clarence street.—The City Engineer has prepared a statement of the probable cost of an electric light plant for lighting the streets of the city, and the matter will be considered by the City Council.

VICTORIA, B. C.—Messrs. Burwell & Irving have given notice that application will be made at the next session of Parliament for an act to incorporate a company to construct and operate a line of railway from some point on the Gulf of Georgia, in Delta Municipality, thence to the city of New Westminster, with power to construct a branch line extending from some point in Delta Municipality through the municipalities of Surrey, Langley and Matsqui to a point near Abbotsford.

VANCOUVER, B. C.—Messrs. Palmer & Corrigan, Civil Engineers, have just completed plans for the new pile bridge across the North Arm of the Fraser river opposite the old North Arm road. The length will be upwards of 1,900 feet. It will consist of three parts, two small islands being in the line of construction. The first section will be 336 feet in length, having two spans of 80 feet each, with a swing 182 feet in length. The second section will be 150 feet in length, in spans of 40 feet, and the third 1220 feet.

WINNIPEG, MAN.—One of the conditions by which a certain part of Fort Rouge was embraced within the city limits was the construction of a bridge at Boundary street within a certain period. At the last session of legislature the application for an enlargement of the period was refused. An effort will therefore be made to build the bridge this winter, and the matter will be brought before council at an early date.—Mr. J. C. Gordon is making arrangements to commence the erection of a drug store on Main street, near the Manor hotel, estimated to cost \$6,000.—The erection of several large business blocks is contemplated during next year.

HAMILTON, ONT.—Tenders are wanted at 70 Pearl street until the 25th inst. for the erection of a two-story brick dwelling.—Messrs. J. H. Tilden and John Milne, of this city, and Robert Jaffray, of Toronto, are three of the projectors of the proposed smelting works. The company will ask for a charter of incorporation. The amount of the capital stock is \$1,000,000.—Building permits have been granted as follows: Robert Henderson, two-story brick dwelling on East avenue, between Wilson and Evans streets, cost \$1,100; James Hobbs, two-story brick dwelling on Wentworth street, between Cannon and

Barton streets, cost \$1,200; James Dunlop three two-story brick dwellings on Catharine street, between Hunter and Augusta streets, cost \$2,500; John Crawford, two-story brick dwelling on King street, between Pearl and Locke streets, cost \$1,200.

**OTTAWA, ONT.**—The medical profession of this city held a meeting recently to discuss the erection of a sanatorium for the treatment of consumptive patients. It is probable that an effort will be made to form a joint stock company.—The Court of Revision has confirmed the by-laws for the construction of a number of sewers, granolithic and plank sidewalks.—At the last meeting of the Ottawa Board of Trade the question of securing the erection of a new custom and inland revenue building was discussed and a committee was appointed to interview the government on the matter.—The building of a railway bridge over the Ottawa river from Hull was also discussed and a committee was appointed to obtain information and report. The cost of this undertaking is estimated at \$600,000.—Mr. G. F. Stalker, architect is now engaged preparing the plans for the proposed isolated hospital, which will be submitted to the Board of Health at the next regular meeting. It has been decided to erect four isolated cottages of one story in height, with the administrative building in the centre of the four, which will be two stories high and will contain reception room, consultation rooms, matron's rooms, five store rooms and rooms for nurses.

**TORONTO, ONT.**—It is said to be the intention of the Ontario Government to erect a new residence for the Lieutenant Governor on Hoskin avenue. It is understood, however, that the step will not be taken for some time to come.—The Board of Works at a meeting held on Monday last, adopted the recommendations of the City Engineer for the construction of the following works: a Trinidad asphalt pavement on Carlton street, from Jarvis to Sherbourne street, cost \$10,800; asphalt pavement on Hoskin avenue, cost \$14,560; a cedar block pavement on Roseberry avenue, from Bathurst street to east end of the avenue, cost \$820; a sewer on Avenue road, to cost \$3,362; the grading of Wilson street, cost \$500.—Mrs. Hamilton has applied to the Property Committee for permission to erect a cottage on the Island.—Rev. Dr. Scadding, on behalf of the Pioneer and Historical Society of York County, has addressed a memorial to the City Council asking that the central site immediately in front of the new Parliament buildings in the Queen's Park, be reserved as a site for a proposed monument to be erected in memory of the late John Graves Simcoe first organizer of the Province of Ontario and founder of the City of Toronto.—A building permit has been granted as follows: Eby, Blain & Co., pr. 3 story bk stores and dwelling, s. w. cor. Yonge and Cumberland sts., cost \$8,000.

**MONTREAL, QUE.** The St. Cune-gonde Town Council decided at a recent meeting to pave Notre Dame street with asphalt.—Mr. Coates, of the Consumers' Gas Company, is said to have purchased about three acres of land on the banks of the canal west of Clendinning's new foundry on which to erect the proposed gas works, which will be of the most modern type. Operations will be commenced on the arrival of Mr. Coates, engineer, who is expected in a few days. The first gas holder will be delivered by the end of the month.—A movement is on foot to secure the granting of a bonus to the Richelieu and Ontario Navigation Company to establish their work shops in this city.—The Protestant residents of the Municipality of Outremont are desirous of securing the erection of a church edifice, and a meeting was held recently to elicit an expression of opinion on the question, at which some substantial aid was offered.—The prospect of securing the erection of a new G. T. R. station at Cune-gonde are said to be encouraging.—Walter Livermore, architect, 665 Dorchester street, invites tenders until 7 p.m. to-day (Thursday) for

the erection of a school house in Cote St. Louis.—P. W. St. George, City Surveyor, will receive tenders until Wednesday, the 27th inst., for the construction of sewers on the following streets:—St. Antoine street, from Fulford street to Dominion street; Madeleine street, from Wellington street to Grand Trunk railway; Woodstock street from St. Antoine street northward. Notice is also given that it is proposed to construct sewers on Dorchester street, from St. Charles Borromeo street to St. Urbain street, and on Ontario street from Beauport avenue to Gale street.—The ratepayers of Cote St. Antoine have approved of the by-law authorizing the Council to borrow the sum of \$250,000 for permanent improvements.

#### FIBRES.

Mr. R. G. Baxter's granary at Burlington, Ont., was completely destroyed by fire on Friday of last week. The building was heavily insured.—The village of Kamloops, B. C., was visited by a disastrous fire on Sunday morning last. The following is a list of the places destroyed: Vair's tinsmith shop, Prior & Co's hardware shop, Stephenson's jewellery store Contractor Simm's offices, Fortune's store and dwelling house, J. A. Mara's residence, Sinclair's fruit store, Quinn's boot and shoe establishment, Chong Lee's general store, Kwong On Wo Co's and five other Chinese houses. The loss will exceed \$100,000.—The Steamer Byron Terrier was destroyed by fire at Leamington recently. Loss, \$25,000.—The Masonic building at Alvington, Ont. was burned on the 15th inst. Loss on building, \$2,000, insurance, \$900.—Eker's brewery on St. Lawrence street, Montreal was almost entirely destroyed by fire on Tuesday last. Loss, \$14,000; insurance, \$9,000.—Dumas & Co's shoe factory on Joseph street, St. Roche, Que., was damaged by fire recently to the extent of \$15,000.

#### CONTRACTS AWARDED.

**KINGSTON, ONT.**—Mr. H. B. Bibby has secured the contract for putting a new galvanized iron roof on the post office.

**VICTORIA, B. C.**—Messrs. Coughlan & Mayo have been awarded the contract for constructing the Spring Ridge surface drains, at the price of \$8,935.35.—The contract for the erection of the new South ward school has been awarded to Mr. J. G. Brown, whose tender was \$23,556.

**OTTAWA, ONT.**—The Department of Railways and Canals has awarded the contract for steel rails for the Intercolonial railway to the amount of 5,000 tons equally between J. R. Hutchins and Charles Cassils, of Montreal. The contract for 1,000 tons for the Prince Edward Island railway and 300 tons for the Windsor branch has been awarded to W. H. Daunt, of England.—The Ormstown Brick and Terra Cotta Co. have received the contract for the pressed brick required for Mr. H. J. Chamberland's new house.—The tenders for the construction of a bridge across the Gatineau river, near Gatineau Point, were opened on Tuesday last. Messrs. Vau & Lachance were awarded the contract for roadway approaches, piers and abutments, at the price of \$15,079, and the Dominion Bridge Company the superstructure, at \$13,900.

#### BUSINESS NOTES.

W. T. Horton, builder, Halifax, N. S., has assigned to James Dempster.

Cookson & Plows, plumbers, have opened an office in Victoria, B. C.

T. Linker, plumber, Montreal, is offering to compromise at 25c. on the dollar.

George Ponsford, one of the oldest contractors of St. Thomas, died in that city recently.

Joseph Theriault, a Montreal contractor, is seeking an extension of time. L. Morache, another contractor of the same city, has been asked to assign.

A system of waterworks has just been completed for Nanaimo, B. C.

#### VENTILATING TUBES.

The quantity of air discharged per minute through a ventilator is variously stated, though one of the fundamental things to be known in ventilating any room. Of course the principle of the discharge is the difference in the temperature between the room and the external air—the greater the difference the more rapid the current, other things being equal; the height of elevator is also another important condition. To take Hood's calculations, we find that supposing the height of the ventilator is ten feet—an ordinary height of a room exit—and the difference between the interior and outer air is 5°, the cubic feet of air discharged per minute through a ventilator of 1 ft. square is 116 ft. At the height of 15 ft. the discharge is 142 c. ft.; at 20 ft. 164 ft.; at 30 ft. it is 201 ft.; at 40 ft. in height it is 235 ft.; and at 50 ft. the discharge is 260 c. ft. With a difference of 108 the discharge is for 10 ft. height of ventilator, 164 c. ft.; which is just equal to the discharge through a ventilator 20 ft. high and with 5° difference of temperature. At 15 ft. the discharge is 202 c. feet; at 20 ft., 232 c. feet; at 30 ft., 284 c. ft.; at 40 ft., 329 c. ft., and at 50 ft. high, 367 c. ft. These figures are sufficient to show that height and temperature are both important conditions to the effectual ventilation of buildings, and that, if we cannot be sure of having our interiors warmer than the outer air—a state of things not unknown during summer weather—it is very necessary to place the outlet for vitiated air as high as it can be conveniently arranged.

#### MUNICIPAL DEPARTMENT.

##### THE MANUFACTURE OF SEWER-PIPE.

By EDWARD ORTON, JR.

There are two quite well marked ways of making sewer-pipe in the state of Ohio, which leads to their classification usually as the river process (that used in Ohio Valley in Jefferson county,) and the Akron process (used at Akron and Columbus). The process is the same in all cases, and even extends into the manufacture of fire-brick as far as the grinding and tempering goes. The machinery and details have already been described under the manufacture of fire-brick, as well as the character of the clay of the district.

When the clay has been ground, sifted and tempered, it is usually elevated by a belt to the upper story of the works, and deposited in a bin beside the top of the sewer-pipe press. All sewer pipe machines act on the same principle, but the mechanical details differ.

The pipe-press consists of a large steam cylinder, upon a high iron frame; the piston runs into a second cylinder of less diameter situated beneath it, this is called the mud-drum or mud-cylinder, and into it the clay to be pressed is introduced, and from its lower end it is forced out as pipe by the pressure from the upper or steam cylinder. The piston at the upper limit of the stroke leaves a passage into the inside of the mud-drum near the top, which is closed as the piston moves down further. Into this opening is shoveled the tempered clay. It is tempered so dry that it may be shoveled with perfect ease, and it has no tendency to stick together by contact alone, though it does so readily by pressure. The cylinder being filled with clay, the piston is given steam and moves down slowly, consolidating the clay and expressing the enclosed air through small holes in the piston-head and the cylinder bottom. When, through these holes, the clay begins to issue, the pressman knows that the clay has filled the shape of the cavity perfectly; and as the bottom is a moveable one, it is loosened and dropped upon a balanced platform close beneath it. This platform under the weight of the cylinder head, which is so shaped as to form the pipe, is just counter-balanced, and by any pressure can be moved up or down, carrying the socket shaper on top. The bottom being pushed out of the way, continued pressure from above causes the pipe to issue. When

enough has come out, it is cut off by a rotary knife from the inside, and the separated length of pipe is carried away either on a cart or in the hands. It is next sponged and pared, to smooth it. The pipe is shaped by being forced out between the wall of the mud-drum and a conical core which is suspended from higher up in the drum. This cone parts the clay evenly on all sides, and causes it to leave the press in an even, regular shape and thickness. The dimensions of the presses used are various; the Pittsburg press at Walker's has a steam cylinder 44 inches in diameter, and 23 inches of mud-drum. The ordinary diameter is from 35 to 36 inches, and about 18-inch mud-drum. The gang necessary to run a press are: 1st, one man to fill the mud cylinder; 2nd, one engineer; 3rd, one man to cut the pipe and help handle the pipe; 4th, one man to manipulate the socket shaper; 5th, from one to three men to carry off the pipe. At one of the Elliottsville works, a press is in use having two mud-drums parallel, which are filled and pressed alternately, so that the press may work constantly instead of filling, pressing and waiting to refill. The drums are shifted backward and forward by a horizontal cylinder to one side. The capacity of a press varies with the kind of clay used, the size of pipe made, and many other conditions, but in normal working, will not vary far from these figures: 36-inch press, making 6-inch pipe, 3,000 a day, 12-inch pipe, 1,000 feet daily; 15-inch pipe, 800 feet; 18-inch pipe, 650 feet; 20-inch and 24-inch pipe, about 500 feet daily.

(To be continued.)

#### LEGAL DECISIONS AFFECTING MUNICIPALITIES.

**CORBIV V. DIGBY WATER CO.**—By a grant to parties under whom the defendant company claimed, an easement was granted consisting of the right to construct and repair a reservoir or tank for water, and conduct thereto the water from springs on the property. The company constructed a tank and cut trenches, etc., and years after constructed a new and large tank for which an action was brought by the grantee of the fees. Held by the Supreme Court of Nova Scotia that the construction of the new tank was not justified, and that the plaintiff could maintain an action for the nuisance.

**SIDEWALK—DEFECTS—LIABILITY.**—Two decisions of interest in relation to the law governing responsibility for defects in sidewalks were recently rendered by the Supreme Court of Minnesota. In one of these, Wright vs. City of St. Cloud, the court held that where a person with full and present knowledge of the defective condition of a sidewalk and of the risks incident to its use voluntarily attempts to travel upon it when the defect could easily and without appreciable inconvenience, have been avoided by going around it, he is not in the exercise of responsible care, but must be presumed to have taken his chances, and if injury results he cannot recover from the city. In the other case, City of Wabash vs. Southworth, the court held that where a cellar-way, trap-door, scuttle or the like is put in a public sidewalk for the convenience of the abutting property, as between the owner and the city, the duty of maintaining it in a safe condition devolves upon the former, and he cannot release himself of this duty by merely abandoning the use of the structure, but can only do so by removing it and restoring the sidewalk to its original condition; that if, through the negligence of the property owner, the structure becomes unsafe, and injury results for which the city is liable because of neglect of its duty to keep its streets in a safe condition for travel, it may, upon a payment of damages to the person injured, recover from the owner, by whose fault (as between him and it) the injury was occasioned, and that the mode of procedure provided by the charter of the city in question was not exclusive, but the city might pay the damages without suit, and then recover over an action against the property owner.

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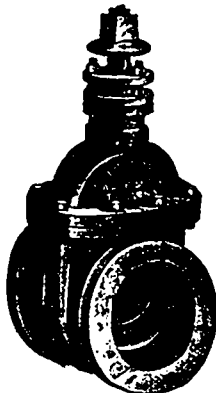
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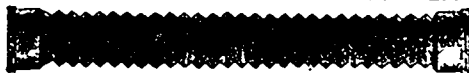


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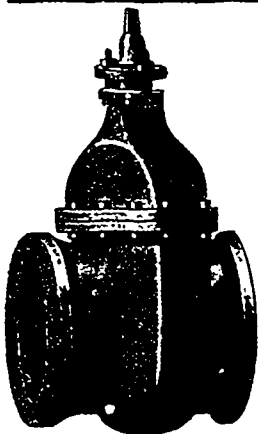
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**A. C. WINTON, Secretary-Treas.**  
Office: No. 23 Toronto Street, Toronto, Ont.

**CANADA PIPE AND FOUNDRY CO. ....**

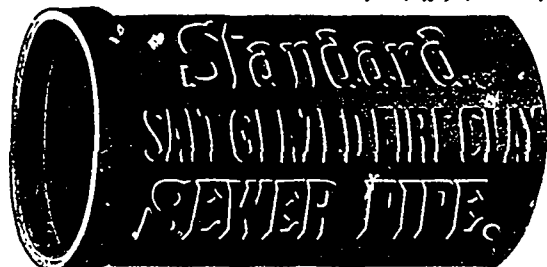
MANUFACTURERS OF

**..... Cast Iron Pipes and Special Castings**

Works: MONTREAL AND ST. HENRI, QUE.  
CORRESPONDENCE SOLICITED.

**THE STANDARD DRAIN PIPE CO.**

OF ST. JOHNS, P. Q., (LIM.)



Manufacturers of  
Salt-Glazed, Vitrified  
**SEWER PIPES**

Double Strength Railway Culvert Pipes, Inverts, Vents,

AND ALL KINDS OF FIRE CLAY GOODS.

**THE G. & J. BROWN MFG. CO.**

Railway and Contractors' Plant.

**BRIDGE BUILDERS**

BELLEVILLE, ONT.

**CENTRAL BRIDGE AND  
- - ENGINEERING COMPANY,**  
(LIMITED)  
Peterborough, Ont.  
WM. H. LAW, Manager and Engineer.  
MANUFACTURER OF

**RAILWAY AND HIGHWAY BRIDGES**

*Viaducts, Piers, Roofs, Turntables and  
Girders in Steel and Iron.*  
Tension members forged without welds. Riveting  
done by hydraulic or compressed air machines.  
Specialties: Good workmanship and strict adherence  
to specifications and drawings.  
**CAPACITY: 2,000 TONS PER ANNUM.**

**OUR SALES OF  
"BURHAM"**  
**Portland  
Cement.**

for the past 8 months have been  
**25,499 GASKS.**  
"Burham" Brand outranks all others.  
Try it and be convinced. . . . .

Sole Consignees for Canada:  
**MORAE & CO., OTTAWA**

**Canada Pipe Foundry,**  
HAMILTON, ONTARIO.  
ALAN GARTSHORE, Proprietor.  
Manufacturer of

**CAST IRON WATER, GAS AND  
SEWER PIPES.**

— ALSO —  
*Special Castings of every description.*  
CAPACITY: 50 TONS PER DAY.  
In use from Vancouver to Sydney, Cape Breton.  
*Correspondence solicited.*

**Prices of Building Materials.**

**LUMBER.**  
CAR OR CARBO LOGS.

Toronto. Montreal.

1 1/2 to 2 clear picks, Am. ins.	34	00	36	00
1 1/2 to 3 upper, Am. ins.	37	00	45	00
1 1/2 to 4, pickings, Am. ins.	37	00	30	00
1 inch clear, common	13	00	14	00
1 x 2 and 2 1/2 dressing and better.	20	00	18	00
1 x 10 and 12 mill run	14	00	14	00
1 x 10 and 12 dressing	16	00	18	00
1 x 10 and 12 common	14	00	14	00
1 x 10 and 12 spruce cut	10	00	11	00
1 x 10 and 12 scull.	9	00	10	00
1 inch clear and picks	20	00	23	00
1 inch dressing and better	18	00	20	00
1 inch siding, mill run	14	00	14	00
1 inch siding, common	13	00	13	00
1 inch siding, ship cuts	12	00	10	00
1 inch siding, mill cuts	8	00	8	00
Call scantling	8	00	8	00
1 1/2 and thicker cutting up plank	22	00	23	00
1 inch strips, 4 in. to 8 in. mill run	14	00	14	00
1 inch strips, common	11	00	11	00
1 1/2 inch flooring	16	00	14	00
1 1/2 inch flooring	16	00	14	00
XXK shingle sawn, per M	5	00	6	00
XX shingles, sawn	3	00	3	00
Lath	1	00	1	00

**YARD QUOTATIONS.**

Shipping call boards, promiscuous widths	13	00	13	00
Shipping call boards, stocks	10	00	10	00
Hemlock scantling and joist up to 16 ft.	11	00	12	00
Hemlock scantling and joist up to 18 ft.	11	00	12	00
Hemlock scantling and joist up to 20 ft.	11	00	12	00
Scantling and joist, up to 16 ft	10	00	10	00
" " " " up to 18 ft	10	00	10	00
" " " " up to 20 ft	10	00	10	00
" " " " up to 24 ft	10	00	10	00
" " " " up to 28 ft	10	00	10	00
" " " " up to 32 ft	10	00	10	00
" " " " up to 36 ft	10	00	10	00
" " " " up to 40 ft	10	00	10	00
" " " " up to 44 ft	10	00	10	00

Toronto. Montreal.

Cutting up planks, 1 1/2 and thicker, dry	23	00	25	00
Cutting up planks, 1 1/2 and thicker, board	18	00	18	00
Cedar for Kerblins, 4 x 7 1/2	3	00	3	00
per M	14	00	14	00
1 1/2 in. flooring, dressed, F.M.	28	00	31	00
1 1/2 inch flooring, rough, B.M.	22	00	22	00
1 1/2 " undressed, F.M.	20	00	20	00
1 1/2 " undressed, B.M.	19	00	19	00
1 1/2 " dressed	22	00	23	00
1 1/2 " undressed	18	00	18	00
Headsheet, dressed	22	00	22	00
Clipboarding, dressed	22	00	22	00
White pine, dressed, per M	26	00	27	00
18 in.	26	00	27	00
Sawn lath	2	00	2	00
Cedar	2	00	2	00
Red oak	4	00	4	00
White pine	15	00	15	00
Basswood, No. 1 and 2	18	00	18	00
Cherry, No. 1 and 2	20	00	20	00
White ash, No. 1 and 2	25	00	25	00
Black ash, No. 1 and 2	25	00	25	00
Picking stocks	16	00	16	00
Planks, American inspection	40	00	40	00
Three uppers, Am. inspection	50	00	50	00
<b>BRICK—W.M.</b>				
Common Walling	7	50	6	00
Good Facing	9	00	8	50
Sewer	8	50	8	50
<b>Pressed Brick, Per M:</b>				
Plain brick, f. o. b. at Milton	16	00		
" " " and quality	14	00		
" " " 3rd	8	00		
Hard Building	4	00		
Headed and Ornamental, per 100	10	00		
Roof Tiles	24	00		
Diamond looking tile	16	00		
First quality, f. o. b. at Campbellville	18	00	25	00
2nd quality, f. o. b.	14	00	20	00
3rd	10	00	17	00
Ornamental, per 100	3	00	3	00
Tiles	24	00	26	00
Plain brick, "A" f. o. b. Don Valley	18	00	25	00
" " " "C"	13	00	18	00
Trojan or Buff	24	00	30	00
Ornamental, per 100	3	00	3	00
Plain brick, f. o. b. Port Credit	18	00		
" " " and quality	13	00		
" " " 3rd	8	00		
Hard Building	4	00		
Ornamental, per 100	3	00	3	00
<b>Per Load of 1 1/2 Cubic Yards.</b>				
Common Rubble, per ton, delivered	14	00	14	00
Large flat Rubble, per ton, delivered	18	00	18	00
Foundation Blocks, per sq. ft. Kent Freestone Quarries	5	00	5	00
Moncton, N. B., per cu. ft., f. o. b.	1	00		
River John, N. S., brown				
Freestone, per cu. ft., f. o. b. Bathurst	80	95	65	75
New York Blue Stone				
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 9 in., per ft. Most Freestone			70	80
Thomson's Gate Bridge, cu. ft.			75	80
Credit Valley Rubble, per ton, delivered	13	00	14	00
Credit Valley Brown Coursing, per superficial yard	2	50	3	00
Credit Valley Brown Dimension, per cubic foot	90		90	
Credit Valley Grey Coursing, per superficial yard	1	50	2	00
Credit Valley Grey Dimension, per cubic foot	65	75	65	75
Madoc dimension floating, f. o. b. Toronto, per cubic ft.	30	33		
Ohio Freestone, f. o. b. Blue Promontory, f. o. b.	60		65	
No. 1 Buff Dimension	80		85	
No. 2 Buff Dimension	85		85	
The above prices means freight and duty paid.				
2 in. sawed lagging per sq. ft.	12		13 1/2	
" " " "	12		13	
" " " "	12		12 1/2	
Duty to be added to these prices.				
Quebec and Vermont rough granite for building, per cu. ft.	33	1 50		
For ornamental work, cu. ft.	35	0 0		
Granite paving blocks, 8 in. to 12 in. x 6 in. x 4 1/2 in., per M	50	00		
Granite curbing stone, 6 in. x 30 in., per lineal foot	70			
<b>SLATE.</b>				
Roofing (# square)				
" red	16	00	20	00
" purple	9	00	10	00
" untanned green	8	50	6	00
" black	8	00	7	00
Terra Cotta Tile, per sq. ft.	22	00		
Ornamental Black Slate Roofing	8	00		
<b>PAINTS. (In oil, # gal.)</b>				
White lead, Can., per 100 lbs.	6	25	6	00
" zinc, Can., " "	6	50	7	50
Red lead, Eng., " "	6	75	7	00
" verdigris, per 100 lbs.	2	50	1	75
" vermilion	90	1	90	1
" Indian, Eng.	10	12	10	12
Yellow ochre	5	10	4	0
White chrome	25	20	25	20
Green, chrome	7	12	7	12
" Paris	25	40	20	20

Toronto. Montreal.

Black lamp	15	35	12	25
Blas, ultramarine	15	40	12	28
Oil, lined, raw, 4 imp. gal.	6	68	6	68
" " " boiled	6	72	6	68
" " " refined	18	18	18	18
Putty	2 1/2	1 1/2	2 1/2	1 1/2
Whiting, dry, per 100 lbs.	70	1 00	60	75
Paris white, Eng., dry	90	1 25	90	1 25
Litharge, Am.	6 1/2	8	6 1/2	8
Sienna, burnt	15	10	15	10
Umber	15	10	15	10
<b>CEMENT, PORTLAND, per bbl.</b>				
" English	2	75		
" Belgium	3	75		
" Thorold	2	50		
" Queenston	2	25		
" Niagara	2	50		
" Hull	1	50		
" London	2	45	2	90
" Newcastle	2	35	2	90
" Belgian	2	30	2	90
" Canadian	2	25	2	90
" Roman	2	75		
" Parian	1	50	1	75
" Superfine	6	50	7	00
Koenig's Course "Whites"	4	50	4	75
Calined plater, per barrel	1	50	1	70
Fire Bricks, Newcastle, per M	30	60	30	60
" Scotch	30	60	30	60
Lime, Per Barrel, Grey	40			
" " White	55			
Plaster, Calined, M. B.	9	00		
" " N. S.	8	00		
Hair, Plasterers', per bag	80	1 00		
<b>HARDWARE.</b>				
Cut nails, 5d & 6d, per keg	2	40		
Steel	2	50		
<b>CUT NAILS, PENCE AND CUT SPIKES.</b>				
4d, hot cut, per 100 lbs.	10		3	
6d, " " "	10		3	
8d, " " "	10		3	
10d, " " "	10		3	
12d, " " "	10		3	
14d, " " "	10		3	
16d, " " "	10		3	
18d, " " "	10		3	
20d, " " "	10		3	
22d, " " "	10		3	
24d, " " "	10		3	
26d, " " "	10		3	
28d, " " "	10		3	
30d, " " "	10		3	
32d, " " "	10		3	
34d, " " "	10		3	
36d, " " "	10		3	
38d, " " "	10		3	
40d, " " "	10		3	
42d, " " "	10		3	
44d, " " "	10		3	
46d, " " "	10		3	
48d, " " "	10		3	
50d, " " "	10		3	
52d, " " "	10		3	
54d, " " "	10		3	
56d, " " "	10		3	
58d, " " "	10		3	
60d, " " "	10		3	
62d, " " "	10		3	
64d, " " "	10		3	
66d, " " "	10		3	
68d, " " "	10		3	
70d, " " "	10		3	
72d, " " "	10		3	
74d, " " "	10		3	
76d, " " "	10		3	
78d, " " "	10		3	
80d, " " "	10		3	
82d, " " "	10		3	
84d, " " "	10		3	
86d, " " "	10		3	
88d, " " "	10		3	
90d, " " "	10		3	
92d, " " "	10		3	
94d, " " "	10		3	
96d, " " "	10		3	
98d, " " "	10		3	
100d, " " "	10		3	

Toronto. Montreal.

3d to 5d cold cut, not polished or blued, per 100 lbs.	90		90	
<b>FINE BLUED NAILS.</b>				
3d, per 100 lbs.	2	50	2	50
4d, " "	2	00	2	00
<b>CASING AND BOX, FLOORING, SHOOK AND TOBACCO BOX NAILS.</b>				
1d to 3d, per 100 lbs.	50		50	
10d, " "	60		60	
8d and 9d, " "	75		75	
6d and 7d, " "	90		90	