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CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF
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. 5. Toronto and Montreal, Canada, May 4, 1893. No. 11

THE CANADIAN CONTRACT RECORD,
PUBLISHED EVERY THURSDAY
As an 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.
C. H. MORTIMER, Publisher,
CONFEDERATION LIFE BUILDING, TORONTO.
Telephone 2362.
64 Temple Building, Montreal.
Bell Telephone 2299.

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

ADVERTISING RATES ON APPLICATION.

At its Convention held in Toronto, Nov. 20 and 21, 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: "Moved by M. Perrault, seconded by A. F. Dunlop, that we the Architects of the Province 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.

BARTER AND EXCHANGE.

This department has been opened for the speedy barter and exchange of second-hand plant or material, or small lots of new or second-hand materials by builders and others not regularly engaged in the sale of such articles. Advertisements other than those of the above description will not be inserted.

RATES—12 words and under, 15 cents; each additional word, 1 cent (three figures count one word); on two or more subsequent insertions a discount of 10 per cent. will be allowed. Not more than four insertions of an advertisement can be granted.

Replies to advertisements may be addressed to a box at this office, in which case necessary stamps must be sent for re-mailing replies. Advertisements for this department must be prepaid.

TO DRAUGHTSMEN.—About 2½ quires of Whatman's Drawing Paper for sale (Imperial size), only \$5 for the lot. Box 151 at this office.

TENDERS

for the immediate purchase and removal of Nos. 94 to 104 Scollard Street, also one top buggy, received at No. 6, Shaftesbury Place, Toronto North; new lumber or bricks taken in exchange.

TENDERS WANTED.

Tenders will be received by the undersigned up to SATURDAY NOON, MAY 6TH, 1893, for supplying

Cast-Iron Pipe for a Submerged Main.

Plans and specifications may be seen at the office of this paper. Each tender must be accompanied by a marked cheque or cash deposit equal to 5 per cent. of the amount of the contract.

The lowest or any tender not necessarily accepted.
THOS. F. MCGUIGAN, City Clerk,
Vancouver, B.C., March 30th, 1893.

TENDERS WANTED.

Tenders will be received at the office of the undersigned until noon of Saturday, the 13th inst., for the several trades and work required in the erection and completion of a Women's Building in connection with the Kingston General Hospital, for the Board of Governors. The lowest or any tender will not necessarily be accepted. Contractors will be required to furnish satisfactory evidence of their ability, financial and otherwise, to properly execute the work.

POWER & SON, Architects,
Lion Block, Kingston.

TO CONTRACTORS.

Tenders will be received by the undersigned up to FRIDAY, MAY 12TH, at 6 p.m., for the several works required in extensive Alterations and Additions to St. James Episcopal Church, Paris, Ont.

Plans and specifications prepared by Mr. Geo. W. Gouinlock, Architect, Toronto, may be seen and all information obtained at the offices of

C. M. FOLEY, Barrister,
Paris, Ont.

The lowest or any tender not necessarily accepted.

To Contractors.

A new edition of the *Canadian Contractors' Hand-Book* is now in press, and will be published before the first of June.

The Hand-Book has undergone thorough revision. Everything not considered to be of the greatest practical value has been eliminated from the new edition, while the size of the work has been increased by the addition of seventy-five pages of entirely new material. 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.

C. H. MORTIMER, Publisher,
Confederation Life Building, TORONTO.

NOTICE

TO CONTRACTORS.

CANADIAN PACIFIC RAILWAY

Sealed tenders addressed A. L. Hertzberg, Engineer Canadian Pacific Railway, Toronto, Ont., will be received up to noon of

MAY 10TH, 1893,

for the placing, by the 15th of September, 1893, of about 250,000 cubic yards, or any part thereof, of filling in Toronto harbour between John and Lorne Streets for the Canadian Pacific Railway.

Plans, specifications and form of tender can be seen at the Engineer's office, Toronto.

The company reserve the right to reject any and all tenders.

J. W. LEONARD,
Gen. Supt.

Toronto, April 28th, 1893.

WATERWORKS PLANT FOR SALE.

For sale—a waterworks plant consisting of two sets of pumping engines in first class order, and can be seen at the Parkdale Pumping Station, Toronto. One set of 2½ million gals. capacity with fly wheel, steam cylinder 20 inches, and 18 inch stroke, gun metal plungers 12 inches diameter and 12 inch stroke, and one set of 1,500,000 gals. capacity, steam cylinder 24 inches and 12 inch stroke, also two boilers, 4 feet diameter and 12 feet long. The reason for disposing of these is in consequence of Parkdale, a suburb, being annexed to the City of Toronto. These are as good as new, and can be purchased at a large reduction on cost price; also 150 feet of 16 inch, and 600 feet of 12 inch, Ward joint flexible intake pipe. Apply to John Lorton, 1457 Queen st. West, Toronto.



Notice to Contractors

PAVEMENTS ON TRACK ALLOWANCES.

Time for Receiving Tenders Extended to May 10, 1893.

Notice is hereby given that the time for the reception of tenders for the various asphalt pavements on the

TRACK ALLOWANCES

is extended from Saturday, April 29, 1893, to WEDNESDAY, MAY 10, 1893, at 11 o'clock a.m.

DANIEL LAMB,
Chairman Committee on Works,
Committee Rooms, Toronto,
April 28, 1893.



Notice to Contractors

Pavements on Track Allowances.

Tenders will be received by registered post addressed to the City Engineer, Toronto, up to 11 o'clock a.m. on SATURDAY, MAY 13TH, 1893, for the construction of the following Pavements on Track Allowances:

College street, from Dufferin street to Jameson avenue, vitrified brick or cedar with toothing, on concrete.

Jameson avenue, from College street to Dundas street, vitrified brick, or cedar with toothing, on concrete.

Also Asphalt Pavements on Richmond street, from Bay to Victoria street. Earl street, from Sherbourne street to its west end.

Specifications may be seen, and forms of tender obtained, on and after Saturday, May 6th, 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 material tendered for under \$1,000, and 25 per cent on the value of the material 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, May 1, 1893.

USEFUL HINTS.

Apparently nothing is more effectual in adding breadth and depth to a room than a panel ceiling. The banquetting rooms of some old castles are fine examples of this illusion in decoration.

Plate-glass bricks are reported by *Iron* to have been made from the sand which is a residue of the process of grinding of plate glass. The quartz sand which is mingled with particles of iron and glass is dried and forced into a mold. The bricks thus obtained are subjected to a temperature of 2,732 Fahr., with the result of a fusion which forms a white brick claimed to be frost and acid proof.

To DETECT EARTHY MATTER IN STONE.—Break off a few chippings about the size of a shilling with a chisel and a smart blow from a hammer; put them in a glass about one-third full of clean water; let them remain undisturbed at least half an hour. The water and specimens together should then be agitated by giving the glass a circular motion with the hand. If the stone be highly crystalline, and the particles well cemented together, the water will remain clear and transparent, but if the specimens contain uncrystallized earthy powder, the water will present a turbid or milky appearance, in proportion to the quantity of loose matter contained in the stone. The stone should be damp, almost wet, when the fragments are chipped off.

Analysis of ancient mortars from some of the castles and churches of England have been compared by a contributor to *The Builder*, who draws the following conclusions from them: 1. That the proportions of lime have been found to vary considerably, and that a high percentage is not necessarily indicative of superior quality. 2. That the proportions of sand have also been found to vary considerably, and that, on the whole, the specimens which contained the most were generally of superior quality, but that in no case did the proportion of sand to lime exceed in round numbers that of 2 to 1, which is very much less than is usually found in modern mortar, whilst in jerry mortar it is often as much as 9 to 1. 3. That the proportion of gelatinous or hydrated silica found in a mortar is a reliable indication of its durability and tenacity, and that the higher the percentage of this constituent, the more closely will such approach the character of cement. 4. That in the examination of local limestone as to their suitability for building purposes, the relative richness in this gelatinous silica should be specially reported upon.

CONTRACTS OPEN.

CANNINGTON, ONT.—The Council is discussing a drainage system.

TRURO, N. S.—Mr. R. O. McCurdy is excavating for a new house on Queen street.

PICTON, ONT.—A new Methodist church will be erected here, with a seating capacity of 1,200.

PEMBROKE, ONT.—Dr. James Irwin will erect a large block on his property on Pembroke street.

ISEINGTON, ONT.—W. B. Johnson will erect a handsome brick residence on his farm here.

FOREST, ONT.—Messrs. Cahill & Co. will ask the town for a bonus to aid in rebuilding their flour mill.

CAMPBELLFORD, ONT.—The ratepayers have carried a by-law to extend the waterworks to the 14th bus Company's saw mill.

COOKSHIRE, QUE.—The town is issuing debentures to the amount of \$50,000 to provide for a system of waterworks and drainage.

MOSBORO, ONT.—Another meeting was held last week to discuss the erection of a Presbyterian church, but no decision was arrived at.

WINGHAM, ONT.—Mr. P. Macdonald, M. D., will receive separate or whole tenders until Saturday, the 20th inst., for the erection of a block of brick stores in this town.

WINNIPEG, MAN.—The promoters of the new Academy of Music to be built back of the Potter House block, state that the structure will be erected this summer.

SARNIA, ONT.—Mr. J. C. Robson, architect, will receive tenders until Wednesday, the 10th inst., for furnishing and building a parochial residence in this town for Father Bayard.

GLENCOE, ONT.—Assistant Superintendent Tiffin, of the G. T. R., was in town recently selecting a site for a new railway station to be built here. It will be of brick and stone.

MINNEBOSA, MAN.—The Oddfellows will erect this summer a handsome stone hall, to contain two stores with plate glass fronts. The building will be 50 x 60 feet, two stories high, with basement.

WINDSOR, ONT.—The proprietors of the Manning House are considering the erection of an additional story.—The Board of Works are asking for tenders for paving Pitt street between McDougall street and Glangary street.

REGINA, N. W. T.—A meeting of the congregation of Knox church was held recently to discuss the erection of a new church this summer, and a subscription list will be opened at once. The cost, it is expected, will be about \$8,000.

MOOSE JAW, N. W. T.—Mr. T. N. Robinson, merchant, has purchased the property known as the Lagan block and is about to erect a large brick block. He has also bought the residence and property of Mr. Naismith, and will immediately erect another dwelling upon it.

ST. JOHN, N. B.—It is said that nothing will be done at present in the matter of awarding the contract for the wharf at Partridge Island, as the parliamentary appropriation is less than the sum required for the work, and it is probable the specifications will be revised and new tenders asked for.

PRESCOTT, ONT.—The plans submitted by Mr. Hanley, of Belleville, for the proposed new High School, have been accepted by the Board.—Mr. Johnson, architect, of Ogdensburg, has prepared plans for the rebuilding of the Methodist church here the cost of which will be about \$6,000. The plans have not been accepted by the congregation.

HUNTINGDON, QUE.—The County Council has decided to call for separate tenders for the steel work and for the stone abutments and approaches of a steel bridge to be erected across the Chateauguay river. The Secretary has been instructed to advertise for tenders for the stone abutments, and to obtain plans and specifications for the steel structure, the same to be sent in by the 13th inst.

GUELPH, ONT.—On the 17th inst. the ratepayers will vote on a by-law to raise the sum of \$8,000 for the erection of a fire hall.—A meeting was held recently of persons desirous of promoting the erection of an opera house, or public hall in this city. It was decided to secure information regarding the cost of a suitable building with a view of forming a stock company to carry out the project.

STRATFORD, ONT.—David G. Baxter, architect, is preparing plans for three 2 story red brick residences for Mr. Frank Ryan, of this city, to cost \$2,000 each. There will be required hot air furnaces, grates, mantels, leaded glass, &c.—An enlargement of Loreto Convent is to be made this year by the erection of a wing toward Grange-st., about 42x24 feet and 43 feet high to be used mainly for chapel and school-room purposes.

LONDON, ONT.—Mr. Frederic Nicholls, General Manager of the Canadian General Electric Company, was in the city recently looking over the site for the proposed power house, and plans will be prepared at once.—It has been decided by the members of Zion Church, Mitchell Road, to rebuild their church. The new building will be brick with stone basement, costing in the neighborhood of \$2,200.—Messrs. Moore & Henry, architects, will receive tenders until to-morrow (Friday) at 5 p.m. for the erection of a brick

residence on Wellington street for R. C. Struthers.—Mr. C. A. Morley has taken out a building permit to erect a \$2,500 store and three-story brick residence at 517 Richmond street.

MONTREAL, QUE.—The Dominion Commercial Travellers Association will remove from their present premises at the corner of St. James and McGill Streets, as the erection of a magnificent structure on the site is contemplated.—The Road Committee has reported in favor of the construction of sewers on the following streets: St. Catherine street, between Moreau and Desery streets; Pine avenue, between Drolet and St. Denis streets; Wolfe street, between Craig and Notre Dame streets.—A meeting of the ratepayers of the municipality of Cote St. Antoine was held a few evenings ago to consider the best means of providing additional school accommodation. It was decided to erect a new school instead of enlarging the present building, and to purchase a new site.

HAMILTON, ONT.—It is said to be the intention of the directors of the Ontario Rolling Mills Company to establish steel works in connection with their present works. The company will submit a proposition to the City Council at an early date.—The following building permits have been granted.—Mr. Andrew Callaghan residence on Piccadilly street, near Maitland, cost \$300. J. M. Lottridge two-story brick dwellings on Herkimer street, between Bay and Caroline streets, cost \$5,000; T. G. Wright, two-story brick house on Crooks street, cost \$1,100; Charles Martin, two-story brick dwelling on Caroline street, between Robinson and Hannah streets, cost \$1,000, John Linder, three two-story brick dwellings on James street north, between Wood and Burlington streets, cost \$3,600.

TORONTO JUNCTION, ONT.—The Street Railway Company has secured the right of way through the Township of York to Swansea, and will build the road this summer.—A by-law to raise the sum of \$12,000 will be submitted to the ratepayers on May 8th, \$2,500 of which amount is required to erect two houses at the pumping station, \$4,000 for street improvement, and the balance for water-works extensions.—The Council have obtained permission to borrow \$56,000 for public works.—Provincial Engineer Radcliffe proposes building a residence here.—The Town Council has made a further grant of \$3,000 towards the erection of the new High School building, making a total grant of \$33,000. This will enable the school board to award the contract and carry out the work in accordance with the original plans.

OTTAWA, ONT.—The work of rebuilding the Collegiate Institute, which was almost wholly destroyed by fire a few months ago will be commenced immediately.—E. F. E. Roy, Secretary Department of public Works, will receive tenders until the 9th of June next for the reconstruction of the Breakwater at Point du Chene, Westmorland county, New Brunswick. Plans and specifications may be seen at the Intercolonial Railway station Agent's office, Point du Chene, and at the Department of Public Works, this city. Tenders are also asked by the above department until Thursday, the 25th inst., for the construction of a heating apparatus at the Vancouver, B. C. post office, and until Friday, the 26th inst., for the erection of an industrial school at Brandon, Man.—Tenders are wanted by the Ottawa Electric Railway Company for 16,000 ties.

TORONTO, ONT.—Messrs. Dancy Bros. intend to erect a pair of semi-detached houses on College Avenue, opposite the Sick Children's Hospital. Excavating has been commenced.—Mr. Peter Gibson, York Township Engineer, will report on the probable cost of constructing a sewer on Don Mills road.—The erection of a new building is contemplated by the directors of the Plate Glass Trust. It is said that it will be erected on the site of the old Holland house on Wellington street, formerly occupied by the Liberal Club.—It is possible that the City Engineer will recommend the construction of a new waterworks conduit across the Bay to the Island, owing to the impurity of the water supplied from the present conduit.—M. Sheard, architect, 120 Yonge street, is asking for tenders until the 8th inst. for the erection of three attached houses on McGill street.—Capt. F. Dudley Jessopp, who is disposing of his residence on Lowther avenue, is about to award the contract for the erection of a new solid brick residence on St. Clair avenue.

Wychwood Park, to cost \$4,000.—The City Engineer has recommended the construction of an asphalt pavement on Blecker street, from Carlton to Wellesley streets, at a cost of \$12,890, and on Mincing lane, to cost \$1,380. A concrete lining for the reservoir is also recommended.—The Perfection Hoop and Veneer Company contemplate erecting a factory on the lot opposite the old plough factory, between Boyce and Campbell avenues, and are applying to the Council for exemption from taxation.—The Waterous Engine Co., of Brantford, will probably erect engine works on the Don flats provided sufficient inducements are granted by the City Council.—Building permits have been granted as follows: John Lennox, Amelia st., pr. s. d. two-story bk. dwellings, 4 and 6 Wilson st., cost \$5,000; Toronto Lithographing Co., additions at 11 Jordan street cost \$1,600; C. Jackson, pr. att. 2 story and attic bk. dwellings, 17 and 19 Alexander st., cost \$3,000; Stephen Crealock, 29 D'Arcy st., 2 story r. c. dwelling, n. e. corner College st. and Brock ave., cost \$1,900; Henry Marvel, (T. McConnell, agent), 18 Maitland st.,

a 2 story bk. building, 44 x 190, w. side St. George st., n. of Sussex ave., cost \$4,000; Mr. G. Knight, a 2 story brick extension to house on West Lodge ave., cost \$1,000.

FIRES

The foundry and machine shop of Mr. Thomas Robson, of Fenelon Falls, Ont., was damaged by fire last week to the extent of \$6,000. The insurance was \$2,500.—Mr. Geo. Stewart's grist mill at Rockburn, Que., was burned to the ground recently. He will rebuild.—The Lakeside Park buildings at Thornbury, Ont., have been totally destroyed by fire.—The Knitting mills at Merriton, Ont., were burned down on the 26th inst. They were owned by the Bank of Toronto, who lost \$18,000 on the building and machinery, and were operated by J. Taylor & Son. The residence of Mr. Hamilton was destroyed at the same time, loss, \$4,000, insurance, \$2,300.—Thos. Bedford's block at Port Perry, Ont., was destroyed by fire on the 20th ultimo. Loss \$9,000; insurance \$6,000.—Eleven houses were destroyed by fire at Hallow, a village situated a few miles from Levis, Que. The losses are about half covered by insurance. The houses were occupied by W. Cameron, Basile Boucher, Gebrge Lamothe, Councillor Fortin, Henri Langlais, Etienne Dussault, Hyacinthe Caron, Michael Quinn, Octave Veillaux, Alfred Charrier G. Langlais, Miss Canure and Perry Pradergrast.—The Oakville Basket factory, at Oakville, Ont., together with two storehouses, was completely destroyed by fire on Saturday morning last. Loss, \$8,600; insurance \$4,000. Rebuilding will be commenced at once.—The store of Mr. J. O'Boyle, at Brechin, Ont., was entirely destroyed by fire on Monday morning last. The loss will be heavy, but is mostly covered by insurance.

CONTRACTS AWARDED.

REGINA, N. W. T.—The contract for the erection of a new court house has been awarded to Mr. Charles Willoughby, a local contractor.

LONDON, ONT.—Mr. E. Farquhar, of Toronto, has been awarded the contract for grading on the Ottawa and Parry Sound Railway between Arnprior and Eganville.

KINGSTON, ONT.—The St. Lawrence Foundry Co., of Toronto, has been awarded the contract to supply the waterworks department with cast-iron pipe, at \$33.60 per ton.

WINNIPEG, MAN.—Messrs. Sutherland & Wood, local contractors, have been awarded the contract for an addition to the Winnipeg Court house. The contract price is \$59,000.

MORRIS, MAN.—Mr. Chas. Robinson has received the contract for the erection of the Presbyterian church, at the price of \$8,075. This does not include the furnace, seatings nor furnishings.

VRDEN, MAN.—The contract for the erection of two solid brick two-story stores for Mr. John Cain has been awarded to Mr. John Maguire, of Moosomin. The plans were prepared by Mr. Chesterton, architect, of Winnipeg.

TORONTO JUNCTION, ONT.—The Town Council has awarded contracts for furnishing sidewalk materials as follows: Lumber, C. A. Batt, \$14.75 per thousand for two-inch pine planking and \$12 for 4 x 4 cedar scantling; nails, J. Brocklebank, \$2.55 per keg for 5 in. cut nails and \$3.25 for wire nails.

TORONTO, ONT.—The Harbor Commissioners have awarded the contract for dredging the bay to Mr. Randolph Macdonald, of the firm of Macdonald & Manning.—Contracts have been awarded as follows by the Board of Works for annual supplies:—Wm. Blaikie, brass castings at 14c., bronze castings 20c. per pound; Wm. Stollery and Burns & McCormick, valve and meter chambers per 1,000 bricks at \$15, the contract being divided; Blachford & Johnson, special castings, at \$2.25 per 100 lbs.; St. Lawrence Foundry, cast iron pipe, at \$34.90, \$33.75, \$33, and \$32.80 for 3, 4, 6, and 12-inch respectively; John Abell, double and single service iron stop-cock boxes, at \$1.20 and 72 cents; John Perkins, hydrants, \$25.75, Bryce & Co., \$15.40 for pipe per M., \$12 for hemlock, and \$5 per stick for square 12-inch lumber.—The following tenders for pavements have been accepted:—Williams & Co., cedar block paving with granite tooling on street railway tracks, Gerrard street, from Parliament to River, \$7,344.40; Bathurst street, King to Queen street, \$684.34; Winchester street, Sumach to Parliament street, \$5,320.38; A. G. Brown, concrete foundation for street railway tracks on Front street, Fredenck to Church street, \$2,707.

MONTREAL, QUE.—The Catholic school commissioners have awarded contracts for the construction of Montcalm school as follows: Earth-work masonry, brickwork, drains, etc., Mr. O. Martineau, \$23,000; woodwork, Cote & Mesnard, \$9,777; iron-work, Canadian Bridge & Iron Co., \$4,973; roofing and plumbing, Brodeur & Lessard \$4,700; fireplaces, Blouin, Desforges & Latourelle, \$3,545; Acme cement, coating and floors, Mr. Morache, \$2,123.—For the reconstruction of Sarfield school the contract for masonry is awarded to Messrs. Chapleau & LeMay at \$11,200, and that for iron work to Mr. E. Chanteloup, at \$2,382.—A. C. Hutchison, architect, has let contracts for a residence for T. H. Christmas at Cote St. Antoine, as follows: Masonry, J. H. Hutchison; carpentry, Beck-

ham & Scott; brickwork, P. C. Wand; plastering, J. McLean; plumbing and heating, Hughes & Stephenson; painting, Geo. S. Kimber; roofing, G. W. Reed. Same architect has also awarded contracts as follows for a two-story extension to the City Hotel.—Masonry, J. B. St. Louis; carpentry, Wm. Swan; plumbing, John Date; plastering, Thos. Phillips; roofing, Campbell & Co.—A. E. Dunlop, architect, has awarded contracts as follows for the fine new offices of the Dominion Steamship Co. on St. Sacrament street:—Carpentry, Simpson & Peel; masonry and brickwork, J. H. Hutchison; plastering and mosaic work, J. Morrison & Son; painting and glazing, J. S. Kimber; vaults, J. & J. Taylor; grille work, E. Chanteloup.—H. R. Fallover architect, has awarded the following contracts: two 4-story dwellings on Visitation street, for J. B. Mauthot & Sons, masonry, Pateau & Pateau carpentry, C. Scotte, plumbing and roofing, Bourbonniere & Lapriene; brickwork, Albert Gauthier; painting, Vallancourt & Brisebois; two 3-story dwellings on Montcalm street for P. J. Martin—masonry, G. Guilbault, carpentry, J. Fournier, brickwork, Riopel & Landry; plastering, J. Lefebvre, painting, O. M. Lavoie

CORRECTION.

Editor CANADIAN CONTRACT RECORD.

SIR: In a late issue you say that the price of 18 in. pipe at which we were awarded the contract at Toronto Junction was 50 cents; it should read 55 cents.

Yours respectfully,

HAMILTON & TORONTO SEWER PIPE CO.

MUNICIPAL DEPARTMENT.**THE BLOCK SYSTEM OF REPAIRING STREETS AT NEWTON, MASS.**

An interesting experiment in connection with repairs and maintenance of the streets at Newton, Mass., most of all of which, it appears, are macadamized, was made in 1861, under the direction of Mr. Albert F. Noyes, City Engineer. From Mr. Noyes' report for the year 1891, just at hand, we abstract the following: In accordance with the instructions of the highway committee Mr. Noyes made a report on the method of maintaining macadamized roads in France, which report is appended to his annual report. This was followed by a classification of the streets of the city into principal and secondary and country roads. Of the class designated as principal streets, 22.4 miles, including 442,082 sq. yds. of surface, were selected and divided into ten sections varying in total area from about 28,000 to 80,000 sq. yds., the idea being to make the actual labor require in each division as nearly equal as possible.

The operation of this system of street maintenance can be best described by quoting from the report, as follows:

The men assigned to each section were selected from the most reliable and efficient men on the force and were called section men, and remained under the charge of the district foremen. Their duty was to keep their section in proper condition: that is, to keep the gutter clean of weeds, trim the grass, patch all gulleys and ruts in the roadbed, look after the sidewalks, etc.; in fact do all the small repairs necessary as soon as needed, the regular street force being called upon only for large repairs and renewals of the roadbeds, etc.

They were not to be called off from their regular work except in emergencies such as snowstorms, etc., when the entire force is needed clearing the roads. Each man was supplied with a wheelbarrow, a pick, a shovel and a wooden rake, hoe, lantern, sickle, edging knife and cord line. The wheelbarrows were painted blue, with the section number clearly painted on the handle, so as to be easily seen by the foreman or superintendent, when on the rounds of inspection. At convenient places on each section piles of crushed stone and gravel were located, from which material was obtained for patching up whatever holes or ruts might appear in the roadbed or in the sidewalks. The other streets were cleaned up at stated intervals by the rest of the highway force. Where large repairs were to be done or streets resurfaced, the whole force (outside of the section men) was joined together under

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the local district foreman, and the work carried rapidly forward to completion. In this way the repairs were made, as shown on the table of the highway widening and reconstruction, at considerable less time and expense than if carried on simultaneously by the separate district forces.

The improved appearance and condition of the streets thus cared for was quickly noted by citizens. The men appear to take a pride in their work and their efforts were attended with nearly equal results considering the varying conditions, namely, the original condition of the roadbed; level or lilly streets; stone curbing or sodded edging; concrete or cobble paved gutters, amount to traffic, etc. *Engineering News.*

Canadian collectors of customs have been instructed that paving blocks of stone, not further advanced than chipped or rough hammered, are properly dutiable under item 547 of the tariff at the rate of 20 per cent. ad valorem.

A broken water main which it was inexpedient to remove immediately was repaired at Zanesville, O., by inserting sections of smaller pipe 80 feet long when coupled together, digging down to the places where the two ends of this pipe were, cutting open the larger pipe and then caulking the smaller firmly in place.

Asphalt pavements in Frankfort-on-the-Main are reported to have shown rapid deterioration as a result of contact with gas leaking from street mains. Shortly after the pavements had been put down in 1885 and 1886 cracks of varying lengths, from 0.8 inch to 1.2 inch deep, were formed in the asphalt, resembling those sometimes formed in earth under great heat. The cracks were found to extend mainly along the line of the gas mains in the streets, and odors of illuminating gas were freely given off from them. Removing the asphalt surface showed that the beton foundation layers immediately underneath were also cracked, permitting the gas leaking from the mains to come in direct contact with the asphalt. The latter, it appeared, absorbed more or less of the gas elements, principally benzine, and through their action lost all its cohesive properties, finally cracking in the manner referred to. — *Engineering Record*

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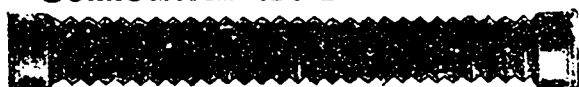
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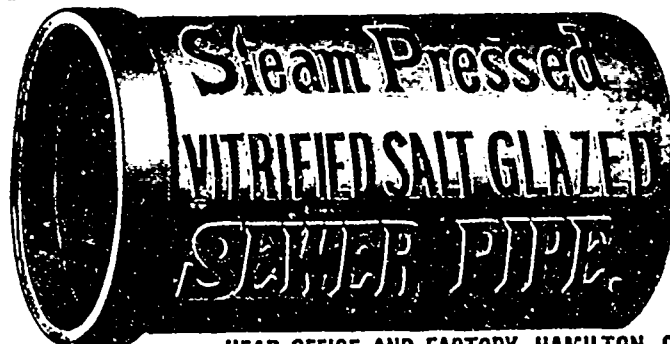
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