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Canadian Contract Record

46 Richmond St.

# CANADIAN CONTRACT RECORD

A Weekly Journal of Advance Information and Public Works.

ITS PURPOSE: TO SUPPLY TO CONTRACTORS ADVANCE INFORMATION RESPECTING CONTRACTS OPEN TO TENDER, AND TO ARCHITECTS, ENGINEERS, MUNICIPAL AND OTHER CORPORATIONS, A DIRECT MEDIUM OF COMMUNICATION WITH CONTRACTORS.

ITS MERIT: ECONOMICAL AND EFFECTIVE SERVICE.

Vol. 1.

Toronto and Montreal, Canada, November 8, 1890.

No. 39

## THE CANADIAN CONTRACT RECORD,

A Weekly Journal of Advance Information and Public Works,

PUBLISHED EVERY SATURDAY

As an Intermediate Edition of the "Canadian Architect and Builder."

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14 KING ST. WEST, TORONTO, CANADA.

Telephone 2362.

Temple Building, Montreal.

Bell Telephone 2259.

Information from any part of the Dominion regarding contracts open to tender sent exclusively to this journal for publication, and not elsewhere published, will be liberally paid for.

### 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 have 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."

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.

## TO BUILDERS AND CONTRACTORS.

Sealed tenders are requested for the several works necessary to the erection of certain buildings in the Queen's Park, Toronto, for

### THE VICTORIA UNIVERSITY.

The plans and specifications may be seen and all information obtained at the office of W. G. Storm, R.C.A., Architect, No. 19 Union Loan Buildings, Toronto street.

The tenders (on forms supplied by the architect) are to be delivered at the architect's office on or before noon on

FRIDAY, THE 21ST INST.

The lowest or any tender not necessarily accepted.

By order of the Building Committee,

JOHN POTTS, D.D., Chairman.

JOHN N. LAKE, Secretary.

Toronto, 8th November, 1890.

## TENDERS

Will be received by the undersigned up to 5 p.m. on

WEDNESDAY, NOVEMBER 12TH,

FOR THE ERECTION OF A

Factory Building at West Toronto Junction.

The lowest or any tender not necessarily accepted.

DARLING & CURRY,

Mail Building, Toronto.



Sealed tenders addressed to the undersigned and endorsed "Tender for Beaverton Pier," will be received until Thursday, the 27th day of November next, inclusively, for the construction of a landing pier at Beaverton, County of Ontario, Province of Ontario, according to a plan and specification to be seen on application in the office of Frank Madill, Esq., M.P., at Beaverton, and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to five per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

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

By order,

A. GOBEIL, Secretary.

Department of Public Works, }  
Ottawa, 30th October, 1890. }



## NOTICE TO CONTRACTORS.

Sealed Tenders addressed to the undersigned, and endorsed "Tender for Pumping Plant," will be received at this office until Friday, the 21st day of November next, inclusively, for supplying, setting in place, and delivering in complete working order, the Pumping Plant in connection with the Dry Dock, now in course of construction at Kingston, Ontario, according to plans and a specification to be seen at the Resident Engineer's Office, 30 Union Street, Kingston, and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the form supplied and signed with the actual signatures of tenderers.

An accepted bank cheque, payable to the order of the Minister of Public Works, equal to five per cent. of amount of tender, must accompany each tender. This cheque will be forfeited if the party decline the contract, or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

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

By order,

A. GOBEIL, Secretary.

Department of Public Works, }  
Ottawa, 23rd Oct., 1890. }

## TO BUILDERS.

Tenders will be received by the undersigned till WEDNESDAY, 12TH INSTANT, for the erection of a Factory Building on Sheppard street. Plans will be on view on and after Monday, 10th inst.

LANGLEY & BURKE, Architects,  
Canada Life Insurance Buildings, 40-46 King Street West, Toronto.

## TENDERS WANTED

For the Construction of Water-Works System for the Corporation of Niagara, Ont.

Sealed Tenders will be received by the undersigned until 8 p.m. of THURSDAY, THE 20TH NOVEMBER, 1890. Plans and specifications may be seen and all information obtained at the office of the Consulting Engineer, John Galt, Esq., 53 King St. east, Toronto.

Tenders must be on printed forms furnished by the engineer, and accompanied by marked cheque for 3 per cent., payable to the Corporation Treasurer.

HENRY PAFFARD, Mayor.

### USEFUL HINTS.

As asphalt will burn as quickly as tar unless combined with a large proportion of other substances, and is moreover softened by exposure to very moderate heat, says an exchange, it is difficult to see where the fire-proofing qualities come in.

Doors made of paper are now being made. They are formed of two thick paper boards, stamped and molded into panels and glazed together with glue and potash, and then rolled through heavy rollers. After being covered with a water-proof coating, and one that is fire-proof, they are painted, varnished and hung up in the usual way.

It has long been known that a solution of bichlorate of sodium or "borax" possesses the property of dissolving or softening various resins which are unaffected by plain water and by the great majority of saline solutions. As a basis for a permanent label ink, unaffected by water or moderately strong acids, there is nothing equal to a half-saturated solution of ordinary borax, duly charged with as much orange shellac as it will take up on boiling for twenty minutes.

CRUSHED STEEL FOR CUTTING.—Crushed steel is said to be coming into use for cutting stone. It appears to be made by quenching very high-carbon steel in cold water from an excessively high temperature, such as would overheat steel for most purposes. This renders it not only hard, but rather brittle, so that it is possible to pulverize it. It is then crushed in a stamp mill and sifted closely to size. It is said to be not only cheaper but more effective than emery, giving a better and quicker polish, and lasting much longer.

**CONTRACTS OPEN.**

**ELORA, ONT.**—Mr. Frank Dalby will erect a skating rink.

**JESSORVILLE, ONT.**—The Methodists have decided to build a new church.

**PETERBORO, ONT.**—The Government is to be petitioned to erect a fish hatchery on the Ontario river.

**WALKERTON, ONT.**—The town will have plans and specifications immediately prepared for the construction of waterworks.

**BROCKVILLE, ONT.**—A charter has been obtained by local capitalists for the construction of an electric street railway.

**ST. CATHARINES, ONT.**—The Government has been petitioned to erect a new bridge over the Welland canal at this place.

**LETHBRIDGE, N. W. T.**—The Lethbridge Waterworks and Electric Light Company gives notice of application for incorporation.

**PERTH, ONT.**—The town will assist the Government to the extent of \$4,000 to erect a new bridge and extend the canal at this place.

**ST. JOHN, N.B.**—James Pender & Co., nail manufacturers, are about to erect large buildings.—Geo. Waring has leased a site on which to erect an iron foundry.

**CARLETON, PLACE, ONT.**—The plans for the new post office to be erected here are on view. It is understood to be the intention to call at once for tenders for the work.

**KINGSTON, ONT.**—The vestry of St. George's Cathedral has resolved to expend the sum of \$15,000 in improvements.—Work will be commenced at once on the re-building of the hotel at Thousand Island park.

**HANOVER, ONT.**—The Board of Trade is urging the construction of a railway from Markdale via Durham, Allan Park, Hanover and Walkerton, to Inverhuron, Kincardine or other points on the western boundary of Bruce.

**WEST TORONTO JUNCTION.**—The Council at a recent meeting resolved that the best interests of the municipality and the public at large would be served by the building of an electric street railway or railways to connect with the Toronto system.

**WINNIPEG, MAN.**—Legislation will be sought to incorporate the Winnipeg and Duluth Railway Company, with power to construct a railway from Winnipeg in a south-easterly direction to a point on the international boundary in the province of Manitoba, near the Lake of the Woods.

**QUEBEC, P. Q.**—The judges named by the City Council to award the prizes offered by the corporation for the three best plans of a site for the new city hall have completed their work. Their award has been handed to the Mayor, who will communicate it to the Council.—Mr. Alfred Palmer, chief engineer of the surveying party of the Labrador Railway, has arrived here from Labrador. His conversation indicates that his report will be favorable to the projected railway.

**MONTREAL, QUE.**—A number of houses are to be erected on lots recently purchased at Montreal Junction, and arrangements are being pushed forward to secure the construction of a system of waterworks.—The Parks Commission will recommend the Council to grant the request for a site in Mount Royal Park for a new observatory, on condition that the plans be submitted for the approval of the Commission.—The Mount Royal Park Incline Railway will be ordered by the council to proceed with the erection of a permanent building in accordance with plans filed at the City Clerk's office.—St. Cunegonde will replace its incandescent street lights by arc lights.—It is said to be the intention of the Montreal Incline railway to extend the line to St. Lawrence street.—Property owners of Cote St. Paul are agitating for new waterworks.—A stone pavement will be put down in the Wellington street subway next year.

**TORONTO, ONT.**—The following building permits have been granted: A. W. Godson, det. 2-storey and attic bk. dwelling, Crawford street, south of bridge, cost \$6,500; Mrs. Criekshank, 3-storey bk. store, 271 Queen st. east, cost \$3,500; Allan Furniture Co., additions to warehouse, 5 King st. east, cost \$3,000; Hughes Estate, alterations to stores, 115 Queen st. west, cost \$2,000; J. Bedford, det. 2-storey and attic bk. and stone dwelling, n.w. cor. Sherbourne and Sackville sts., cost \$12,000.—The Industrial Exhibition Association have instructed their architect to make a thorough examination of all the buildings and report cost of improvements, enlargements and repairs to the next meeting of the board.—The Government is being urged to grant the use of ten acres of land to enable the city to carry out the extension of the cattle market.—The City Engineer recommends that upon receipt of a sufficiently signed petition Leslie street be opened up and graded from Hunter street to the crest of the ravine, south of Danforth avenue; that Queen street be widened, commencing on the north side at a point about 100 feet west of Roncesvalles avenue, and continuing west-ly to a point 375 feet west of Sunnyside avenue; also at the south-west angle forming the intersection of King and Queen streets by the acquisition of a small triangular strip extending on each street about 100 feet; that a new street be opened and graded running parallel to and lying north of the Grand Trunk railway from the point 375 feet from Sunnyside avenue, and continuing thence westerly to the easterly limit of High Park, at an estimated cost of \$30,000; that a six-foot stone flag sidewalk be constructed on the north side of Grenville street, from Yonge street to Surrey Place.—In view of the necessity of laying shortly a permanent pavement on Yonge Street, the City Engineer recommends the immediate construction of a 12-inch water main, at an estimated cost of \$17,000.—Mr. W. G. Storm, architect, has prepared plans for a sanatorium to be erected in Deer Park.—Mr. Fellows proposes to erect next spring on Sussex avenue a couple of houses and a stable.

**CONTRACTS AWARDED.**

**OTTAWA, ONT.**—Messrs. Jones & Andrews, of this city and Quebec, have been given the contract for building a wharf at St. Anne des Monts Gaspar Co.

**SHERBROOKE, QUE.**—The contract for lighting with electricity the R. C. Seminary and College, Cathedral and Bishop's palace has been given to Mr. A. J. Corriveau, of Montreal.

**'SODA IN PORTLAND CEMENT.**

Mr. Bernhofer, an Austrian engineer, says Engineering, has recently tried the effect of adding crystallized soda to Portland cement mortar and exposing the same to the action of frost. The mortar consisted of 1 litre of cement, 1 litre of lime, with 3 litres of river sand, mixed with a solution of 1 kilogramme of crystallized soda in 2 litres of water. The experiment commenced at 7.30 p.m. on Dec. 9, 1889, and lasted till 10 a.m. on Dec. 10, a period of 14½ hours. During the night the temperature fell to 31½ deg. below zero, and at the finish of the experiment was still 15¼ deg. below zero (Cent.) at which time the specimens were placed in a hot oven where they remained for three hours. At the expiration of this time it was found the extreme cold had had no disadvantageous effect on the setting of the specimens, and the experimenter accordingly concludes that the addition of soda enables Portland cement to withstand the action of frost.

**'KEEPING WALLS DRY.**

In a recent issue of the London Architect, W. L. Dearborn explains Sylvester's process for keeping walls dry. It consists in using two washes or solutions for covering the surface of the walls—one composed of castile soap and water, both substances to be perfectly dissolved in water before being used. The walls should be perfectly clean and dry, and the temperature of the hot air not above 50° Fah. when the compositions are applied. The first, or soap wash, should be laid on when boiling hot, with a flat brush, taking care to form a froth on the brickwork. This wash should remain twenty-four hours so as to become dry and hard before the second, or alum wash, is applied, which should be done in the same manner as the first. The temperature of this wash when applied may be 60° or 70° Fah., and this also should remain twenty-four hours before a second coat of the soap wash is put on. These coats are to be applied alternately until the walls are made impervious to water. The alum and soap thus combined form an insoluble compound, filling the pores of the masonry and entirely preventing the water from entering the walls.

**SLAG CEMENTS.**

In a recent article on slag cements, a French authority, as quoted in a recent issue of Engineering, states that these cements are made by finely grinding blast-furnace slag, and mixing it with a suitable proportion of fat lime. The grinding has to be very fine, because as the cement is made by a simple mixture, it is necessary that the surface on which the two constituents, the lime and the slag, react on each other should be as large as possible, if proper chemical combination is to ensue. As manufactured in France, the cement leaves only 20 per cent. on a sieve containing upwards of 25,000 meshes per square inch. The density of slag cements is much less than that of Portland, weighing bulk for bulk, but from .8 to .88 times as much. In general, this cement also sets somewhat more slowly than Portland, but when hardened, has, in many cases, a greater strength, particularly at early dates after setting. In some experiments still unfinished, the following results were attained with a slag cement from the Department of Isere:

Age.....	1 week.	2 month.	3 months.
Breaking load, lbs. per sq. inch.....	473.5	568.8	678.3

These figures are higher than any attained in the tests made on Portland cements for the new Croton aqueduct. Experiments were also made with slag cement-mortar, mixed with and allowed to harden in sea water, and gave the following results; the mortar consisted of six parts by weight of cement to ten of sand:

Age	Breaking Weight.	Pounds per Square Inch.
8 days	319.0	275.2
28 days	375.4	327.0
		248.4
		341.2

The main objection to slag cement seems to be that if it is allowed to harden in dry air its strength is very materially reduced and it is then liable to crack. In the town of Villefranche-sur-Saone it has been largely used for paving foot paths.

**THE APPLICATION OF IRON AND STEEL TO BUILDING PURPOSES.\***

The results of many experiments show that two tons load per superficial foot of foundation is a safe limit to assume for ordinary clay, gravel, etc. Having settled on a limit of pressure on the earth, we will now consider the question of an isolated column as being the simplest case, and will assume that it carries a not unusual load of 50 tons; such a column would weigh about 15 cwt., say one ton; thus 51 tons will be discharged on its bed-stone. This bed-stone may be taken as ordinary sandstone, which would carry with safety a load of 25 tons per foot; this determines the size of base flange of column, which in this case should have an area of two feet at least. In a building where the ground floor supports are principally columns, and especially for a corner shop where there is only a party and back wall, it is advisable to make the column or stanchion bases larger than given by above rule to give lateral steadiness to the building. The concrete block under the bed-stone or base-plate or brick pier should always be mixed with Portland cement, for the ordinary lime concrete is long in setting, and in large masses it will take years before the centre of block becomes hard. One of Portland cement to eight of other ingredients, if carefully and well mixed, will safely bear a load of 5 tons per superficial foot. These other ingredients should be *hard* materials, as gravel, broken stone and bricks, or bats of hard quality.

**Cast-Iron Columns and Stanchions.**—A cast-iron hollow column to carry 50 tons should have a ratio of about fifteen to twenty times its diameter for its length; this might safely be loaded to 2½ tons per square inch of sectional area; and, if we assume a diameter of 9 inches and a thickness of metal of 1 inch, we get an area of 25 inches, 20 per cent. in excess of our requirements; but for hollow columns it is always advisable to have a liberal margin of safety, as, unless great care is taken in the molding, the shifting of the cone may cause an unequal thickness of metal in the casting. The hollow column is, theoretically, the strongest form of section, but the probability of an unequal thickness of metal is an objection to its use. Another objection is that it does not lend itself very readily to being cased in a fireproof material. Its base flange should have a bold rounding at its junction with the shaft, and bracketed in four directions; the thickness of the base flange should be from one-eighth to one-quarter more than the thickness of the shaft—in this case 1¼ inch. It will often be found that stanchions of the + or H section are preferable.

They have this great advantage, that the whole surface of the metal can be seen and any imperfections detected; also, the absence of the central core greatly reduces the risk of an unsound casting, while in tiers or stacks of stanchions such sections give great facilities for making simple junctions of girders and iron joists at the various floor levels. In designing a stanchion of H section to be placed flat against the wall, it must be remembered that the least width of its section, viz, the width of the flange of the H section, is the measure of its strength, and it will be seen at once that an H section 12" x 6" is not so strong as one 12" x 9", even though it contained the same sectional area. The commonly employed + or H section is not to be recommended, on account of the very unequal distribution of compressive stress over its section, and also on account

of its liability to become bowed in cooling—a risk which, more or less, attends all very non-symmetrical sections. These channel sections are generally fixed with the web or back placed against the wall, but the stanchion is under better conditions if the web is placed outward towards the centre of span. Whatever form of section of column or stanchion is decided on, it is important that the cap plate on which the girder rests should be well chamfered back from the front to prevent the girder from bearing on the extreme front edge of the cap plate, and, in the case of very narrow stanchions, the cap plate should also be narrow, to prevent as far as possible the deflection of the girder tending to bend the stanchion.

All bed-stones for ends of girders in walls should have their front edges chamfered in same manner, and for a distance of 3 inches from the face.

**Wrought-Iron and Steel Stanchions.**—It is not now uncommon to use stanchions made of rolled joists, the cap and base-plate being fixed to the joists by angle-irons or gusset-plates, or both combined. As the ends of joists cannot be considered as bearing accurately on the end plates, without special care in the workmanship, such gussets and angles must be designed so that the shearing or bearing resistance of the riveting alone is sufficient to transmit the load to the base-flange. For very heavy loads, say 150 to 300 tons, it is usual to make stanchions of wrought-iron, of tubular section, with web plates and angle-iron, or with webs made of rolled joists or channel irons. The construction of such stanchions presents many special difficulties of design in the cap and base junctions; and as such loads rarely occur in ordinary practice, it is advisable, whenever they do occur, that an engineer should be employed to design them.

Cast-iron base-plates direct on concrete are rarely used, unless the load on column exceeds 100 tons. It is not possible to give a rule for their depth in center, or the thickness of metal, as this will be influenced by the number of the radiating arms and their thickness; but a rough approximation would be 2½ inches in depth for every foot in diameter, and a nearly uniform thickness to that of the column or stanchion on it. Thus, a base-plate 6 feet diameter would be about 15 inches deep in the centre, and as the stanchion on it would have to carry a load of 130 tons, it would be found to work out to about 1¼" metal, and base-plate should have the same thickness. Such a base should have some holes about 3" diameter cast in the spaces between each pair of radiating arms, so that when base-plate is wedged up and cement is run under same, it can be seen to flow at these holes, and thus make certain that whole area of plate is covered by cement.

**Prices of Building Materials.**

LUMBER.	
CAR OR CARGO LOTS.	
1½ and thicker clear picks, Am. ins.	\$30 00@32 00
1½ and thicker, three uppers, Am. ins.	37 00
1½ and thicker, pickings, Am. ins.	27 00
1 x 10 and 12 dressing and better.	18 00 20 00
1 x 10 and 12 mill run.	23 00 24 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.	10 00 11 00
1 x 10 and 12 maple culls.	9 00
1 inch clear and picks.	28 00 30 00
1 inch dressing and better.	18 00 20 00
1 inch siding, mill run.	14 00 16 00
1 inch siding, common.	11 00 12 00
1 inch siding, ship culls.	\$10 00 \$12 00
1 inch siding, mill culls.	8 00 9 00
Cull scantling.	8 00 9 00
1½ and thicker cutting up plank.	22 00 25 00
1 inch strips, 4 in. to 8 in. mill run.	14 00 15 00
1 inch strips, common.	12 00 12 00
YARD QUOTATIONS.	
Mill cull boards and scantling.	10 00
Shipping cull boards, promiscuous widths.	13 00

Shipping cull boards, stocks.	14 00
Hemlock cantling and joist up to 16 ft.	11 00 12 00
" " " " 18 "	12 00 13 00
" " " " 20 "	13 00 14 00
Scantling and joist, up to 16 ft.	14 00
" " " " 18 "	15 00
" " " " 20 "	17 00
" " " " 22 "	19 00
" " " " 24 "	21 00
" " " " 26 "	23 00
" " " " 28 "	25 00
" " " " 30 "	27 00
" " " " 32 "	27 00
" " " " 34 "	29 50
" " " " 36 "	31 00
" " " " 38 "	33 00
" " " " 40 to 44 ft.	30 00
Cutting up planks, 1½ and thicker, dry board.	25 00 26 00
Cedar for block paving, per cord.	18 00 22 00
Cedar for Kerbing, 4 x 14, per M.	5 00
Cedar for Kerbing, 4 x 14, per M.	14 00
B. M.	
1½ inch flooring, dressed, F. M.	28 00 31 00
1½ inch flooring rough, B. M.	18 00 22 00
1½ " " " " dressed, F. M.	25 00 28 00
1½ " " " " undressed, B. M.	18 00 19 00
" " " " dressed	18 00 22 00
" " " " undressed	12 00 15 00
Beaded sheeting, dressed	22 00 35 00
Clapboarding, dressed	12 00
XXX sawn shingles, per M, 16 in.	2 65 3 75
Sawn lath.	2 00 2 20
Red oak.	30 00 40 00
White.	35 00 45 00
Basswood, No. 1 and 2.	18 00 20 00
Cherry, No. 1 and 2.	70 00 70 00
White ash, No. 1 and 2.	25 00 25 00
Black ash, No. 1 and 2.	20 00 30 00
Dressing stocks.	16 00 22 00
Picks, American inspection.	40 00
Three uppers, American inspection.	50 00

**BRICK—M**

Common Walling.	\$7 50
Good Facing.	9 00
Sewer.	8 50 9 00
Pressed Brick:	
Plain brick, f. o. b. at Milton, per M.	\$17 00
" " " and quality, per M.	13 00
" " " 3rd	10 00
Hard Building.	10 00
Moulded and Ornamental, per 100.	\$3 10 10 00
First quality, f. o. b. at Campbellville, per M.	18 00
and " " " 3rd	13 00
Hard Building.	10 00
Ornamental, per 100.	\$3 10 10 00
Tiles.	24 00

Stone.	
Common Rubble, Per Toise, delivered	14 00
Large flat	18 00
Foundation Blocks, " Cubic Foot.	35
Slate: Roofing (per square).	
" red.	15 00
" purple.	9 00
" untinting green.	9 00
" black slate.	7 50
Terra Cotta Tile, per sq.	25 00
Ornamental Black Slate Roofing.	8 00
Sand:	
Per Load of 1½ Cubic Yards.	1 25

**PAINTS. (In oil, per lb.)**

White lead, Can.	6 25 6 50
zinc, Can.	6½ 7 50
Red lead, Eng.	5½ 6½
" venetian.	1 60 1 75
" vermilion.	90 1 00
" Indian, Eng.	10 12
Yellow ochre.	5 10
Yellow chrome.	15 20
Green, chrome.	7 12
" Paris.	25 40
Black, lamp.	15 25
Blue, ultramarine.	15 25
Oil, linsed, raw (& Imp. gallon).	68 70
" " boiled	72 75
" " refined,	78 80
Putty.	2½ 2½
Whiting, dry.	75 1 00
Paris white Eng., dry.	90 1 25
Litharge, Am.	6½ 8
Sienna, burnt.	15 20
Umber,	8½ 12

**CEMENT, LIME, etc.**

Lime, Per Barrel of 2 bushels, Grey.	40
" " " " White	55
Plaster, Calcined, New Brunswick.	2 00
" " " " Nova Scotia.	2 00
Hair, Plasterers', per bag.	1 00
Cement, Portland, per bbl.	2 80 3 00
" Thorold,	1 50
" Queenston,	1 50
" Napanee,	1 50
" Hull,	1 50

**HARDWARE.**

Cut Nails:	
American Pattern, 1½ inch, per keg.	4 15
" " " 1½ to 1¾ inch, per keg.	3 40
Canadian Pattern, 1½ inch, per keg.	3 65
" " " 1½ to 1¾ inch, per keg.	3 15
" " " 2 to 2½ inch, "	3 15
" " " 2½ to 3 inch, "	2 90
" " " 3 inch and larger.	2 65
Steel nails 10c. per keg extra.	
Finishing nails, 1 inch, per keg.	5 75
" " " 1½ inch, "	2 05
" " " 1¾ inch, "	4 50
" " " 2 inch, "	4 75
" " " 2½ inch and larger.	3 10

\* From a paper read before the Royal Institute of British Architects, by F. T. Reade, Hon. Assoc., R.I.B.A.

MONTREAL PRICES.

Lumber, Etc.

Ash, 1 to 4 in., M.	\$13	00	@18	00
Birch, 1 to 4 in., M.	15	00	25	00
Basswood	12	00	20	00
Walnut, per M.	50	00	100	00
Butternut, per M.	22	00	40	00
Cedar, flat.	00	04	00	06
Cherry, per M.	60	00	80	00
Elm, Soft.	15	00	17	00
Elm, Rock.	25	00	30	00
Maple, hard, M.	20	00	25	00
Maple, Soft.	16	00	18	00
Oak, M.	40	00	95	00
Pine, select, M.	35	00	40	00
Pine, and quality, M.	20	00	25	00
Shipping Culls.	13	00	16	00
Mill Culls.	8	00	10	00
Lath, M.	1	30	1	90
Spruce, 1 to 2 inch, M.	10	00	12	00
Spruce Culls.	4	50	6	00
Shingles, 1st quality.	2	00	3	00
and	1	25	1	50

Cement, etc.

Portland Cement, per barrel	\$ 2	70	@	3	00
Roman "	2	70		3	00
Fire Bricks, per M.	20	00		30	00

Cut Nails:

Hot-cut Am. or Can. pattern, 3 inch and above	# 75	\$2	85	
Hot-cut Am. or Can. pattern, 2 1/2 inch and above	3	00	3	25
Hot-Cut Am. or Can. pattern, 2 1/2 and 2 inch.	3	25	4	20
Am. pattern, 1 1/2 and 1 3/4 inch hot-cut 1 1/2 inch	5	50	5	60
Can. Pattern, cold-cut, 1 1/2 and 1 3/4 inch	3	25	4	20
Finishing Nails, per 100 lb. keg, 1 1/2	3	75	5	95
Finishing Nails, per 100 lb. keg, 1 3/4	75	cents		
and 1 1/2 inch.	Hot Cut			
nishing Nails, per 100 lb. keg, 2 inch and up	Nails.			

Patents, etc.

White Lead, pure, 25 to 100 lb. kegs.	6	50	7	00
" No. 1.	5	25	5	50
" No. 2.	4	50	5	00
" No. 3.	4	00	4	50
dry.	5	25	5	75
Venetian Red, English.	1	50	1	75
Yellow Ochre, French.	1	25	3	00
Whiting, London, washed.	0	50	0	65
" Paris.	1	15	1	25

Oils:

Linseed, raw.	0	63	0	55
" boiled.	0	66	0	68
Olive, pure.	1	10	1	15
" machinery.	95		1	05
" extra, qt., per case.	3	00	3	25
pls.	2	50	2	60
1/2 pts.	2	75	3	10
Spirits turpentine.	0	67	0	70

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