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THE

Canadian Contract Record

A Weekly Journal of Advance Information and Public Works.

Vol. 1.

Toronto and Montreal, Canada, July 26, 1890.

No. 24

THE CANADIAN CONTRACT REGORD,

A Weekly Journal of Advance Information and Public Works,

PUBLISHED EVERY SATURDAY

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.

14 KING ST. WEST,

TORONTO, CANADA

Telephone 2362.

Montreal.

Temple Building, -Bell Telephone 2259.

The purpose of this journal is to supply Contractors, Manufacturers and Dealers throughout Canada, with advance information regarding contracts open to tender, and to furnish Architects, Municipal and other Corporations with a direct medium of communication with Contractors.

Information from any part of the Dominion regarding contracts open to tender will be gratefully received.

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 publisher of the "Canadian Contract Record" desires to ensure the regular and prompt delivery of this Journal to every subscriber, and requests that any cause of complaint in this particular be reported at once to the office of publication. Subscribers who may change their address should also give prompt notice of same, and in doing so, should give both old and new address.

EFFECT OF VIBRATION ON A BUILDING.

BY OWEN B. MAGINNIS.

The examination of a house built about six years ego, on one of the uptown streets, between Fourth and Madison avenues, shows how sensitive a structure can be to the effect of vibration when its component parts are small and the structure is unprovided with safeguards against this unusual agent.

The serious injury about to be described, can only be attributed to vibration, because the house—a five storey double flat—was well built of breiks, and fair mortar, with a brownstone ashlar front, the whole having a rubble foundation resting on sound rock, and interior brick piers supporting the timber girders which carried the main stud partitions, in the usual manner. It is then reasonable to suppose that had the structure not been subjected to unusual forces differently applied to its foundation, the settlement would have been uniform, and the interior would not have shown the following evidences of unequal settlement and strains:

Commencing the examination in the cellar, the foundation wall evinces no sign of exterior fracture, but it is depressed in several places, from front to rear, showing that the bed on which it rests has been displaced. The eastern wall next to Fourth avenue is about 6 inches lower on the footing in the centre of its length, than the west wall, and the piers, supporting the partitions are bent about two inches in the height, about 5 feet 6 inches, seemingly from the pressure of the beams as they subsided with the eastern foundation wall. The floor concrete, however, is unbroken round the piers, though it is broken at the wall and sunken in many places throughout the entire surface.

The consequences of this are shown throughout the partition walls, set at right angles to the eastern wall, and on all door jambs and window frames. Having settled so much at the foundations, it follows that all square openings are thrown out by pulling down the eastern side to a more or less degree in each, for instance, some are 15, inches out of square, some 1 inch, some 14 of an inch and so on. Needless to say, the doors and sash have all been pieced and cut to fit into the present shape of the openings. All the joints are open, and it is a fortunate circumstance that the walls settled plumb, or the doors and sashes would have required more fitting.

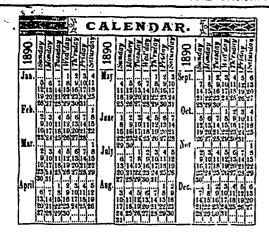
The plaster is in a worse condition, being parted at the junctions and traversed over by large cracks running diagonally from the top eastern side to the bottom on the western side, and in many places it threatens to fall off. So distinctly is the settlement shown, that the picture mould in the dining-toom is bent into a curve, and the floors are sagged to such an extent, that when a table is placed against the west wall, a ball of wool will roll off its top to the floor.

Summed up in its entirety, the building is in a poor condition and shows too early dilapidation. As to the cause of this it is evidently attributable, as stated before, to vibration, communicated in this case, by the trains on Fourth avenue and by the concussion made in blasting out cellars on the adjoining street. The perceptible effect of the vibration caused by the trains varies with their different speeds and weights, but it is always so noticeable, that a glass of water placed on the floor when a train is passing, will raise a wavelet on the surface of the water, and the heavier trains often tattle the sash in their frames. This vibration is felt all along the avenue, and the buildings sufter more or less. The writer has also known this to be so great that a small frame house, built close to the track, was violently shaken by a passing train.

Another reason for the failure of the above foundation, was the shock of the blasting. This was very violent, owing to the use of very heavy charges, often unnecessary, which shook the house from cellar to roof, frightening the inmates, causing a rocking in the whole structure, and must necessarily have disintegrated the surface rock under the foundation walls, perhaps causing displacement as the unequal settlement would denote. If this be the case, and it could be clearly proven, there would be good ground for action and subsequent compensation for damages. It is a singular fact that the front and rear, or north and south walls, are uninjured, and the east and west walls are strained. The whole subject is well worthy of consideration, and the owners of property along Fourth avenue should carefully watch the condition of their buildings, for it is not always faulty construction which necessitates constant repairs and more expenditure. - Manufacturer and Builder.

A French writer observes that painting floors with any colour containing white lead is injurious, as it renders the wood soft and less capable to wear. Other paints without white lead, such as umber or siennal are not injurious, and can be used with advantage. Varnish made of drying lead salts is also said to be destructive, and it is recommended that the borate of magnesia should be used to dispose the varnish to dry. A recipe for a good floor varnish is given as follows. Take two pounds of pure white borate of maganese, finely powdered, and add it hitle by little to a saucepan containing ten pounds of inseed oil, which is to be well stirred and raised to a temperature of 360° Fahrenheit. Heat 100 pounds of linseed oil in a boiler until ebullition takes place, then add to it the first liquid, increase the heat, and allow it to boil for twenty minutes. Then remove from the fire and filter the solution through cotton cloth. The varnish is then ready for use,

The "Canadian Contractors' Hand book," 50 cents to RECORD subscribers.





CONTRACTS OPEN.

PORTAGE LA PRAIRIE, MAN.—The Portage Electric Co, will build a central station.

HALIFAX, N. S.—The Board of Works has decided to borrow from \$25,000 to \$50,000 for sewerage purposes.

GUELPH, ONT. - F. C. Greenside, V. S., will receive tenders until 6 p.m. to-day (26th inst.) for the erection of a brick office.

St. MARY'S ONT.—Plans and specifications are being prepared for the erection of a four-roomed addition to the central school.

NORTH TORONTO, ONT.—A by-law is about to be submitted to the people to provide for the expenditure of \$63,000 for water-works.

ALEXANDRIA BAY.—A site has been donated by Judge Donahue upon which a stone church is to be erected, costing about \$6,000.

BRANTPORD, ONT.—Tenders will be received by the city clerk until noon on Monday, Aug. 4th, for the construction of 2,500 feet of stone flag side-walks, also for the construction of asphalt and wooden sidewalks.

WINDSOR, ONT.—Surveys are being made preparatory to the construction of an electric railroad from Walkerville to the Michigan Central railroad.—Mr. Anderson, of Xenia, O., is looking for a suitable location upon which to build a hominy flake factory.

OTTAWA, ONT.—A syndicate in which W. H. Howland, of Toronto, is interested, in connection with their proposal to construct a street railroad here, has offered to build a bridge across the Ottawa and extend the railway to Hull, if the city will guarantee the bridge bonds.

W. TORONTO JUNCTION —The ratepayers have given their approval to the by-law to borrow \$8,000 to complete the fire halls and complete an electric fire alarm.—A Committee of the Council has been appointed to consider the advisability of supporting the application of the Electric Street Ruilway Company for a charter.

SARNIA, ONT.—The need of new water-works is very much felt here.— Jos. Hickson, President of the St. Clair Tunnel will receive tenders at his office, Montreal, until noon on Saturday, August 9th, for the earthenwork and masonry required for the formation of the approaches to the St. Clair Tunnel at this place. All information obtainable from the Tunnel Company's Engineer at Hamilton, Ont.

LONDON, ONT.—New tenders will be asked for the construction of an extension to the boiler house at Springbank.—The Fire and Light Committee recommend that they be authorized to advertise for a plant capable of lighting the city either with a 1,000 candle power or 2,000 candle power, or both combined. Also for tenders for contracts for lighting the city, as a whole or in sections, with one or two thousand candle power, for a term of years.—Several sites for a new fire hall have been submitted to the Council.—Tenders are to be invited for electric plant capable of lighting the city, and also for lighting it by contract.

MONTREAL, QUE.—The Street Railway Company proposes to construct stables at Cote St. Louis.—The ratepayers of Cote St. Antoine have by their votes approved of the by-laws authorizing the town to borrow \$350,000, to be used in the construction of sewers, and to secure outlets for the drainage of the town and other improvements; and \$100,000 for the purchase of the property of the Water Company.—It is proposed to re-decorate the whole interior of St. James Church on St. Denis street.—A Committee of the general hospital Board has been appointed to consider the plans for the new wings, and report upon the whole matter of extending the accommodation of the hospital.

HAMILTON, ONT.—Mr. Edwards, architect, is preparing plans for a residence for Mr. F. B. Griffith! The site selected is the corner of James and Herkimer streets. The cost will be about \$15,000.—Mr. Mills, archi-

tect, has in course of preparation plans for a five storey and basement brick fire-proof office building for Thomas Myles & Son, to be erected at the corner of Main and Hughson streets. It will be heated by steam and will contain vaults on each floor.-The following building permits have been granted: Thos. Appleton, three-storey bk. dwelling on Vine street, between Macnab and James, cost \$2,500; Bank of Hamilton, alterations on building on James street, between King and Main, cost \$3,000; J. M. Rousseaux, two-storey house on James street, between Augusta and Young, cost \$4,000; J. S. McMahon, alterations on building on Emerald street, between Main and Hunter streets; Wm. Mills, addition to a bk. building on James street, between Young and Maria, cost \$700; Geo. C. Morrison. addition to workshop on Caroline street, between Barton and Stuart st.; R. O. Bigelow, three brick buildings on Murray street, between Murray and Barton sts. -Senator Sanford will make alterations to his residence costing from \$15,000 to \$20,000. - The Wentworth Gas and Oil Company have received permission to lay underground pipes in the city. - James Balfour, architect, will receive tenders until noon, 30th inst., for alterations and additions to dwelling.

TORONTO, ONT .- The grand stand at the Exhibition ground wid be enlarged to hold 1,000 more people.-The Fire and Light Committee has decided to ask tenders for lighting the city entirely by gas. 5,000 lumps or more, and for electric lighting, 1,200 or more are lights. An alternate tender for 2,000 gas lamps and 800 are lights will be asked for, to be placed anywhere within the city limits. The contracts will be placed for two or three years.-The Property Committee of the Collegiate Institute Board has selected a design from among the number submitted in the recent architectural competition, and has recommended its acceptance by the Board,-The Minister of Public Works for Ontario will receive tenders until noon on Aug. 1st, for additional pipes and hydrants for fire protective purposes at the Asylum for the Insane, London, Ont., construction of water closets, partitions, etc., at the Normal School, Ottawa, steam heating for addition and main building and erection of additional stories to wings of main building, School of Practical Science, Toronto.-The following building permits have been granted. J. Boddy, alterations to 650 to 654 Spadina Ave., cost \$3,000, Jos. Stinson, pair 3-storey bk. stores, 377 to 379 Parliament St., cost \$7,000; Geo. Peckham, additions to 22 Mutual St., cost \$1,200; A. Harvard, pair s.d. 2-storey and attic bk. dwellings, Fuller Ave., cost \$6,500; F. E. Stephenson, two pair 2-storey and attic bk. dwellings, Homewood Ave., cost \$10,000; John Bun, additions to 91 Wellesley St., cost \$2,500; W. D. Matthews, 2-storey and attic bk, and stone dwelling, St. George St., cost \$17,000.—The City Treasurer has been empowered to issue debentures for \$10,500, for the ground required for extension of the free library.

CONTRACTS AWARDED.

WIARTON, ONT.—The contract for the construction of an extension of the breakwater has been awarded to Mr. D. Porter of this town.

ST. THOMAS, ONT.—Mr. Henry Lindop has received the contract to construct the dwellings required for the employees of the new waterworks.

AYR, ONT.—The tenders for the public school have been awarded to James Gillard, Woodstock, for the carpenter work, and Whitehead & Fairfax for the brickwork. The contract price is \$6,000.

GALT, ONT.—Goldie & McCulloch have been awarded the contracts for burglar-proof vau is for Finance Department, Ottawa, also for La Banque Nationale, Sherbrooke, vaults and doors for Sun Life Assurance Co. building at Montreal, and large safes for Lake of the Woods Milling Co., Consumers' Cordage Company and the E. D. Horner Banking Agency, established in the New York Life building, Montreal.

COMPRESSED AIR LIFTS IN PARIS .- Compressed air is being applied to machinery in Paris upon the Popp system with conspicuous success. The Parisian Compressed Air Company has just introduced a lift having this motive power, and is being tried at the Bourse du Commerce, and at one or two of the principal hotels. Its main recommendation is that the cost is about one-half that of hydraulic lifts, and that the expense of working is proportionate to the weight of material raised. The principle of the lift is very simple. The lift is worked upon compressed air, which operates upon water. When the compressed air is admitted, it enters a water chamber. The water in the chamber is forced out under the lift ram or piston, which is driven upwards. On the descent of the lift the water flows back again into the chamber, so that the action is very easy and gradual. By this method the power exerted can be regulated at will, and the lifts now in use in Paris are employed both for lifting persons and for raising machinery and similar heavy The same company has also laid down an installation in the Bourse du Commerce for refrigerating purposes, the air being maintained at a low temperature by expansion of compressed air.

TO CONTRACTORS.

Tenders will be received until the 28th inst. for ADDITIONS AND ALTERATIONS to pair of Semi-Detached Residences corner of Sherbourne and Selby streets.

Plans and specifications can be seen at my

E. J. LENNOX, Architect, Cor. King and Yonge Sts., Toronto.

TENDERS

Will be received by the undersigned until 5 p. m. on WEDNESDAY, JULY, 30TH, for the

Purchase and Removal of the Mission Building

Corner College street and Mission Avenue.

GORDON & HELLIWELL, Architects, 26 King Street East, Toronto.

TO CONTRACTORS.

Sealed tenders will be received by the under-signed until THURSDAY, AUG. 28, 1890, for the Mason, Bricklayer, Carpenter, Roofer, Plasterer, Painter and Glazier, Ironwork and Elevators of the

Surgical Wing of the Royal Victoria Hospital.

The plans and specifications prepared by H. Saxon Snell, F.R.I.B.A., London, Eng., to be seen and all necessary information to be had at

seen and all necessary information to be flau at my office.

The contractors are to submit the names of two sufficient surelies for the due performance of the work, and the consent in writing of such surelies, or a certified bank cheque amounting to five per cent. on the amount of the tender.

The lowest or any tender may not necessarily be accounted.

be accepted.

JAMES R. RHIND. Assistant Architect, 157 St. James Street, Montreal. 18th June, 1890.

TENDERS

WILL BE RECEIVED AT MY OFFICE UNTIL

SATURDAY, AUGUST 2ND.

for the several works necessary in the erection of

FOUR STONE AND BRICK HOUSES ON JARVIS STREET.

Drawings and specifications may be seen on and after Wednesday, 23rd inst.

The lowest or any tender not necessarily ac-

S. H. TOWNSEND, Architect, 53 King St. East, Toronto.



Scaled tenders, addressed to the undersigned, and endotsed "Tender for Coal, Public Buildings, will be received until Monday, 11th August next, for Coal supply, for all or any of the Dominion Public Buildings.

Specification, form of tender and all necessary information can be obtained at this Department on and after Wednesday, 16th instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to supply the coal contracted for If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,

A. GOBEIL,

By order, A. GOBEIL Secretary,

Department of Public Works, } Ottawa, July 14th, 1890.



NOTICE TO CONTRACTORS.

Tenders will be received by registered post, addressed to the City Engineer, up to noon on Tuesday, the 29th of July inst., for the supply of the following quantities of

PAVING MATERIAL

to be used for the paving of King street west:—
Four hundred thousand (400,000) feet, b. m., of four-inch tamarac planks, sound and free from defects, in widths varying from eight inches to twelve inches.

Six thousand lineal feet of six-inch stone kerb six thousand linear feet of six-nen stone kerb-ing, in lengths not less than four feet and two feet six inches deep, to be of Medina sandstone, or stone of equal quality; the face of stone to be dressed twelve inches deep, and back of stone six inches deep.

inches deep.
One hundred and fifty lineal feet of six-inch stone circular kerbing, similar quality to above, nine feet six inches radius, in lengths not less than three feet, and dressed as above.

Stone flags four inches thick eight feet long by not less than four feet wide, sufficient to lay a total length of 1,720 feet.
All material to be delivered at the King street subway.

Plans can be seen, quantities and forms of tender obtained on and after July 22nd inst., at the

der obtained on and after July 22nd inst., at the City Engineur's office.

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 2½ per cent, 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 contractors 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.

Chairman Committee on Works.

Committee Rooms, Toronto, July 18, 1890.



NOTICE TO CONTRACTORS.

Tenders will be received by registered post, addressed to the City Engineer, up to noon on TUESDAY, JULY 29TH, 1890, for the following

works:
CEDAR BLOCK PAVEMENTS.
Dunbar Road, from Elm avenue to Hill street;
Hamburg avenue, from Bloor street to Union

Palmerston avenue, from Bloor street to railway tracks; Sydenham lane, from Sydenham street to south

Grafton avenue, from Roncesvalles avenue to

east terminus;
Brunswick Place, from Walmer road to Brunswick avenue:

wick avenue:
Palmerston avenue, from College street to a
point 600 feet north, on concrete foundation,
and with stone kerbs.
ASPHALT PAVEMENT
on Palmerston avenue, from College street to a
point 600 feet north, with stone kerbs.
Plans can be seen, quantities and forms of tender obtained on and after July 22nd inst., at the
City Engineer's office.

City Engineer's office.

A deposit in the form of a marked cheque, payable to the order of the City Treusurer, for the sum of 5 per cent, on the value of the work tendered for under \$1,000, and 2½ per cent, over tendered tor under \$1,000, and 2½ per cent 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.

NOTICE TO PROPERTY OWNERS.

Property owners on the above named streets are hereby notified, by order of the City Engineer, that unless private drain connections, water and gas services, where required, are made before the construction of the pavements, a charge of \$2.50 per square yard of surface to be broken will be made if permissian be asked to lay them in afterwards.

SOUN SHAW

wards. JOHN SHAW,
Chairman Committee on Works.
Committee Rooms, July 18, 1890.

TENDERS

WILL be received by the understaned until 5, p. m. on FRIDAY, 'THE 1ST AUGUST', for the various works required in the erection of a

RESIDENCE IN ROSEDALE.

The lowest or any tender will not necessarily be accepted.

GORDON & HELLIWELL, Architects, 26 King Street East, l'oronto,

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OEMENT, LIME, etc.	Mitchell & Co., Robt	IV	Earl & Co., Edward	vii
Lime, Per Barrel of 2 bushels, Grey 40	BRICKS (PRESSED). Hynes Terra Cotta & Brick Co	vi	Wright & Co	ix
" " White ee	Savage, R. D.	viii	Wright & Co	83.
Plaster, Calcined, New Brunswick 2000	Toronto Pressed Brick & Terra Cotta Co.	ii	METALLIC LATH.	
Hair, Plasterers', per bag	The Ontario Terra Cotta, Brick & Sewer	•••	B. Greening Wire Co	viii
Cement, Portland, per bbl 2 80 3 00	Pipe Co	хi	MINERAL WOOL	
	BUILDERS' SUPPLIES.		Gast & Atchison	
" Queenston, " 1 50	Adamant Mfg. Co	vi	Savage, R. D.	viii
" Napanee, " 2 50	Maguire, William	iv	ORNAMENTAL PLASTERERS.	
HARDWARE.	McNally & Co	ili	Baker, J. D	ii vi
Cut Nails:	Rathbun Co	vi	Whetter, Henry R	ii
American Pattern, 11/2 inch, per keg 4 25 11/2 11/2 inch, per keg 3 50 Canadian Pattern, 11/2 inch, per keg 3 75	BUILDING STONE DEALERS.	_	Wright, Jas	ii.
Canadian Pattern, 13 inch, per keg 3 75	Britnell & Co	84	PAINTERS.	•
" 11 11/2 to 13/4 inch, per keg 3 15	Bristow Bros.	84	Dill & O'Hearn.	III
" " to 2 % inch, " 3 35	Gillespie & Brooks	84 X	Dill & O'Hearn. Dunham, Frank T.	Ш
11 25 to 25 inch, 11 3 oo 11 11 3 inch and larger 2 75	Rathbun Co.	vi	Gilmor & Casey	Ш
Steel nails 10c. per keg extra.	Savage, R. D.	viii	Hatch, W. J	III.
Finishing nails, 1 inch, per keg 5 75	The Adjuda Quarry Co	8.4	Poleto, T Taylor, W. J.	
" 1½ inch, " 5 05	Vokes Malcolm Stone Co	8.4	PAINTS, VARNISHES, &C.	111.
" " 1½ " " 4 25	BUILDERS' HARDWARE.		Cottingham, Walter H	ıv.
" and larger 400	Aikenhead & Crombie	Ÿ.	Muirhead, Andrew	
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Ash, 1 to 4 in , M	CEMENTS. Adamant Mfg. Co	vi	Forsyth, Robert	83
Birch, 1 to 4 inch, M	McNally & Co., Wm.	ix :	Gardner & Co., A.	lV
Walnut, per M 50 00 100 00	Maguire, William	iv	Durous Cement Concrete Pavement Co The Colman-Hamilton Co	viii vii
Butternut, per M 22 00 40 00	McRae & Co	iv		417
Cedar, flat	Rathbun Co	vi	PLASTERERS. Dayton, William H	11
Cherry, per M	Savage, R. D	viii	Fox, R. B.	11
Elm, Rock 25 00 30 00	Terry, Edward	iv	Hynes, W. J.	ï
Maple, hard, M	Wright & Sons, C. B	iii	Magill, E. T	ıi
Maple Soft	CHIMNEY TOPPING. Hansen, Harald M		Watson Bros	įΪ
Pine, select, M	CHURCH AND SCHOOL FURNITURE,	vii	Plate Glass.	•
Pine, 2nd quality, M.r 20 00 25 00	Bennet Furnishing Co	ıv	Lyon, N. T.	m
Shipping Culls	Bennet Furnishing Co	ix	McCausland & Son	83
1 Lath, M 1 50 1 90	Pennington & Baker	x	Toronto Plate Glass Importing Co PLUMBERS.	xì
Spruce, 2 to 2 inch, M 10 00 12 00	CONTRACTORS AND BUILDERS.		Bennett & Wright	8.
Spruce Culls	Andrews, Francis	II	PLUMBING SUPPLIES.	۰+
Shingles, 1st quality	Davidson & Kelly	II II	Booth & Son	ii
dament ala -	Davis, H	ii	Higman, O	٧
Portland Cement, per barrel \$ 2 70@ 3 00	Dearing, Geo	ii	Malcolm, W. B.	ŗ
Portland Cement, per barrel	Hood & Co., H	ii l	Mitchell & Co., Robert	lV
Cut Nails:	Grant & Goddard	11	ROOPING MATERIALS. Can. Galvanizing & Steel Roofing Co	ii
Hot-cut Am. or Can. pattern, 3 inch	Halls, Wm	II	Merchant & Co	84
, and above 2 75 \$2 85	Hancock, Thomas	ii ¦	Metallic Roofing Co	×
Hot-cut Am. or Can. pattern, 21/4 inch	Hannah Bros		ROOFERS.	•-
and above	Humphrey, T. R.,	X	Baird Bros	11
	Marshall, John	ıî	Duthie & Sons, G.	ΪĨ
Am. pattern, 134 and 134 inch hot-cut 3 50 5 60	Marshall, John	ii	Forbes, Duncan	11
" 1½ inch " 4 25 5 80 Can. Pattern, cold-cut, 1½ and 1½ inch 3 25 4 45	Moss, Wm	.11.	Hutson, W. D.	11.
" 134 inch 3 75 5 95	Pudifin, Wm	11	Metallic Roofing Co	X
Finishing Nails, per 100 lb. keg, 13	Redmond, Joseph	ii l	Ormsby, A. B.	χii
Linguist Line to to the Key 1/3 1 12 cents	Stevens, Chas. H	ii	Rennie & Son, R	ll II
and 114 inch Hot Cut	Thomas & Howell	II	Shales, John H	ij.
pishing Nails, per 100 lb keg, 2 inch Nails.	CUT STONE CONTRACTORS.	**	Stewart, W. T.	ΪÎ
and up		84	The Parmalee Roofing & Paving Co	II
Paints, etc.	Hibbard, H. & T	III i	Toronto Roofing Co	IJ
White Lead, pure, 25 to 200 lb. kegs. 6 50 7 00		111	Williams & Co., H	ĺΪ
11 No. 2 4 50 5 00	Johnson & Son, Wm	.84	SAFES. Kimball, S	
" No-3 4 00 4 50		1111.	SANITARY APPLIANCES,	
dry 5 25 5 75	ELECTRIC BELLS. Canadian Electric Mfg. Co	_		
Venetian Red, English 1 50 1 75 Yellow Ochre, French 1 25 3 00		Я, 1	Booth & Son	iī
	ELEVATORS.	84	Booth & Son Earl & Co., Edward	iī x
Whiting, London, washed 0 50 0 65	ELEVATORS.	84 IV	Earl & Co., Edward	X V
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