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# CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF  
PUBLIC WORKS • TENDERS • ADVANCE INFORMATION • AND MUNICIPAL PROGRESS

EVERY SATURDAY

Vol. 3. Toronto and Montreal, Canada, April 23, 1892. No. 11

**THE CANADIAN CONTRACT RECORD,**  
A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress.  
PUBLISHED EVERY SATURDAY  
As an Intermediate Edition of the "Canadian Architect and Builder."

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Bell Telephone 2299.

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

ADVERTISING RATES ON APPLICATION.

## TENDERS WANTED.

Tenders will be received at the office of the undersigned until SATURDAY, APRIL 23RD, 1892, for the erection of a pair of semi-detached houses on Huron street, near Lowther avenue.  
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.

S. H. TOWNSEND, A.R.C.A.,  
53 King St. East.

## TENDERS WANTED.

Tenders will be received at the office of the undersigned until MAY 6TH, 1892, for the several works necessary in alterations and additions to a Residence on St. Alban's Street. Plans may be seen at the office on and after Wednesday, April 27th.

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.  
S. H. TOWNSEND, Architect,  
53 King Street East.

## Notice to Contractors.

Tenders will be received addressed to the undersigned up to noon on WEDNESDAY THE 27TH INST., for the following water works supplies

- About 100 tons cast iron water pipes.
- 5 tons special castings.
- 10 hydrants.
- 10 6 inch valves.
- 6 4 inch valves.
- 500 service cocks as per sample.
- 6 tons lead pipe.
- 350 service boxes.
- 1000 feet galvanized iron pipe.

Any information required will be given on application to the City Engineer.  
The above quantities are only approximate and the Committee will only bind themselves to take what they actually require, and the Committee do not bind themselves to accept the lowest or any tender.

N. C. POLSON,  
Chairman Water Works Committee,  
Water Works Office, Kingston, April 12, 1892.

## TO CONTRACTORS.

Tenders received at the office of the undersigned until noon of APRIL 30TH, for the erection of a Terrace of Five Houses on West Street. Lowest or any tender not necessarily accepted. Plans and specifications may be seen at our office.  
POWER & SON, Architects,  
Lion Block, Kingston, April 21st

## TO CONTRACTORS.

Tenders will be received at the office of the undersigned until noon of MAY 2ND, for work required in making certain alterations and improvements to St. John's Church, Portsmouth. Lowest or any tender not necessarily accepted. Plans and specifications may be seen at our offices on and after the 27th inst.  
POWER & SON, Architects,  
Lion Block, Kingston, April 21st.

## TENDERS

Will be received by undersigned up to 5 o'clock p.m. THURSDAY, 28TH INST., for the several works required in the erection of a Brick House on north side D'Arcy Street.

The lowest or any tender not necessarily accepted.

STRICKLAND & SYMONS, Architects,  
18 Toronto Street.

## ELECTRIC LIGHTING.

Tenders will be received at the office of the Town Clerk, Chatham, Ontario, up to 12 o'clock noon, of THURSDAY, THE 28TH DAY OF APRIL, INST., for lighting the streets of the Town of Chatham by electricity.

The number of lights required; number of times to be lit during the year; how long each night; and duration of contract, will be made known on application at this office.

The Council will reserve the right to purchase the plant at any time after completion, and also the right to reject any or all tenders.

JOHN TISSIMAN,  
Town Clerk,

Town Clerk's Office,  
Chatham, Ont., April 7th, 1892.

## LIQUIDATOR'S AUCTION SALE

OF VALUABLE LEASEHOLD PROPERTY AND  
Terra Cotta and Plaster Goods, etc.

ON  
WEDNESDAY, 27th APRIL, 1892,  
at 11 a.m.

There will be offered for sale at public auction at the premises of the Hynes Terra Cotta and Brick Company, Esplanade, foot of Jarvis street, Toronto, by Messrs. Oliver, Coate & Co., the following assets of the said company:

Parcel 1—Stock of manufactured Terra Cotta, very complete. Parcel 2—all stock of moulds and models, for use in manufacture of Terra Cotta; parcel 3—Valuable plaster, models and cases all mounted and in good order; parcel 4—Stock of manufactured centre flowers and brackets; parcel 5—Leasehold property in the City of Toronto, being water lot, having thirty-three feet frontage on the south side of Esplanade near the foot of Jarvis extending to the windmill here with two kilns and buildings erected thereon, and boiler, engine, pumps, and presses, and a quantity of staving, belting and pulleys. Also office furniture, safe, etc.

The whole of the said assets, together with the good will of the business of the company, will be offered first en bloc, and if not sold will then be offered in separate parcels as above.

Terms ten per cent cash and balance in fifteen days from the date of sale. Inspection can be made on the premises between 10 and 12 o'clock noon each day until the date of sale, and full particulars can be had on application to H. W. SMITH, Liquidator, Wickham, Thomson & Fitzgerald, Solicitors, 61 Canada Life Buildings or to Oliver Coate & Co., Auctioneers.

## TENDERS

Will be received until the 30TH INST., for the erection of a HOUSE IN ROSEDALE

CHAS. J. GIBSON, Architect,  
94 Adelaide St. East, Toronto.

## CIVIL ENGINEER WANTED.

Applications addressed to the undersigned will be received up to 6 o'clock p.m. THURSDAY APRIL 28TH, 1892, for the position of Town Engineer and Surveyor to take charge of the Engineer's Department of the Town of Toronto Junction.

The appointee to hold office during the pleasure of the Council.

The Council reserves the right to reject any or all applications.

For full particulars regarding the position, apply to J. H. Hoover, Chairman of the Committee on Works.

Applicants to furnish testimonials as to ability and character.

Applications to be marked "Engineer's Applications."

ROBT. I. LEIGH, Town Clerk,  
P. O. Box 405.

Toronto Junction, April 21st, 1892.

## CONTRACTS OPEN.

PORT HANBY, MAN. The C. P. R. will erect a station here.

ST. ROSE, QUE.—A new Protestant Church is being erected at this place.

TRENTON, ONT.—The Proctor House lately destroyed by fire, will be rebuilt.

LOCH WINNOCH, ONT.—The Presbyterians have decided to build a new church.

SARNIA, ONT.—The curling Club contemplate erecting a new rink to cost \$3,500.

FLEMING, MAN.—Plans have been prepared for a new station to be erected by the C. P. R.

ELKHORN, MAN.—The plans for the new school house are waiting approval by the Government.

NAPINKA, MAN.—The citizens are agitating for a bridge across the Souris river at this place.

ASHROFT, B. C.—Subscriptions are being solicited for a new Presbyterian church to be erected here.

ARNBRICK, ONT.—The Baptists have secured a site and will build a handsome church at an early date.

ALTON, ONT.—Mr. Joseph McClure is about to build a new dwelling on the corner of Church and Wilbur streets.

DURHAM, ONT.—The Rev. Father Cassin has purchased the Humbert Estate and will transform it into a church.

BRADFORD, ONT.—Plans for the new High School building have been approved and tenders will be called for shortly.

MILLBANK, ONT.—J. R. Jones is calling for tenders for a brick school house. Plans at the office of A. Hepburn, architect, Stratford.

WOODSTOCK, ONT.—G. C. Eden, Town Clerk will receive tenders until the 30th inst. for the purchase of debentures to the amount of \$145,000.

COLLINGWOOD, ONT.—The Property Committee wishes to obtain plans and estimates for a system of heating by steam for the market building.

SHELBURNE, ONT.—Thos. J. Watson will receive tenders up to May 7th for the erection of a brick Orange Hall. Plans and specifications at his office.

PERTH, ONT.—The ratepayers will vote on a by-law on the 9th of May to grant a bonus of

\$11,000 to Robt Gemmill & Co. to erect a woollen factory.

WINNIPESAU, ONT.—The Council has decided to make extensive alterations to the town hall. The Public School Board will erect new school buildings near Crawford avenue.

ST. JOHN, N. B.—The citizens have decided to memorialize the Dominion Government to erect and equip a grain elevator here similar to the one the Government built in Halifax.

SEBRINGVILLE, ONT.—Geo. Hamilton, Secretary, will receive tenders until May 4th next for the erection of a mill, barn, granary and weigh house for the Sebringville Flax Company.

CHATHAM, ONT.—Plans have been accepted for the new church which the congregation of the First Presbyterian church propose to erect. The building will cost in the neighborhood of \$25,000.

NORWAY, ONT.—At the annual vestry meeting of St. John's church held recently, a committee was appointed to proceed with the erection of a new church. Rev. C. Ruttan, rector.

RAT PORTAGE, ONT.—Plans are being prepared by Mr. C. H. Wheeler, architect, of Winnipeg, for the new St. Albion church to be erected in this town. It will be constructed of stone and will cost \$10,000.

MONCTON, N. B.—Mr. W. H. Faulkner has decided to erect a three story brick building on Main street. The general offices, machine shop, round house and station of the Intercolonial Railway are to be lighted by electricity.

VANCOUVER, B. C.—A. C. P. R. engineering party are making a survey of the route for the new railway from Revelstoke to the Upper Arrow lake, which is the first section of the line proposed to be constructed to Kootenay lake.

TORONTO JUNCTION, ONT.—It is stated that arrangements have been made with a Montreal syndicate to build an electric street railway. The line will run along Dundas and Keele streets to Davenport Road, and thence to Toronto.

PESKOWIC, ONT.—Mr. C. W. Spence, of the C. P. R. was in town recently consulting with the Council about the construction of bridges across the mouth of the Muskrat river—A water works system is again being agitated with a fair prospect of the by-law being earned.

STRATHROY, ONT.—The Fire and Water Committee are considering the advisability of recommending that a system of water works be constructed at once, and are holding communication with several towns and cities in the province with the view of securing the best system.

OTTAWA, ONT.—Wm. Smith, Deputy Minister of Marine, will receive tenders until the 14th May next, for the construction of four automatic whistling buoys three bell buoys and six can buoys four feet in diameter. All made of iron or steel, delivered as follows: two of the whistling buoys and all the can buoys at Halifax, the other two whistling buoys and the bell buoys at St. John, N. B. Plans may be seen at the Department of Public Works, this city, and at the agencies of the department, Halifax and Pictou.

KINGSTON, ONT.—The bill to incorporate the Kingston belt line railway company has been read a first time before the Private Bills Committee in Parliament. The petitioners are B. W. Folger, R. Crawford, R. P. Curtis and H. D. Titus. They want permission to operate a railway of the gauge of four feet and one half inches from a point distant as the company desires, including Cataraqui and Portsmouth. The capital stock of the company will be \$100,000. They propose to build elevators, storehouses, warehouses, engine houses, sheds, wharves and piers.

LONDON, ONT.—A club house is to be erected here for the Young Liberals Association. Mr. J. D. Sherman will erect a residence on the corner of St. James and Richmond streets, to cost \$2,000—The Park Avenue Presbyterian congregation are having plans prepared for alterations and extensions to their church. The plans include a new front and tower, higher walls, etc.—Three cottages are to be built on Hyman street for Mr. Stephen B. Coon.—Mr. D. Wade will

erect a two-storey brick house on the corner of Adelaide and Grosvenor streets.—Mr. O. Graydon will receive tenders until the 26th inst. for the construction of cloak rooms at the Collegiate Institute.—Tenders will be received at the office of the Water Works Engineer until the 26th inst. for painting the buildings at Sprangbank.—G. Craddock, architect, will receive tenders until noon to-day for the erection of a residence on the corner of Oxford and Wellington streets.

**HAMILTON, ONT.**—A new church is to be erected in the Parish of St. Peter, in the northeast end of the city.—Mr. Jas. Balfour, architect, is preparing plans for a handsome new residence for Mr. Geo. T. Tuckett, to be erected on the block bounded by King, Queen, and George streets, to cost about \$25,000. The plans will be completed and tenders called for at an early date.—The City Clerk will receive tenders until noon to-day for the erection of the maternity hospital. Plans at office of Lucian Hills, architect, 11½ King street east.—Building permits have been granted as follows during the past week. Hamilton Street Railway Company, bk. power house on Guise street, cost \$15,000; Thomas Smith, 2-storey bk. dwelling on West avenue north, between Wilson and Evans streets, cost \$1,200; George Behrens, 1½-storey bk. dwelling on Wentworth street, between Cannon and Barton streets, cost \$800.—R. Clohecy, architect, wants tenders for the erection of a brick residence on Grant avenue.

**TORONTO, ONT.**—The enlargement of the church of St. John the Evangelist, corner Stewart and Portland streets, is contemplated. The erection of a new edifice is also spoken of.—Mr. John I. Beer has purchased and torn down the Bull's Head hotel, on the corner of Niagara and Duro streets, on the site of which he intends to erect a new building to cost about \$28,000.—Tenders are wanted at 751 Manning ave. until noon to-day for slating, roofing, plastering, plumbing, painting and drains.—A proposition to enlarge St. Simon's church on Howard street was discussed at its vestry meeting held recently. It was decided to extend the church in a westerly direction, and to make additions to the transepts. These improvements will cost in the neighborhood of \$5,000.—Mr. M. Morgan, Harbor Master will receive tenders until Wednesday, the 27th inst., for dredging at the western channel of the bay. Plans at the Harbor Master's office.—Mr. Rogers, 327 Church street, is about to build a residence on his property adjoining.—A fine residence is to be built on De Lisle avenue, Deer Park, for an American gentleman. Messrs. Bonnick & Duke are looking after the work.—Extensive additions to the Bellamy Works at Scarborough are to be carried out.—Building permits have been granted to the following: E. A. Forster, det. 2-storey bk. dwelling, e. side Do. Mills rd., nr. Danforth rd., cost \$1,500; R. Watt, 2-storey bk. store and dwelling, 163 Brunswick ave., cost \$2,200; Urquhart & Smith, det. 2-storey and attic bk. dwelling, n. side King st., west of Jamieson ave., cost \$4,500; Teagle & Darwent, 332 Clinton st., three att. two storey and attic bk. dwellings, 114 Palmerston ave., cost \$6,000; Jas. Crowther, pr. 2-storey and attic bk. dwellings, s. side Wood st., nr. Yonge, cost \$3,800, and three att. 2-storey bk. stables, in rear s. e. cor. Yonge and Wood sts., cost \$2,500; Land Security Co., 3-storey bk. office building, s. w. cor. Victoria and Adelaide sts., cost \$10,000.

**MONTREAL, QUE.**—The Council of the Board of Trade has decided to memorialize the Dominion Government with a view of securing a subsidy for a line of steamers plying between the St. Lawrence and the West India islands.—Messrs. Roy & Gauthier, architects, are preparing plans for the following works: R. C. church at Aylmer, Que.; Church of St. Joachim, at Shefford, Que.; R. C. church at Stanbridge, Que.; R. C. church at Pakenham, Ont.; church at St. Albert, Ont.; R. C. church at St. Prudentienne, Que.; church at West Manchester, U. S.; church at Fitchburg, Mass., U. S.—The City Clerk will receive tenders until Tuesday, the 26th inst., for the supply of bricks, cement, lime, lubricating and other oils, cotton waste, packing, lamps, hardware, and lumber required by the Water Works Department, also for 40 tons of best soft pig iron, to be delivered at the water works yard, St. Charles Borromeo street.—L. J. Seurgent, General-Manager Grand Trunk Railway, will receive tenders until the

31st May, for stores of various kinds required by the company at Montreal, London, Hamilton and Portland during twelve months commencing July 1st, 1892.—The trustees of Erskine church have had plans prepared for the improvement of the building. They were submitted and considered recently, but nothing definite was decided upon. The church authorities will meet again at any early date to consider the matter.—The City Clerk will receive tenders until Thursday, the 28th inst., for repairs to the Bousecours market.—Theo. Daoust, architect, is preparing plans for the following works: Residence for A. Valequette; eighteen cottages for T. Barbeau at Point Claire; three tenement dwellings on St. Denis street for Mr. R. G. Martineau; tenement on St. Hurbert street for Mr. D. Renand; two tenements on Maple street.—St. James Club is talking of spending \$50,000 on improvements to their building.—W. E. Doran, architect, is calling for tenders for the erection of two stores on St. Catherine street.

#### FIRES.

Mr. Wm. Wilson's residence near Dorchester Station, Ont., was burned on Wednesday last, loss \$1,200.—The outbuildings of the Methodist church at Catarqui, Ont., were destroyed by fire on the 19th inst.—The large grain warehouse and elevator at Cobourg, Ont., occupied by W. D. Matthews & Co. of Toronto, was burned on Tuesday last. The building was owned by the Grand Trunk Railway Company. Loss \$2,000, insurance \$1,200.—Cozens & Bell's saw mill and machine shop at Sault Ste. Marie, Ont., was destroyed by fire on the 19th inst. loss \$6,000; no insurance.—Mr. P. Christie's shingle mill at Severn Bridge, Ont., was destroyed by fire on Thursday last. Loss, \$3,000; insurance, \$2,000.—The Anglican church at Northfield Centre, Ont., was burned on the 11th inst.

#### CONTRACTS AWARDED.

**ORILLIA, ONT.**—Mr. G. R. Eaton, of this town, has received the contract for the new post office.

**SMITH'S FALLS, ONT.**—The contract for erecting the market building has been awarded to Mr. M. Ryan.

**LACHINE, QUE.** The Council has awarded the contract for the electric light plant to the Edison General Electric Company.

**OWEN SOUND, ONT.**—Messrs. T. B. Horton & Son have been awarded the contract for the Beech street sewer at \$999.75.

**FORT WILLIAM, ONT.**—The contract for the new Hudson Bay Company's store has been awarded to Mr. John Saul of Winnipeg.

**WROXETER, ONT.**—Mr. W. Davidson has been awarded the contract for the building of a \$5,000 brick church for the Presbyterians of this place.

**HAMILTON, ONT.**—The Hamilton Bridge & Lool Co., has secured the contract for the iron-work for the electric power house for the street railway company.

**PRESCOTT, ONT.**—The contract for the erection of the new Presbyterian church has been awarded to Messrs. Ward & Steele, of this place, at the contract price of \$12,600.

**TORONTO, ONT.**—The Water Works Committee have accepted the following tenders for supplies: iron and steel, Rice Lewis & Son, brass work, Wilson & Cousins, lumber, Reid & Co., general stores, F. W. Merritt; pipe laying, Burns & McCormack; oil, McColl Bros.

**MONTREAL, QUE.**—W. L. Thomas, architect, has awarded the contracts for the Temple Emmanuel on Stanley street, as follows: masonry and carpentry, Jark & Tate; Roofing, Montreal Roofing Co.; plumbing and heating, F. Horton; plastering, J. McLean.—Messrs. Taylor & Gordon, architects, have accepted the following tenders for McGill College library: masonry, Peter Nicholson; brickwork, A. Cowan; carpentry, Geo. Roberts; roofing, G. W. Reed; heating, Garth & Co.; plastering, Morrison & Son; painting John Murphy.—Theo. Daoust, architect, has awarded contracts for store and dwelling at Point Claire, as follows: masonry, W. Mayer; carpentry, M. Mayer.—Jos. Hanes, architect, has let contracts for two stores on Bleury street as

follows: carpentry, H. Demeris; masonry, N. Duforte.—W. E. Doran, architect, has awarded contracts for the erection of three houses for Mr. Strachan, Valois, Que.

#### ROPES A SUBSTITUTE FOR MOLDINGS.

It is not known, probably, that new manilla rope will make beautiful and economical spiral moldings for wood-work. Rope may be used as spiral moldings in circular and curved work where wooden molding could not be employed without incurring extraordinary expense. The cash cost of rope will not usually amount to half the price of spiral moldings of the same size. Whatever may be the size selected, the rope should be soaked for a few hours in thin starch and glue, equal parts thoroughly mingled together. When the rope is to be nailed in place, take it from the vessel in which it has been placed and wipe off all the adhesive matter; then secure one end with a brad or two, and twist the rope until the spiral strands appear more prominent than when a rope is not twisted firmly. After the molding ropes are secured where they are to remain, take a small stick of hard timber, dressed off like a three square file, and draw the stick firmly in the creases between the strands of the rope, in order to make the strands appear more prominent. Such moldings may be finished with wood-filler, painted and varnished. Some prefer to soak the ropes in boiled oil instead of thin starch and glue. But oil will be more expensive, and no better than the other material. The writer observed recently the columns and pilasters of an elegant suburban villa, all of which were finished with beautiful spiral moldings made of inch rope. *Manufacturer and Builder.*

#### USEFUL HINTS.

To glue ebony to mahogany or other hard woods, use the finest white glue or gelatine dissolved in acetic acid or strong vinegar. The surface of the wood should be roughened.

A correspondent of the *Scientific American* gives the following account of his experience with mortar of which sugar was one of the ingredients:—"We use the cheapest grade of beet sugar, costing here four cents a pound, and all lumps must be mashed up before putting in the mortar. The mortar must be dry or 'stiff' when the sugar is put in, as it makes it very soft when mixed thoroughly. We put the sugar in when we temper it for putting on the wall, and put it in the hair mortar only, or first coat, and use about forty pounds of sugar to the hundred yards. It is a little harder to put on than without sugar. But the result is we have a wall that cannot be easily damaged. We can draw a trowel corner over it, and bearing hard can only mark it. It does not crack by pounding on it, nor the clinches be easily broken off. It does not color the white coat, and we can find no fault with it, while on the other hand, it is far superior to the unsweetened. We figure the extra cost at four cents per yard. Our sand here is very poor and loamy."

#### PERSONAL.

Mr. R. Findlay, architect, Montreal, has removed from the New York Life Building and will on and after 1st of May, 1892, occupy rooms No. 14-15, 4th floor, in the Sun Life Assurance Building.

## MUNICIPAL DEPARTMENT.

### LEGAL DECISIONS AFFECTING MUNICIPALITIES.

**WHAT CONSTITUTES THE LOWEST BID.**—A decision of more than usual interest to builders and to officials awarding public contracts is that recently rendered by Judge Childs of the New York Supreme Court at Buffalo. The Buffalo water commissioners having advertised for bids on a new pumping engine required, instead of accepting the lowest bid, awarded the contract to another concern whose bid was considerably higher. A citizens' association fought the award as contrary to law, but according to the decision of Judge Childs the parties offering to furnish material or do the work advertised for at the lowest money consideration are not necessarily to be considered the lowest bidders. In the words of the judge:

"The fifth objection urged by the plaintiff is that the commissioners exceeded their jurisdiction in this, that they arbitrarily awarded the contract to the highest bidder. In considering this question, it must be conceded that the commissioners were to decide upon which was the lowest bid, and for that purpose were to consider all the facts legitimately before them; their decision being subject to review upon the same facts, and to be overthrown if so far unsupported as to indicate an arbitrary or improper act on their part; otherwise to be sustained. The single fact that the contract was awarded to the party requiring the most money for the work is not at all decisive of this question. If the successful bidder offered a machine more valuable than its competitor, it may have been the lowest bidder although requiring more money."

It was allowed that the element of risk, because the pump offered by the lowest bidder had no record and was to that extent experimental and problematical, was of vital importance and justified the commissioners in interpreting, as the most advantageous offer, the bid that on the face of it was the highest.—*American Contractor.*

There has been a great deal of criticism (observes Stone, of Indianapolis,) on the pavement question in American newspapers. But in American cities it is universally the practice, as soon as a pavement is laid, to tear it up again for the laying of mains and pipes. There is no pavement that will withstand such treatment. No matter how secure the foundations or how well the pavement be laid, nor of what material, it will be injured, if not ruined, by tearing it up in portions, for street purposes. In truth, the heavier the foundation and the better the work, the more it will be injured by being torn up in sections. A scheme for street improvement should include not only improvements for the moment, but should anticipate the future. It is ruinous to spend good money for one improvement to ruin it by other improvements. A municipality should include the paving with the other improvements, and when a street is improved it should be perfected. As it goes, in American cities we neither have the pavements, the improvements, nor the money they cost. They would cost less at the beginning, and would last

MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

and water mains, and electric conduits are as much a part of street improvements as pavements, and the improvement should include the whole or none.

The bursting of water pipes by freezing forms the subject of a letter by John Tyndall in *The Plumber and Decorator*, in the course of which he states that the air does not play a sensible part in the bursting of water pipes. In his early days he was accustomed to give expression to the apparent paradox that there is no such thing as real uniformity in nature. In regard to pipes considered "almost uniform," the slightest accident, says Tyndall, on the interior surface, a speck of dirt, for example, will start the crystallization at one point rather than at another. That the freezing should occur with absolute uniformity throughout a water pipe he regards as physically impossible. Spaces of dirt will cause some portions of a pipe to be filled by a solid plug, while other portions continue filled with water. Spaces of liquid he considers sure to occur now and then between the ice plugs, and if the latter be of any length, it would require a considerable force to push them through the narrow openings. As the force of the water is not sufficient to push the ice plugs through the tube will be torn asunder across the line of least resistance.

PERSONAL.

Mr. J. C. Kennedy has resigned his position of town engineer of Owen Sound, Ont., to accept a more lucrative position at New Glasgow, Nova Scotia.

Established 1841.

THOROLD CEMENT

OVER

ONE MILLION BARRELS USED BY THE GOVERNMENT OF CANADA IN THE MOST IMPORTANT PUBLIC WORKS IN THE COUNTRY.

MANUFACTURED BY

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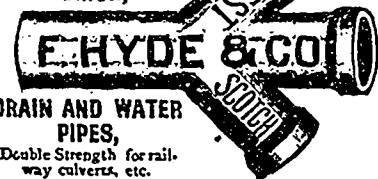
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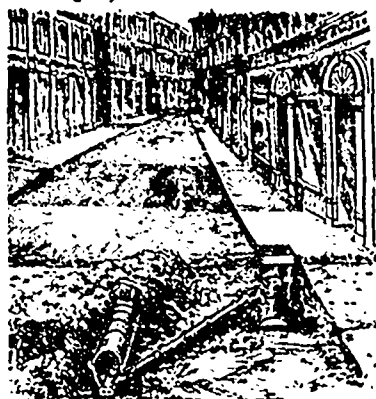
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1 1/2 x 2, pickings, Am ins.	27 00	27 00	30 00	30 00
3 inch clear			52 50	60 00
1 x 10 and 12 dressing and better	18 00	20 00	18 00	20 00
1 x 10 and 12 mill run	13 00	14 00		19 00
1 x 10 and 12 dressing	14 00	16 00		18 00
1 x 10 and 12 common	12 00	13 00	8 00	10 00
1 x 10 and 12 spruce culls	10 00	11 00	10 00	11 00
1 x 10 and 12 maple culls		9 00		9 00
1 inch clear and picks	28 00	30 00	31 00	35 00
1 inch dressing and better	18 00	20 00	18 00	20 00
1 inch siding, mill run	14 00	16 00	14 00	16 00
1 inch siding, common	11 00	12 00	12 00	14 00
1 inch siding, ship culls	10 00	11 00	10 00	11 00
1 inch siding, mill culls	8 00	9 00	8 00	9 00
Cull scantling	8 00	9 00	8 00	9 00
1 1/2 x thicker cutting up plank	22 00	25 00	22 00	25 00
1 inch strips, 4 in. to 8 in. mill run	14 00	15 00	14 00	15 00
1 inch strips, common	11 00	12 00	11 00	12 00
1 1/2 inch flooring	14 00	15 00	14 00	15 00
1 1/2 inch flooring	14 00	16 00	14 00	16 00
XXX shingles, sawn, per M				
16 in.	2 30	2 35	2 30	2 35
XX shingles, sawn	1 30	1 35	1 30	1 35

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Shipping cull boards, promiscuous widths	13 00	13 00
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Hemlock scantling and joist up to 16 ft.	11 00	12 00
Hemlock scantling and joist up to 18 ft.	12 00	13 00
Hemlock scantling and joist up to 20 ft.	13 00	14 00
Scantling and joist, up to 16 ft.	14 00	14 00
" " " " 18 ft.	15 00	15 00
" " " " 20 ft.	16 00	16 00
" " " " 22 ft.	17 00	17 00
" " " " 24 ft.	19 00	19 00
" " " " 26 ft.	21 00	21 00
" " " " 28 ft.	23 00	23 00
" " " " 30 ft.	25 00	25 00
" " " " 32 ft.	27 00	27 00
" " " " 34 ft.	29 50	29 50
" " " " 36 ft.	31 00	31 00
" " " " 38 ft.	33 00	33 00
" " " " 40 to 44 ft.	36 00	36 00

