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CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL

PUBLIC WORKS • TENDERS • ADVANCE INFORMATION • AND MUNICIPAL PROGRESS

EVERY SATURDAY

Vol. 3.

Toronto and Montreal, Canada, January 21, 1893.

No. 50

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

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TO BUILDERS.

Revised tenders will be received by the undersigned up to Wednesday next, the 25th inst., at 5 p. m., for Three Attached Houses on Church street for Mr. Robert Thompson.

EDWARDS & WEBSTER, Architects.
18 Victoria Street, Toronto.

TENDERS WANTED.

Tenders will be received by the undersigned until TUESDAY, 31st JANUARY, for the interior joinery, set up; or for the material, ready to place, f. o. b. steamers at Toronto, for a residence for Mr. J. L. Meikle, at Port Arthur, Ont. Tenders will also be received up to above date for the required plumbing.

The lowest or any tender will not necessarily be accepted.

J. A. ELLIS, Architect,
Toronto Junction.



NOTICE TO CONTRACTORS.

Proposed Improvements on the Esplanade.

Tenders will be received by registered post, addressed to the City Engineer, Toronto, up to eleven o'clock a. m. on Tuesday, the 7th day of February, 1893, for the construction of

CRIBBING ON THE ESPLANADE IN FRONT OF THE CITY.

Specifications may be seen and forms of tender obtained on and after January 27th inst., 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 2 1/2 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 lowest or any tender.

DANIEL LAMB,

Chairman of Committee on Works

Committee Rooms, Toronto, January 20th, 1893.

CONTRACTS OPEN.

WOODSTOCK, ONT.—It has been decided to erect a hospital at a cost of \$10,000.

MITCHELL, ONT.—Mr. John Skinner has decided to purchase an incandescent electric light plant.

PETROLIA, ONT.—The Waterworks Company will shortly award the contract for the laying of water mains.

GLENCOE, ONT.—The Grand Trunk Railway Company will build a new passenger station here during the coming summer.

THURSO, ONT.—It is reported that Messrs. J. & G. Black are about to rebuild their factory which was destroyed by fire a few weeks ago.

OWEN SOUND, ONT.—The North Grey Agricultural Society, at a meeting held Wednesday, decided to purchase ground, erect commodious buildings and lay a good track.

ST. JOHNS, QUE.—The Town Council invites tenders until the first of February for the purchase of \$20,000 worth of debentures. F. R. Hansel, is Secretary-Treasurer.

NIAGARA FALLS, ONT.—It is stated that the Niagara Railway Suspension Bridge Company is contemplating the construction of a new double track suspension bridge across the gorge near the Falls.

BOISSEvain, MAN.—Tenders are now being asked for the mason work of a stone church to be erected in this village. Messrs. E. Lowery & Son, architects, of Winnipeg, will have charge of the work.

CALGARY, N. W. T.—The plans for the new post office at this place, for which the Government are now asking tenders, call for a three storey stone block, with a two-story addition, which will cost upwards of \$40,000.

CARLETON PLACE, ONT.—The Town Council will shortly consider the following questions: a new town hall; a system of waterworks; another bridge over the river; better drainage; better leading roads to the town; and a second roadway into Beckwith.

ST. CATHARINES, ONT.—A company of local capitalists will apply to Parliament for incorporation to operate a water tower canal west of the old Welland canal from Thorold to St. Catharines, and to operate an electric railway from Port Dalhousie to Niagara Falls.

LONDON, ONT.—Tenders will be received by G. Craddock, architect, until the 28th inst. for making alterations and additions to the residence of Mr. G. C. Gibbons on Dufferin avenue.—The plant for the pork packing establishment now being erected is estimated to cost \$50,000.

SOREL, QUE.—The Canadian Pacific Railway Company have offered to rebuild the Yamaski bridge providing the Dominion Government will grant them a bonus towards the cost and a deputation from this place recently waited upon the Dominion Government urging the granting of the said bonus.

COTE ST. PALL, QUE.—The ratepayers of this municipality will vote on a by-law on the 30th inst. to grant a bonus of \$15,000 to the Grand Trunk Railway company, in return for which the company agrees to build a branch line to connect this village with Montreal, and erect a passenger station and freight shed.

PARIS, ONT.—At the annual meeting of the Paris Presbyterian church, held on Wednesday last, it was decided to proceed with the erection of a new church. Plans submitted by Mr. J. J. Rutley, of Chatham, were accepted, and tenders for the erection will be asked for at once, in order that work may be commenced early in the spring. The building will be situated on the corner of Emily and Grand River streets, and will cost about \$24,000.

QUEBEC, QUE.—M. Labelle, superintendent of construction of the new C. P. R. hotel, has received instruction from headquarters at Montreal, to make preparations for the building of an additional wing, which will contain about 70 or 80 more rooms than the structure now being raised.—A deputation representing the Quebec harbor commission waited on the Dominion Government a few days ago to ask for a loan of \$400,000, to be applied to the improvement of the Louise embankment.

HAMILTON, ONT.—The Barton Township Council have passed a resolution instructing the reeve and deputy-reeve to assist the Central Fair and Agricultural Association in securing a grant from the County Council towards the erection of the proposed new buildings.—Mr. T. H. Pratt has purchased the old Bank of Hamilton building.—The Trustees of the First Methodist Church have decided to repair the Sunday School room recently damaged by fire.—It is said that Senator Sanford, on his return from England next month, will arrange for the erection of a mammoth warehouse and factory, and that the new building will be erected on the north side of King street east, between East and Victoria avenues. There is also some talk of a \$150,000 hotel being built this year.

OTTAWA, ONT.—The Carlton County Council have advertised for tenders for debentures for the purpose of raising funds for the construction of the Cummings and Richmond bridges.—The following sites for stations on the Ottawa and Parry Sound Railway have been selected: Marsh Corners, Carp, Kinburn, Galetta and Arnprior. The stations will be neat frame buildings, and work on them will be commenced early in the spring.—E. F. E. Roy, Secretary of the Department of Public Works for Canada, will receive tenders until Tuesday, 7th of February, for the extension of the piers and dredging at Goderich harbor. Tenders will also be received by the Department until Wednesday, 1st of February, for the several works required in the erection of post office fittings at Petrolia.

CHARLOTTETOWN, P. E. I.—A meeting of the Building Committee of the proposed new Roman Catholic Cathedral was held a couple of weeks ago to consider plans and make preliminary arrangements for the erection of the building. It is to be built of grey stone, and will seat 1,500 people on the ground floor. The cost is estimated at from \$80,000 to \$90,000. The west end of the basement is to contain a commodious chapel, to seat about 800, which will be built first. The building will be in the form of a Latin cross, with nave, aisle and transept, and in the Romanesque style of architecture. It has a frontage of

93 feet on Great George street, where the main entrance is to be, and runs back 205 feet. The tower and spire are placed in the south east corner and ascend 190 feet.

MONTREAL, QUE.—A meeting of the Design Committee of the Sir John A. Macdonald memorial was held last week, at which an advertisement was drafted requesting sculptors to submit designs. It was decided, however, to refrain from publishing it until the committee had obtained further particulars regarding the proposed site.—The Finance Committee, at a meeting held recently, decided to report to Council in favor of the widening of Common, Jacques Cartier and St. Nicholas streets, and to obtain an estimate of the cost of the same.—At a recent meeting of the Protestant Board of School Commissioners, ways and means were discussed for the erection of a new British and Canadian school, and it was resolved that the architect of the Board should prepare perspective plans within two weeks. A committee was also appointed to see to the enlargement of St. Urban street school.—The Catholic Commissioners have decided to erect a new school on the Devins' property. Mr. J. Haynes, architect, will have charge of the work. It is said that the Montreal Street Railway Company will erect power houses on Cote street and at Hochelega.—It is also believed that the C. P. R. will shortly begin its construction of a connecting line between Caughnawaga, opposite Lachine and Huntington, a distance of 16 miles.

TORONTO, ONT.—The Public Library Board are considering the purchase of an electric light plant, the cost being placed at \$3,400.—The sum of \$13,600 has been subscribed towards the removal of St. Andrews' Church to site in the north west part of the city. The amount required is \$25,000.—The annual report of the Harbor Master states that owing to the sinking of the west end crib of the breakwater in the western channel, it will necessitate the building of a groynes.—Tenders will shortly be asked by the Industrial Exhibition Association for the erection of new stables and other buildings on the Exhibition grounds. The cost of these is estimated at \$70,000.—Mr. E. J. Lennox, architect, is preparing a statement of the progress of the work on the new Court House, and when the Property Committee meets next week, it will possibly be decided whether to proceed with the work by day labor or call for tenders for its completion.—Tenders will be advertised for at once for a portion of the cribwork to be done by the city on the water front.—Building permits have been issued as follows: Kemp Manufacturing Company, 1 story add. to factory, River and Gerrard streets, cost \$1200; Joseph Sheard, alteration and add. to 421 and 421 1/2 Yonge st., cost \$1400. Henry Stevens, 2 det 2 story and attic bk. and stone dwellings, 60-2 Cowan ave. cost \$7000

FIRES.

The residence of Mr. Gires, near Warkworth, Ont., was destroyed by fire recently.—A business block at Belleville, Ont., owned by the Coleman estate, was badly damaged by fire on the 13th inst.—A new brick dwelling at Shelden, Ont., owned by Norman Lewis, was burned to the ground on Friday of last week. There was no insurance.—The residence of Councillor McKen-

of Stonewall, Man., has been destroyed by fire.—The establishment of Stevens, Clark & Stevens, wholesale boot and shoe makers, London, Ont., was entirely gutted by fire on the 13th inst. The machinery, valued at \$5,000, was completely destroyed. The total loss is placed at \$15,000, on which there is an insurance of \$12,000. The loss on the building, which was owned by Mr. J. A. Childs, of South London, is fully covered by insurance.—The business portion of the village of Norwood, Ont., was damaged by fire on Tuesday last to the extent of \$25,000. The buildings destroyed were owned by Mr. H. S. Moore, and were insured for \$12,000, which will cover the loss. The plate glass front of J. C. Henderson & Co.'s store was destroyed.—The public school building at Essex, Ont., together with furnishings, were totally destroyed by fire on Wednesday last. The loss is placed at \$11,000, about half of which is covered by insurance.—The residence of Thomas C. Ross, at London, Ont., was burned to the ground a few days ago. The insurance is said to be very small.—The following buildings at Caledonia, Ont., were destroyed by fire on Thursday. Mr. Taylor's boot and shoe store, Dr. Burn's office, Atkinson Bros' dry goods house, Hull & Old's flour and feed store, and a three-story frame hotel owned by E. T. Hind. The total loss is placed at \$30,000, insurance \$20,000.—Mr. Wm. Partridge's residence at Plattsville, Ont., has been destroyed by fire, the loss on which is covered by insurance.—The flour, saw and shingle mills at Norland, Ont., were burned to the ground on Wednesday last. The loss is as follows: flour mill, \$6,000, saw and shingle mill, \$2,000.

CONTRACTS AWARDED.

KINGSVILLE, ONT.—Mr. Thos. Jenner has received the contract for building the new Methodist church.

DERRY, N. B.—The contract for the erection of a new Methodist church at this place has been awarded to Mr. James Troy, at the tender of \$1680.

OTTAWA, ONT.—The Department of Public Works has awarded the following contracts for supplying heating apparatus in the various public buildings. Petrolea, to Maguire & Bird, of Toronto; Port Arthur, to Purdy, Mansell & Mashinter, of Toronto; Laprairie P. O., to A. Chanteloupe, of Montreal; St. Hyacinthe, to A. Blondin, of St. Hyacinthe.

STEAM OR HOT WATER FOR GREENHOUSE HEATING.

In order to determine whether steam or hot water were the best for heating greenhouses, a series of experiments have been made at the Agricultural Experiment Station in connection with the Cornell University (New York, U. S. A.), in which the following conclusions were arrived at:—
1. The temperatures of steam pipes averaged higher than those of hot-water pipes throughout the entire circuit for the entire period of test. 2. The higher the inside temperature in steam pipes the less is the proportionate warming power of the pipes at a given point. The heat is distributed over a greater length of pipe, and as steam is ordinarily carried at a higher temperature than hot water, it has a distinct advantage for heating long runs. 3. When no pressure is indicated by the steam gauge, the difference between the temperatures of the riser and the return is greater with steam than with hot water. 4. Under pressure the difference is less with steam than with hot water. 5. There is less loss of heat in the steam risers than in the hot water risers, and this means that more heat in the steam system is carried to the farther end of the house, and more is spent in the returns as bottom heat. 6. This relation is more uniform in the steam risers than in the hot-water risers, giving much more even results with steam than with hot water. 7. When the fires are operative the fluctuation in the temperature of the risers at any given point is much greater with hot water than with steam. 8. An increase in steam pressure raises the temperature in the entire circuit, but the temperature does not rise uniformly with the pressure. 9. The

first application of the pressure increases the temperature of the returns much more than that of the risers. 10. Steam is better than hot water for long and crooked circuits. 11. Pressure is of greater utility in increasing the rapidity of circulation of steam and in forcing it through long circuits and over obstacles. 12. Unfavorable conditions can be more readily overcome with steam than with hot water. 13. Hot water consumed more coal than steam, and was at the same time less efficient. This result would probably be modified in a shorter and straighter circuit with greater fall. 14. Under the conditions here present steam is more economical than hot water and more satisfactory in every way, and this result is not modified to any extent by the style of heaters used.

THE ECONOMIC HANDLING OF ENGINEERING MATERIALS.

To the contractor for any piece of engineering work the question of handling materials, both in transportation and erection, is one of not a little importance, often largely affecting the cost of the work, besides safety and expedition. Novel methods are, therefore, frequently brought into requisition, being suggested by special conditions, and a complete record of these would be decidedly interesting and instructive reading. The matter has been more particularly brought to mind in recently looking over some four or five year old accounts of the great Forth bridge in Scotland, one of them dealing with the method adopted in sinking the caissons for the pier foundations. It may not be amiss to repeat that a specially designed hydraulic shovel was used in digging through a stratum of very tough boulder clay, and some means had to be provided for getting rid of the waste water from the machine which accumulated in the caisson. In order to avoid distressing the workmen, the air pressure in the caisson, after the latter had been made tight against the entrance of water around it by sinking the edges into the clay, was allowed to fall to a point much below the hydrostatic pressure due to the head of water above it. It, therefore, was doubtful whether, with an atmosphere relatively so attenuated, the pumps on the surface would lift the waste water through the sixty or more feet of rise. The very simple expedient was accordingly adopted of setting the suction pipe of the pumps in such a manner that air was drawn in with the water. In passing into the pipe together, the air and water were churned into a sort of emulsion, of course lighter than water alone, and this mixture was easily discharged from the upper end of the delivery pipe without resorting to force pumps.

This notion of taking advantage of the reduced weight of a mixture of water and air, as compared with water alone, is, however, not so very new, and has been applied in many instances in lifting water through heights ranging from about twenty-eight to thirty-six feet. The noteworthy feature in the case of the Forth bridge caissons was the comparatively great height of from sixty to seventy feet.

The circumstance, however, recalled the method which was used at one time, we believe, in the New Jersey end of the Hudson river tunnel in removing the excavated material from the tunnel headings. The material to be disposed of was soft mud. This was thinned to a putty fluid consistency by adding water to it, and in this state it was forced by the air pressure in the heading through a pipe line leading from a receiving trough to a suitable place for deposit on the surface, some distance away from the mouth of the tunnel. The length of the pipe line was quite considerable, but no difficulty was encountered in the working of the scheme. Its simplicity and convenience were certainly striking. There was, as will be readily understood, no machinery necessary. The pipes were simply laid down, and a slight additional tax was put on the air compressors already in use for supplying air to the headings. A somewhat similar plan of

conveying semi-liquid matter is now, we believe, in operation in some places in connection with the manufacture of earthenware; the clay, in a properly prepared state, being conveyed through pipes over short distances, from one building of an establishment to another.—*Mechanical News.*

HOW TO POLISH FRET AND CARVED WORK.

Great care is required to put a bright, level body of polish on fine fretwork, owing to the liability of the rubber catching some delicate piece and breaking it off. Great care is required in making a flat rubber, and many place a penny-piece inside to help to keep a flat face. If the fretwork is open, and the edges much seen, varnish the edges, using a small camel-hair pencil, taking care not to smother the back or face with varnish. To prevent the fretwork from warping or curling up it is a good plan to give the back a good wet rubber of polish, which fills up the pores of the wood. Lay the fret down on a board and fasten it down with pins. No filling is required, in place of this add a little varnish in the rubber polish. Polish in the ordinary way, and do not have the rubber too wet, or you will be liable to get fat edges, and spirit off as in ordinary polishing.

MUNICIPAL DEPARTMENT.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

MR. MCLEAN v. CITY OF ST. THOMAS.—Judgment in special case stated for the opinion of the court pursuant to rule 554 in an action for a declaration of the rights of the plaintiff and the defendants under a deed dated 17th July 1874, and made between the plaintiff and the defendants. By the deed the plaintiff conveyed to the defendants certain lands and a right of way for the purpose of building and other purposes connected with the water works of the city, subject to the conditions of the deeds. The defendants have now ceased to use the property in question for water works, but claimed that under the deed they took and now hold an absolute estate in fee simple in the lands, with the right to use the same for any purposes they may desire, and have the right to use the right of way in the deed mentioned for ingress and egress to and from the lands for the purposes of using and occupying the lands for such purposes as they desire. The questions submitted were whether the defendants were right in these contentions according to the true construction of the deed. The plaintiff contended that the grant was a conditional one for the purpose of the water works only, and that upon the non-performance of the condition the land reverted to the plaintiff, or at least he could restrain the defendants from using it for any other purposes. The court held that under the terms of the conveyance the defendants acquire an absolute estate in fee simple free from any condition, that the grant of the right of way was more restricted, and did not confer a right of way to persons to whom the defendants might lease the lands, etc. judgment accordingly. Plaintiff to have his cost against the defendants.

The Sheriff has placed the municipal books and property of the County of Pontiac under seizure, including the county buildings, for the bonus voted to the Pontiac and Pacific Junction railway some ten years ago, of which no portion has been paid. The bonus was for \$100,000, with interest at six per cent. The county disputed the legality of the debentures on account of the refusal of M. W. J. Poupore, then warden, to sign them, although they were afterwards signed by Warden McNally. The case has been carried through all the courts up to the Imperial Privy Council, with decisions against the county. The debentures, which were held by the estate of the late Senator

Ross, of Quebec, with interest and costs, now amount to \$183,000. Mr. John Bryson, M. P., who sits as Reeve of Mansfield township, has resigned his seat in the County Council. Mr. H. M. McLean, ex-Warden of Pontiac, has gone to Quebec to try to effect a settlement with the Ross estate.

HOW TO TEAR UP A STREET.

One of the most marked things in European cities to the American traveler is the frequent evidences of the employment of highly skilled labor upon work which would be done by unskilled labor in this country. A city official of New York said a short time ago it would be impossible to keep the streets of New York in a state of cleanliness and repair similar to the boulevards of Paris, because of the expense, which the tax-payers would not stand. And he went on to say that, granting the tax-payers were willing to stand the expense, the needed number of skilled laborers could not be found. But in Paris such things can be done quickly and skillfully, because a large force, an indefinitely large force of highly-skilled laborers may be hired for a small sum. The result is that even the humblest work is done with an exercise of skill and intelligence which amazes an American. When a street or building is to be repaired a great force of trained laborers is gathered, the materials for labor come with them, and the work goes forward swiftly, quietly, in an orderly manner, with so little muss and fuss that passers-by are hardly conscious that anything is doing.

An American drinking a small bottle at a little table in front of the Cafe de la Paix one day last summer saw an illustration of this. As he discovered later on, a gas-pipe four or five feet below the level of the asphalt, not far from the curbing, was in need of repair. Toward 10 o'clock a man with a spade, a hammer and a chisel appeared with an assistant, who carried two great baskets. The two laid down their tools, and one of them took from one of the baskets a rope and a number of iron standards, sharp at the lower ends. Quickly the men drove these standards into the asphalt and stretched the rope around them so that a square space eight feet by four was enclosed. The assistant took from the basket a big placard and leaned it against one of the standards and went away. The placard announced that the laborers had permission to take up the asphalt and repair a gas-pipe.

The other laborer climbed over the rope and marked out upon the asphalt a square six feet by two and a half. Following this mark he chiseled through the asphalt, and when he had separated the piece inside the mark he carefully lifted it out and laid it to one side. Then he took his spade and dug up the gravel and other stuff that formed the immediate foundation of the asphalt. This material he put into one of the baskets. Then he attacked the earth underneath, and soon had his hole dug to the required depth, with the gas-pipe exposed. All the dirt he had taken from the hole was in the other basket. If there had been a fine carpet up to the edge of the hole on all sides it would have been only slightly sprinkled with soil and not at all injured.

When he had done he gathered up his tools and looked impatiently up the street. His face cleared away at once and broke into a smile of greeting as two laborers, armed with tools and a basket, appeared. He left them and went away. They were evidently plumbers and understood their business, for in almost no time at all the pipes were fixed and the plumbers were standing outside the rope looking about them. They did not have long to wait. The laborer who had dug the hole reappeared and they went away. He proceeded with the greatest care, but very swiftly, to put back the earth and to ram it down with a rammer he had brought with him.

Just about the time he began to put back the gravel a roller and engine appeared. Another laborer climbed over the rope and helped him with this last work in which hot tar was used. They laid

MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

back the piece of asphalt which had been cut out and laid aside, and filled in the crack. Then they pulled up the stakes and threw them into one basket and the placard into the other, the roller passed over the place two or three times and then they all went away, leaving no dirt, no muss, and only a square line of a slightly different color from the rest of the asphalt to show that anything had been done. The American who was watching all this looked at his watch. It was not quite 12 o'clock. The work had been done in about two hours. The street had not been blockaded. No great and unsightly piles of dirt had been thrown up, the blouses of the laborers were as clean when they went away as when they came. The street was as perfect as if it had not been disturbed.—New York Sun.

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THOROLD CEMENT

WELLAND CANAL ENLARGEMENT, RESIDENT ENGINEER'S OFFICE, WELLAND, April 17th, 1884.

JOHN BATTLE, ESQ., Thorold.

Dear Sir,—Yours of yesterday, relative to Thorold Hydraulic Cement, is received. In reply, I beg to say that my tests of the Thorold Hydraulic Cement have extended over a period of twenty-eight years, and have been on a large scale, as exemplified in the locks, bridges, culverts and other masonry on the Welland Canal and Welland Railway, and that the record, which has been invariably satisfactory, is to be found in an examination of the structures. The necessary tearing down of masonry and concrete, during the Welland Canal Enlargement, has afforded abundant evidence of the reliability of the Thorold Hydraulic Cement, both in masonry and concrete, and above and under water. I desire no better cement for the class of work referred to

I am, dear sir, yours truly.

W. G. THOMPSON, Resident Engineer

ISAAC USHER & SON, THOROLD, ONT.

Manufacturers of

QUEENSTON CEMENT

Proved by Government tests to be the best Canadian natural cement. Write for prices, &c.

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SCOTCH FIRE CLAY-BRICK,



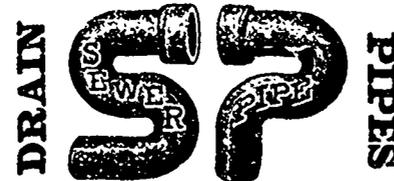
DRAIN AND WATER PIPES,

Double Strength for railway culverts, etc.

Sewer Bottoms or Invert Blocks, Cement.

NOTE.—Only pure SCOTCH unglazed Fire Clay Linings will be kept in stock; any other quality is worthless for resisting heat. Correspondence invited. Quotations promptly furnished

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For SEWERS, CULVERTS; also WATER PIPES, INVERTS, VENTS, &c.

Goods shipped by water or rail to all points.

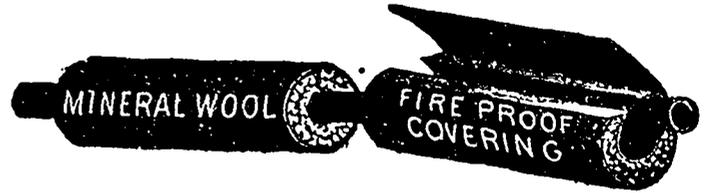
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Bridge and Structural Iron Work. Steel Beams kept in stock. Plans, Estimates and Specifications. WORKS: ST. COLUMBAN ST. AND CANAL SIDE. OFFICE: 7 PLACE D'ARMES, Telephone 9177. MONTREAL.

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are made use of for deadening sound in floors and partitions, insulation of heat and cold, fireproofing, etc., also SECTIONAL MINERAL WOOL COVERING for steam pipes, boilers, exposed water pipes, etc.

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— FOR —



SEWERS, CULVERTS, AND WATER PIPES. INVERTS Fire Brick Sewers

Write for Discounts.

HEAD OFFICE AND FACTORY, HAMILTON, CANADA.

Drummond McCall Pipe Foundry Company,

MONTREAL MANUFACTURERS OF

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Manufacturers of Salt-Glazed, Vitrified SEWER PIPES

Double Strength Railway Culvert Pipes, Inverts, Vents,

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Vitrified Terra Metallic Paving Brick

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STABLE, COACH HOUSE, BOILER HOUSE, BREWERY FLOORS AND YARDS Also all places of heavy and light traffic.

The only Genuine Vitrified Brick. The best in the world for Sidewalks & Street Crossings

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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.

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VITRIFIED CLAY SEWER

CAST IRON STREET GULLEY.

Over 5000 Gulleys are now in use in the following towns: Montreal, Toronto, Ottawa, Quebec, St. Cuneo, St. Henri, Peterboro', Owen Sound, Sarnia, Cote St. Antoine, Sherbrooke, London, New Glasgow, N.S. A saving of \$22 on each gully over the brick gulleys.



LEWIS SKAIFE,
 Engineer and Contractor,
 New York Life Building, - MONTREAL.
 AGENT.

Prices of Building Materials.

LUMBER.
 CAR OR CARGO LOTS.

	Toronto.	Montreal.
1 1/2 x 2 clear picks, Am. ins. 30 @ 32 00	\$ 40.00	\$ 45.00
1 1/2 x 2 three uppers, Am. ins.	37.00	40.00
1 1/2 x 2, pickings, Am. ins.	27.00	30.00
1 inch clear	52.50	60.00
1 x 10 and 12 dressing and better	18.00	20.00
1 x 10 and 12 mill run	13.00	14.00
1 x 10 and 12 dressing	14.00	16.00
1 x 10 and 12 common	12.00	13.00
1 x 10 and 12 spruce culls	11.00	11.00
1 x 10 and 12 maple culls	9.00	9.00
1 inch clear and picks	18.00	33.00
1 inch dressing and better	18.00	30.00
2 inch siding, mill run	16.00	14.00
2 inch siding, common	11.00	12.00
2 inch siding, ship culls	10.00	11.00
2 inch siding, rail culls	8.00	8.00
Cull scantling	8.00	9.00
1 1/2 inch and thicker cutting up plank	22.00	23.00
1 inch strips, 4 in. to 8 in. mill run	14.00	15.00
1 inch strips, common	11.00	12.00
1 1/2 inch flooring	14.00	15.00
1 1/2 inch flooring	14.00	16.00
XXX shingles, sawn, per M	2.30	2.35
XX shingles, sawn	1.30	1.35

YARD QUOTATIONS.

Mill cull boards and scantling	10.00
Shipping cull boards, promiscuous widths	13.00
Shipping cull boards, stocks	16.00
Hemlock scantling and joist up to 16 ft.	11.00
Hemlock scantling and joist up to 18 ft.	12.00
Hemlock scantling and joist up to 20 ft.	13.00
Ornamental Black Slate Roofing	7.50
18 ft	15.00
20 ft	16.00
22 ft	17.00
24 ft	19.00
26 ft	21.00
28 ft	23.00
30 ft	25.00
32 ft	27.00
34 ft	29.00
36 ft	31.00
38 ft	33.00
44 ft	36.00

Toronto. Montreal.

Cutting up planks, 1 1/2 and thicker, dry	25.00	26.00
Cutting up planks, 1 1/2 and thicker, board	18.00	18.00
Cedar for block paving, per cord	3.00	5.00
Cedar for Kerbing, 4 x 14, 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.	18.00	18.00
1 1/2 " " dressed, F.M.	30.00	37.00
1 1/2 " " undressed, B.M.	19.00	18.00
1 1/2 " " dressed, B.M.	18.00	18.00
1 1/2 " " undressed, B.M.	15.00	15.00
Headed sheeting, dressed	22.00	35.00
Clapboarding, dressed	12.00	12.00
XXX sawn shingles, per M	18.00	18.00
Sawn lath	2.00	2.20
White	8.00	8.00
Red oak	30.00	40.00
White	35.00	45.00
Basswood, No. 1 and 2	18.00	18.00
Cherry, No. 1 and 2	70.00	70.00
White & S, No. 1 and 2	25.00	30.00
Black ash, No. 1 and 2	18.00	18.00
Dressing stocks	16.00	16.00
Picks, American inspection	40.00	40.00
Three uppers, Am. inspection	50.00	50.00

BRICK—M

Common Walling	7.50	6.00
Good Facing	9.00	8.50
Sewer	8.50	9.00

Pressed Brick, Per M:

Plain brick, f. o. b. at Milton	18.00
" " 2nd quality	14.00
" " 3rd	10.00
Hard Building	8.00
Moulded and Ornamental, per 100	3.00
Roof Tiles	24.00
Diamond locking tile	16.00

First quality, f. o. b. at Campbellville:

2nd quality	18.00	25.00
3rd	14.00	19.00
Ornamental, per 100	3.00	10.00
Tiles	24.00	26.00

Plain brick, "A" f. o. b. Don Valley:

" " " B "	18.00	23.00
" " " C "	15.00	18.00
Trojan or Buff	24.00	30.00
Ornamental, per 100	3.00	60.00

Plain brick, f. o. b. Port Credit:

2nd quality	18.00	23.00
3rd	13.00	10.00
Hard Building	8.00	8.00
Ornamental, per 100	3.00	10.00

AND.

Per Load of 1 1/2 Cubic Yards	1.25	1.25
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STONE.

Common Rubble, per ton, delivered	14.00	14.00
Large flat Rubble, per ton, delivered	18.00	18.00
Foundation Blocks, per c. ft. Kent Freestone Quarries, Mencon, N. B., per cu. ft., f. o. b.	1.00	1.00
River John, N. S., brown Freestone, per cu. ft., f. o. b.	80.00	90.00
Baltochmye	65.00	75.00
New York Blue Stone	1.05	1.05
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 9 in., per ft.	70.00	85.00
Most Freestone	70.00	80.00
Thomson's Gatewallow, cu. ft.	75.00	80.00

Credit Valley Rubble, per ton, delivered

Credit Valley Brown Coursing, per superficial yard	2.50	3.00
Credit Valley Brown Dimension, per cubic foot	90.00	90.00
Credit Valley Grey Coursing, per superficial yard	1.50	2.00
Credit Valley Grey Dimension, per cubic foot	75.00	80.00

Madoc Rubble, delivered, per ton:

Madoc dimension floating f. o. b. Toronto, per cubic ft.	14.00	14.50
Ohio Freestone, No. 1 Blue Promiscuous, f. o. b.	30.00	32.00
No. 2 Blue Dimension	60.00	65.00
No. 1 Buff Promiscuous	80.00	85.00
No. 2 Buff Dimension	85.00	85.00

The above prices means freight and duty paid.

1 in. sawed flaging per sq. ft.

2 1/2 "	11.00
3 "	13.00
3 1/2 "	15.00
4 "	17.00
4 1/2 "	19.00
5 "	21.00
5 1/2 "	23.00
6 "	25.00

Duty to be added to these prices.

Quebec and Vermont rough granite for building purposes, per c. ft. f. o. b. quarry

For ornamental work, cu. ft.	33.00	35.00
Granite paving blocks, 8 in. to 12 in. x 6 in. x 4 in., per M	50.00	
Granite curbing stone, 6 in. x 20 in., per lineal foot	70.00	

SLATE.

Roofing (per square)		
" red	14.00	16.00
" purple	9.00	8.00
" unlading green	8.50	6.00
" black	7.50	7.50
Terra Cotta Tile, per sq.	22.00	
Ornamental Black Slate Roofing	7.50	

PAINTS. (In oil, lb.)

White lead, Can., per 100 lbs.	6.25	6.50	6.00	6.25
" zinc, Can., "	6.50	7.50	7.50	8.00
Red lead, Eng.	5.00	6.00	6.00	6.00
" venetian, per 100 lbs.	1.00	1.75	1.60	1.75
" vermilion	90.00	90.00	90.00	100.00
" Indian, Eng.	10.00	12.00	10.00	12.00
Yellow ochre	5.00	4.00	4.00	6.00
Yellow chrome	15.00	15.00	15.00	30.00
Green, chrome	7.00	12.00	12.00	12.00
" Paris	2.00	4.00	4.00	20.00

Toronto. Montreal.

Black, lamp	15.00	15.00
Blue, ultramarine	15.00	15.00
Oil, linseed, raw, 1/2 gal.	6.00	6.00
" " boiled "	6.00	6.00
" " refined, "	7.00	7.00
Putty	1.00	1.00
Whiting, dry, per 100 lbs.	70.00	60.00
Paris white, Eng., dry	90.00	90.00
Litharge, Am.	6.00	6.00
Sienna, burnt	15.00	12.00
Umber, "	15.00	12.00

CEMENT, LIME, etc.

Cement, Portland, per bbl.	2.60	2.50
" Thorold, "	1.50	1.50
" Queenston, "	1.50	1.50
" Napanee, "	1.50	1.50
" Hamilton, "	1.50	1.50
" Ontario "	1.50	1.50
" German "	1.50	1.50
" London "	2.65	2.85
" Newcastle "	2.45	2.90
" Belgian "	2.45	2.90
" Canadian "	2.25	2.30
" Roman "	2.75	2.75
" Parian "	4.00	4.75
" Superfine "	6.50	7.00
Keene's Course " Whites "	4.50	4.75
Calced plaster, per barrel	1.50	1.70
Fire Bricks, Newcastle, per M	20.00	24.00
Scott	30.00	35.00
Lime, Per Barrel, Grey	4.00	4.00
" White "	5.50	5.50
Plaster, Calcined, N. B.	2.00	2.00
" N. S. "	2.00	2.00
Hair, Plasterers', per bag	80.00	100.00

HARDWARE.

Cut nails, 5 d & 6 d, per keg	2.40	2.25
Steel "	2.50	2.35
CUT NAILS, FENCE AND CUT SPIKES.		
40d, hot cut, per 10 lbs	5.00	5.00
30d, "	1.00	1.00
20d, 16d and 12d, hot cut, per 100 lbs	15.00	15.00
10d, hot cut, per 100 lbs	20.00	20.00
8d, 9d, "	25.00	25.00
6d, 7d, "	40.00	40.00
4d to 3d, "	60.00	60.00
3d, "	100.00	100.00
2d, "	150.00	150.00
4d to 5d cold cut, not polished or blue, per 100 lbs.	50.00	50.00

Toronto. Montreal.

3d to 5d cold cut, not polished or blue, per 100 lbs.	90.00	90.00
FINE BLUE NAILS.		
3d, per 100 lbs.	1.50	1.50
2d, "	2.00	2.00
CASING AND BOX, FLOORING, SHOOK AND TOBACCO NAILS.		
12d to 30d, per 100 lbs.	50.00	50.00
20d, "	70.00	70.00
8d and 9d, "	75.00	75.00
6d and 7d, "	90.00	90.00
4d to 5d, "	110.00	110.00
3d, "	150.00	150.00
FINISHING NAILS.		
3/4 to 1 1/2 inch, per 100 lbs.	85.00	85.00
2 1/2 to 3 1/2 " "	1.00	1.00
3 to 4 " "	1.10	1.10
1 1/2 to 1 3/4 " "	1.35	1.35
1 1/4 " "	1.75	1.75
1 1/2 " "	2.25	2.25
SLATING NAILS.		
5d, per 100 lbs.	85.00	85.00
4d, "	85.00	85.00
3d, "	1.25	1.25
2d, "	1.75	1.75
COMMON BARREL NAILS.		
1 inch, per 100 lbs.	1.50	1.50
3/4 " "	1.75	1.75
5/8 " "	2.25	2.25
CLINCH NAILS.		
3/4 and 5/8 inch, per 100 lbs.	85.00	85.00
2 1/2 and 3 1/2 " "	1.00	1.00
3 and 4 " "	1.15	1.15
1 1/2 and 1 3/4 " "	1.35	1.35
1 1/4 " "	1.75	1.75
1 1/2 " "	2.25	2.25
SHARP AND FLAT PRESSED NAILS.		
3/4 and 5/8 inch, per 100 lbs.	1.35	1.35
2 1/2 and 3 1/2 " "	1.50	1.50
3 and 4 " "	1.65	1.65
1 1/2 and 1 3/4 " "	1.85	1.85
1 1/4 " "	2.50	2.50
1 1/2 " "	3.00	3.00
Structural Iron:		
Steel beams, per 100 lbs.	2.75	2.75
" channels, "	2.85	2.85
" angles, "	2.80	2.80
" tees, "	2.80	2.80
" plates, "	2.55	2.55
Sheared steel bridge plate.	2.25	2.25

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