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Canadian Institute  
46 Richmond St.

THE

# Canadian Contract Record

A Weekly Journal of Advance Information and Public Works.

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No. 26

## 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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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.

### CAULKING LEAD JOINTS.

The recent issue of *The Technic* gives the following on the above subject:

The lead joint, when properly made, is considered by all authorities to be the best yet devised for water, gas and oil pipes. Although in the recent laying of natural-gas mains in Detroit and elsewhere in the west the screw-joint wrought-iron pipe has been used, it is hardly probable that this will succeed the lead joint in popular favor. The writer was informed by one of the skilled laborers employed on a line where both the screw and lead joint were used that in a test of about 200 pieces of each—the only test made on the entire line—it was found that eighty joints of the screw pipe leaked, while not a leak was developed in the lead.

In the lead joint, a great deal depends upon the skill of the workman who does the caulking. Anybody can pound lead, but anybody cannot make a tight joint. In making lead joints on oil and gas lines little or no yarn is used, but in water it is customary to fill from one-quarter to one-half the bell with yarn, as it has been found that two inches of lead, well driven, is ample to withstand any ordinary pressure. The yarn put in it should be rammed in solidly with the yarning-iron. If the joint be very cold, or at all damp, it is always a good plan, and sometimes a very necessary one, to pour in a little oil. The heavier the oil the better. This prevents the lead chilling too soon, and also prevents its spattering into the face of the man pouring. The opening of the joint may be closed for pouring, either by a rope

rolled in wet clay or by some one of the patent jointers. The latter consist of a rubber band on the inner side of an inclosed hoop of steel. At the ends of the hoop are riveted two lugs, by means of which, either with a clamp or tongs, the jointer is closed around the pipe. A small piece of clay is used as a gate around the opening between the ends of the band, which allows of pouring. The rubber should be kept well smeared with clay, and, when so used, will last for the pouring of five or six miles of pipe.

The use of the jointer will be found quite economical, as it saves the services of the boy who makes the rolls, and a joint having been run with a jointer on requires less time to caulk than one where the roll is used. The tongs will be found much more serviceable than the clamp, although we have not yet been able to find a house which furnishes tongs, but always have to take clamps and have the tongs made by a blacksmith.

The pouring having been successfully accomplished, the caulking proper begins. A good caulker will always caulk the bottom of his joints first, because it is more difficult to do a good job there, and if the top is caulked last, the spigot is forced down against the lead at the bottom, so tightening the joint there. In nearly twenty miles of pipe where this rule was followed, although leaks were occasionally found on the top and upper sides, not one was found on the bottom. If a joint leaks on top, it is a very easy matter to drive the lead a little more, and usually to close it up; but a leak at the bottom is much more difficult to get at. This is one of the best tests we know of, of the ability and experience of a caulker. Another good test is to have a man acknowledge that he cannot tell by looking at a joint whether it will hold or not. If a man says he can, it can generally be relied upon that he has not seen a great deal of work tested.

The tools used in caulking are the yarning-iron, having an edge about 1-16 of an inch by about  $\frac{7}{8}$ ; a cold chisel, to cut off the superfluous lead and to start up a tight joint, and from four to ten sets varying in thickness from 1-16 of an inch to  $\frac{3}{4}$  of an inch, and about  $\frac{1}{4}$  of an inch broad at the face. Some caulkers prefer those with the offset, others those with the single bend. The hammer used should weigh  $1\frac{1}{4}$  to  $2\frac{1}{2}$  or 3 pounds, and should not be over ten inches in length over all.

In caulking the joint, there should first be used a narrow tool next to the spigot, then one a size wider, and so on until one is reached which about fills the joint and leaves a smooth face to the lead. In this way the lead is forced into the recess in the bell, and is also thoroughly consolidated next to the spigot. If the joint was not run full, so that the lead drives back away from the reach of the tools, the joint must be run over again, and under no circumstances in a case of this kind should a cold lead plug be put in. If, however, there is some one point where the joint failed to fill at the front and is filled behind, it is then admissible to put in a plug of cold lead, a chisel having been driven into the lead in the joint to form a cavity for the union of the two pieces of lead; but a plug should never be inserted against a flat surface of lead. It must always go in like a wedge in order to be reliable.

A novel method is to be used in the fireproofing of the new Drexel Institute, in Philadelphia, which is as follows. After the heavy iron joints have been put in place, iron rods about one and a half inches wide and three-quarters of an inch thick are strung from one rafter to another at a distance of about three feet. Under these rods temporary wooden boxes are built and filled with cement. The boxes keep the cement in place until it hardens, when they are removed, leaving a suspended floor capable of withstanding the strain of many tons. The floor is not to be covered with wood, as the cement in itself makes a smooth and hard surface.

CALENDAR.						
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# CONTRACTS

## CONTRACTS OPEN.

**REGINA, N. W. T.**—It is proposed to erect a \$2,000 rink.

**YARMOUTH, N. S.**—An electric street railway is to be constructed here.

**CHIPPWEA, ONT.**—The Presbyterians are talking of building a new church.

**STRATFORD, ONT.**—The *Herald* will erect a new building on the market square.

**OTTAWA, ONT.**—The congregation of Grace church will erect a new building at once.

**PORTAGE LA PRAIRIE, MAN.**—Tenders are being called for a \$3,000 residence for Dr. Milroy.

**PENETANGUISHENE, ONT.**—The Big Mill Company are erecting twelve new houses on Fox street.

**ARROW RIVER, MAN.**—It is proposed to build an Episcopal church in this district, to cost \$2,500.

**LEAMINGTON, ONT.**—There is some talk of H. Walker & Sons building a large summer hotel here.

**WINDSOR, ONT.**—The Michigan Central Railway will shortly begin the erection of a \$20,000 station.

**ST. BONIFACE, MAN.**—The erection of the Industrial School for Indian children will soon be commenced.

**CALGARY, N. W. T.**—It has been decided to grade 250 miles of the Calgary and Edmonton road this year.

**GUELPH, ONT.**—Mr. R. C. Windeyer, of Toronto, is at present engaged on the plans for the new St. James' church.

**GALT, ONT.**—A by-law to raise \$125,000 for the construction of water-works has been approved of by a vote of the ratepayers.

**MEDICINE HAT, N. W. T.**—Preparations will be begun at once for the erection of one or more buildings for the new Industrial Home.

**ST. JOHN, N. B.**—It is proposed to erect a new building for the museum, art school and other institutions of the Nova Scotia Institute of Science.

**AYLMER, ONT.**—Several flowing wells have been struck north of the town, and it is proposed to construct public water-works, having for the base of supply these wells.

**SARNIA, ONT.**—Subscriptions are coming in rapidly for the equipment of an hospital. Charles Mackenzie, M.P.P., heads the list with \$5,000.—Mr. Hutchins will rebuild his grain elevator.

**BROCKVILLE, ONT.**—Tenders will be received up to 6 p.m. Saturday, August 9th, for the plumber's work required in the new West Ward school. Plans and specifications for same may be seen at the office of Geo. A. Allan, architect.

**BELLEVILLE, ONT.**—Geo. Bouchier, Government engineer, is in the city taking measurements of the harbour in view of the contemplated improvements. A measurement of Harlow Island will also be taken, with a view of rip-rapping.

**ANNAPOLIS, N. S.**—A meeting of the incorporators of the Annapolis and Atlantic railway was held in Queens county on the 21st ult. and resolutions passed for securing the organization of a company to construct the line at the earliest possible date.

**BRANTFORD, ONT.**—At a special meeting of the School Board the architect was instructed to reduce the new school building from 21 rooms to 18 rooms, and to make other alterations, so as to bring the expense down to the amount of the appropriation, viz., \$40,000.

**KINGSTON, ONT.**—Folger Bros. will erect a four-storey building on the corner of Clarence and Ontario streets, to cost not less than \$10,000.—An extension will be made to the west side of the new dry dock in order to meet the requirements of the largest lake vessels.

**OWEN SOUND, ONT.**—Tenders will be received by the water-works committee until 6 o'clock p.m. on Friday, the 15th instant, for laying about five miles of 10, 8 and 6-inch water pipes, according to plans and specifications to be seen at the office of the Town Engineer on and after August 7.

**VANCOUVER, B. C.**—The City Council are advertising for an engineer-in-chief to take charge of the sanitary and general engineering of the city. Applications will be received up to the 15th of September by Thomas F. McGing, City Clerk.

**WHITBY, ONT.**—Tenders addressed to T. E. Farewell, County Clerk, will be received by the Road and Bridge Commissioners, County of Ontario, up to 10 o'clock a.m. of the 14th August, for the building of two bridges over Warren's Creek, on the northern and southern boundaries of the town of Oshawa.

**COBOURG, ONT.**—The construction of the Cobourg, Northumberland and Pacific Railway Company will probably be commenced at an early date. The company at its annual meeting a few days ago, appointed a deputation to wait upon Mr. Van Horne, president of the C. P. R., and interview him in regard to making the survey, building the road and carrying out the running arrangements.

**HAMILTON, ONT.**—A. Fearnside has a building permit for the erection of two brick houses on King William St., cost \$2,500.—The City Council has granted the petition for the construction of a sewer on Emerald street, between Stinson street and the Hamilton & North Western track.—A sub-committee has been appointed to solicit funds from the Finance Committee of the Council wherewith to complete the east end sewer.

**NEW WESTMINSTER, B. C.**—The Dominion Deputy Minister of Marine is calling for tenders for the construction of a steel screw steamer for buoy and lighthouse service in British Columbia, of the following dimensions; length, 170 feet; breadth, 31 feet; depth, 13.6 feet. The tenders are to include the building of the vessel, hull, machinery, tackle and equipments, as specified.—A new public library building will be erected here.

**PETERBORO' ONT.**—Messrs. Hall & Hayes, of Peterboro', give notice of intention to ask for an Act incorporating a company to build a railway from some point on Lake Ontario, in the county of Northumberland and the county of Hastings, thence to Peterboro', thence to Bobcaygeon, thence to some point on the Northern Pacific Junction railway between Port Carling and Burk's Falls, thence to French river, thence through the districts of Nipissing and Algoma to Sault Ste. Marie.

**WINNIPEG, MAN.**—Levels of the site of the new Dominion immigration sheds are being taken, preparatory to the commencing of building operations.—The grant of \$1,600 which the municipality of Lorne is entitled to receive has been withheld by the Government and is to be applied in building a bridge at the foot of Rock Lake. It is stated that an engineer employed by members of the Government has been examining the proposed site and that preparations are made to go on with the erection.

**W. TORONTO JUNCTION.**—The Town Clerk will receive tenders until 5 o'clock on Saturday, the 16th inst., for grading and laying sidewalk on Keele street, from Dundas to Bloor street, also for building a stone culvert on Weston road. Full particulars obtainable at the office of the Town Engineer.—The Township Council of York have passed the by-law for block-paving Lake Shore road, from the Humber to the Government buildings at Mimico avenue. The work will cost over \$50,000 and will be of a permanent character.—Willis Chipman, C. E., has recommended to the Council a sewage scheme which will cost \$225,000.

**TORONTO, ONT.**—Tenders addressed to Morgan Baldwin, Harbor Master, will be received until noon on Thursday, the 14th August, for dredging and the construction of a breaker south of the Queen's wharf.—The following building permits have been granted: Geo. Rudden, two r. c. dwellings, 40 and 42 Irwin Ave., cost 1,300; J. Montgomery, 2-storey bk. warehouse, n. w. corner Queen and Bathurst Sts., cost \$2,000; John Low, two 2-storey bk. fronted houses, 151 and 153 Blecker St., cost \$2,000; Trustees Central Methodist Church, Bloor St., additions and alterations, cost \$12,000; A. Beechcroft, six 2-storey and attic bk. houses, corner Gwynne and Melbourne Aves., cost \$15,000.—The Consumers' Gas Company has under consideration the question of establishing miniature gas works in Centre Island for the purpose of supplying residents with light and fuel. It proposes in connection with the scheme to establish a crematory for the burning of garbage.—The ratepayers have voted \$20,000 for the enlargement of the boys industrial school and aid the erection of a similar institution for girls.

## CONTRACTS AWARDED.

**THOROLD, ONT.**—Messrs. Hunt Bros. have been awarded the contract for the new drains.

**BRANDON, MAN.**—The contract for the new Merchants' bank building has been let to John Hanbury.

**COLLINGWOOD, ONT.**—Mr. Fred J. Hodgson's plans for the new school in the West Ward have been accepted.

**HALIFAX, N. S.**—The contract for building the new St. Peter's Church has been awarded to S. Causey, the price being \$27,000.

**VANCOUVER, B. C.**—A. E. Carier has been awarded the contract for building the postoffice and custom house. His tender is under \$75,000.

**PETERBORO, ONT.**—Mr. J. E. Becher, C. E., has been instructed by the special committee on sewers to take the levels of the town and prepare plans.

**LEAMINGTON, ONT.**—The contract for the new school house has been given to McColl & Sutherland, of Windsor. They were the lowest tenderers by \$1,200.

**WHITBY, ONT.**—The Peterboro' Bridge Co.'s tender for the construction of the Pickering Village and Clarendon bridges at the sum of \$4,000, has been accepted.

**WALKERVILLE, ONT.**—The Barnum Wire and Iron Company has been given an order for a solid iron worked store front for J. D. Nasmith, of King street east, Toronto, to cost about \$4,000.

**WEST TORONTO JUNCTION.**—The contract for the Annette street school and additions to the public school at Swansea, have been let to Andrew Brown.—J. W. Butchart has received the contract for the erection of the Dufferin St. school.

**ST. THOMAS, ONT.**—James Finney has been awarded the contract for constructing the new waterworks at \$2,347. Thomas Robertson & Co., of Montreal, tendered for lead at \$2.75 per 100 lbs. in 10 ton lots f. o. b. at St. Thomas, two per cent. off for cash within ten days, which was accepted.

**BRANTFORD, ONT.**—The contract for building the new school in Eagle Place has been awarded to Angus Murray for the sum of \$4,900.—The contract for the erection of the Central School building has been given to Schultz Bros., of this city, and for heating to the Smead-Dowd Company, Toronto, at \$38,744 and \$3,840 respectively. The tender of Schultz Bros. was some \$2,000 above that of Havill & Whitlam, the latter being passed over because not given in the way asked for.—The local electric light company have awarded the contract for an incandescent plant to the Thomson-Houston Co., of Boston.



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
" Thorold... 1 50
" Queenston... 1 50
" Napanee... 1 50
" Hull... 1 50

HARDWARE.
Cut Nails:
American Pattern, 1 1/2 inch, per keg... 4 15
Canadian Pattern, 1 1/2 inch, per keg... 3 65
" " 2 to 2 1/2 inch, per keg... 3 05
" " 2 1/2 to 2 3/4 inch, " " 3 25
" " 3 inch and larger... 3 90
Steel nails toc. per keg extra... 2 65
Finishing nails, 1 inch, per keg... 5 75
" " 1 1/2 inch, " " 4 05
" " 1 3/4 inch, " " 4 25
" " 1 1/2 inch and larger... 4 00

MONTREAL PRICES.

Lumber, etc.
Ash, 1 to 4 in, M... \$13 00 @ 18 00
Birch, 1 to 4 inch, 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, 1st... 15 00 17 00
Elm, Rock... 25 00 30 00
Maple, hard, M... 40 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 35 00
Shipping Culls... 13 00 16 00
Mill Culls... 8 00 10 00
Lath, M... 1 50 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... 2 75 \$2 85
Hot-cut Am. or Can. pattern, 2 1/4 inch and above... 3 00 3 25
Hot-Cut Am. or Can. pattern, 2 3/4 and 2 inch... 3 25 4 20
Am. pattern, 1 1/2 and 1 3/4 inch hot-cut... 3 50 5 60
1 1/2 inch... 4 25 5 20
Can. Pattern, cold-cut, 1 1/2 and 1 3/4 inch... 3 25 4 45
1 1/2 inch... 3 75 4 95
Finishing Nails, per 100 lb. keg, 1 1/2 to 1 3/4 inch... 75 cents advance on Hot Cut Nails.
Finishing Nails, per 100 lb. keg, 2 inch and up... Nails.

Paints, 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:
Linsed, raw... 0 3 0 55
" boiled... 0 60 0 88
Olive, pure... 1 10 1 15
" machinery... 95 1 05
" extra, qt., per case... 2 50 3 25
" 1/2 pt., " " 2 75 3 10
Spirits turpentine... 0 67 0 70

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