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Vol. 3.

Toronto and Montreal, Canada, May 7, 1892.

No. 13

#### THE CANADIAN CONTRACT RECORD,

A Weekly Journal of Public Works, Tendors, Advance Information and Municipal Progress.

PUBLISHED EVERY SATURDAY As an Intermediate Edition of the "Caradian 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.

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

ADVERTISING RATES ON APPLICATION.

At its Concention held in Toronto, Nov. 20 and 21, 1889, the Ontario Association of Architecta 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 unanimous-

Tenders. The following resolution was unanimous y adopted at the First Annual Meeting of the Province of Quebec Association of Architects, held in Montreal, Oct. 10th and 11th, 1890: "Moved by M. Perrault, seconded by A. F. Dunlop, that we the Architects of the Province of Quebec now assembled in Concention being satisfied that the CANADIAN CONTILACT RECORD affords us a direct communication with the Contractors,—Resolved. that we needed our supports to it by solved, that we pledge our support to it by using the columns when calling for Ten-ders,"

The publisher 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 to ho may change their address should also give prompt notice of same, and in doing so, should give both old and new address.

## SALE BY TENDER.

#### Assets of the Barnum Wire and Iron Works Company.

Sealed tenders addressed to the undersigned and marked "Tenders for Barnum Assets" will be received up to 6 o'clock, Pam. on Monday, the teld of May, 1893, for the purchase, en b'oc, or in three separate lots, as below, of the assets of the Barnum Iron Works Company of Ontario, Limited: Lot No. 1—Factory site at Toronto Junctice, containing about two acres of land, with large brick factory exceted thereon, engine and boiler, beltings, pulleys, shaftings, hangers, etc. Valce, as per inventory, about \$18,000. This property is in first-class condition, the buildings being new and the engine and boiler having been only a short time in use. It has been exempted from general municipal taxation for a term of 10 years and water is supplied from the town water works system at cox price. Lot No. 2—All machinery not included in lot No. 1, took, patterns, flasks, merchandise, fixtures, furnture, stationary, etc. Value, as per inventory, about \$20,000 Lot No. 3—Book debts, notes and other evidences of debt, bills judgments, etc.. amountine, as per inventory, to about \$3,3000. The whole will be sold according to inventory, which will be open for inspection at the office of the undersigned on and after the date of this notice. Copies of the inventory and all necessary in formation may be obtained, also permits to view the property, on application to the undersigned. Each tender must be accompanied by a marked cheque for 5 per cent, of the amount of the tender.

CHARLES C. GOING, Trustee.

CHARLES C. GOING, Trustee.
Offices No. 2 Dundas Chambers, Toronto Junction.
Dated 2nd May, 1892.

#### **TENDERS**

Will be received up to MAY 16TH for all trades required in the erection of a Brick Presbyterian Church at Montreal Junction

Plans and specifications can be seen at the office of the Architect.

JAMES AMESS. Montreal Junction.

#### TO CONTRACTORS.

Tenders will be received at the office of the undersigned until MAV 13TH for work required in making alterations to the Carriage Building, Exhibition Grounds. The lowest or any tender not necessarily accepted,
M. HALL, Architect, 9 Victoria Street.

#### TO BUILDERS.

Tenders will be received by the undersigned till

5 p.m on Tuesday, 10th instant, for the erection of a Baptist Church edifice in Guelph.

Pians may be seen at Mr. Thos. Roberts.

Tramosa Bridge, Guelph, as well as at our office.

LANGLEY & BURKE, Architects Canada Life Building, Toronto.

### TORONTO JUNCTION. SEWERAGE WORKS

Lenders will be received until MAY 18TH at the Town Clerk's office, for a brick sewer 2 ft. x 3 ft., about 1400 feet in length on Dundas Street, from Conduit Street to Humberside Ave.

Street, from Conduit Street to Humberside Ave. Plans, specifications, and instructions to bidders may be seen after MAY 107H at the Sewerage Works office. Toronto Junction or at the office of Willis Chipman, C. E., 103 Bay St., Toronto. WILLIS CHIPMAN

May 6th, 1892.

#### TOWN OF PARRY SOUND, ONT.

Scaled tenders for above work will be reco-

Scaled tenders for above work will be received by the undersigned up to 3 p.m. of TUESDAY. THE 244B DAY OF MAY, 1862.

Plans and specifications may be seen, and all information obtained, at the Clerk's office, Parry Sound, or at the office of the Consulting Engineer, John Gait, Esq., Canada Life Building, Toronto, Tenders must be accompanied by marked cheque for 3 per cent of tender, payable to the Treasurer.

The corporation reserves the right to reject any or all tenders

W. L. HAIGHT, Clerk, Parry Sound.

#### **NIAGARA FALLS & RIVER RAILWAY** TO BUILDERS.

#### POWER HOUSE

Scaled tenders will be received by the under-signed up to WEDNESDAY, MAY 18111, at noon, for the construction of a Power House in the Park, near Niagara Falls. On Also for

in the Park, near Ningara Pauls, Ont Also for such masonry as is required about the wheel pit, water lays, dynamic beds, etc.

Plans and specifications may be seen at the Company's office at Ningara Falls, Ont, on and after Monday, May 9th.

The lowest or any tender will not necessarily be accepted.

W. T. JENNINGS, Consulting Engineer. Niagara Falls, Ont.

#### DRAUGHTSMAN

One who has passed the Omario Association's recent final examination, wants opening in firstclass office at once. Experience and study first consideration. Apply to

DRAUGHTSMAN Care CANADIAN ARCHITECT AND BUILDER

#### TENDERS

- FOR ---

## WATER WORKS

#### CORPORATION OF NORTH BAY, ONT.

Scaled tenders will be received by the undersigned up to 8 p m of 11 ESDAY, 11HE 17TH DAY OF MAY, 1862.

Plans and specifications may be seen and all information obtained at the Clerk's office. North Bay, or at the office of the Consulting Engineer. John Galt, Esq., Canada Lafe Building, Toronto. Offers must be accompanied by marked cheque for 3 persent of tender payable to the treasurer. The corporation reserves the right to reject any or all tenders.

JOHN G. CORMACK, Town Clerk, North Bay, Ont.

## Business Men,

SHORTHAND, TYPEARITING, COPYING, SPEC

FIGATIONS and GENERAL CORRESPONDENCE neatly and rapidly executed Would be pleased to want upon Architects Builders, etc., requiring work of this description.

Neatness and accuracy guaranteed.

Testimonials furnished - Terms reasonable

#### DAVID A. PHILLIPS.

123 Borden Street, Toronto. or case CANADIAN ARCHITECT AND BUILDER.

#### CONTRACTS OPEN.

PEMBROKE, OST,-A pulp mill is likely to be established here.

FORT ERISE ONT. - Mr. Rainford is calling for tenders for the erection of a stone church.

ST. ROSE, OUE. A new Presbyterian church is to be crected in the north end of the village

WAYERFORD, ONT.-Tenders will be asked shortly for the erection of two school buildings.

ALMONTE, ONT -- The sum of \$7,000 has been subscribed towards the proposed cotton warp factory.

BRANDON MAN. Plans have been prepared for a new block to be erected by Mr. W. A. Macdonald.

REGINA, N. W. T. The Government has granted the sum of \$5,000 towards improving the reservoir at this place

BARRIE, UNI .- Lenders was be received up to the 15th inst, for the heating of the Court House by hot water, steam or hot air,

ST. HYACINTHE, QUE .- The old college building is being torn down, to make room for the erection of a larger building.

GRENVILLE, QUE.-Rev. Mr. Mouseau is endeavoning to secure funds for the erection of a new Presbytenan church at that place.

AGISCOURT, UNT. Mr. H. Kennedy is to etect a residence here.

Moosoms, N. W. T. A local milling company will erect another grain elevator here this

SIMCOL, ONT. The Town Council has decided to construct granolithic or silica barytic stone sidewalks on the principal streets of the town,

St. Lifonas Ont. The Michigan Central Railway will build two nules of new siding at this place, two at Montrose, and tive at Windsor

CHATHAM, ONL. The East Presbyterion Church congregation will build a \$25,000 church this year, plans for which have been accepted

CARNOCEE, N.W. I. Mr. W. R. Calionic of High Bluff, is making arrangements for the erection of a flour unit and machine shop at this place

MORRISHURG, ON t. - The St. James congregation contemplate erecting a new church. An electric light plant for lighting the town will be installed shortly.

Pictor, N. S. Messis, R. Tanner & Son have moved into temporal, quarters, and are preparing to erect a commodious building on the site of their old building.

CARDINAL, ON L. - Mr. Cavanagh, Sectebry Public School Board, will treese tenders until Wednesday the 18th and, for the costs on of a brick extension to the public school.

GALL, ONL. Messes Mactiregor, Gouldy & Co, are about to build a block of stores on South street. Major Keeter is about to make alterations to his residence on Blun road. Probable cost \$2.700.

AMHERST, N. S.-At a meeting of electors heid recently, it was decaded to horrow an additional \$7,000 for the erection of a school building. The amount already voted was \$25,000, making the esum ited cost \$32,000.

VANCOUVER, B. C. A company is being formed to construct affoating dry dock here-Messrs, Eropp & Wills, of this city, are preparing plans for a residence to be erected on Swan Take Okanagan, for Indge Spanks,

St. Johns, QCE. The ratepayers have curred the by law granting a binus of \$15,000 to the North American Tobacco Company It is said to be the intention of the company to shortly commence the erection of new buildings,

LONDON, ONT, -- The City Engineer is prepar ing plans for the proposed Craig and Queen street diains. It is probable that the proposed extensive repairs to St. Paul's Cathedral will be executed this summer. The estimated cost is \$40,000

PORTAGE LA PRAIRIE, MAS. - The Town Council has received a reply from the Government stating that the sum of \$5,000 would be granted for the building of a bridge across the Assimboine river, provided the same cost not iess than \$12,000.

SEAFORTH, ONT. Messrs. R. Beattie & Co. wal receive tenders until the 8th inst. for the erection of a first-class double store and packing house. Wm. Elhott, I own Clerk, wants tenders for the purchase of the electric light plant used by the town.

St. Henri, Que,-Application will be made

at the next session of Parliament for an act to incorporate the St. Henn Light and Power Company. The company propose to manufacture and supply electric light, and erect the necessary buildings therefor.

NEW GLASGOW, N. S.—It is understood that the scheme for an electric street railway is now about taking shape. The foundation of the station has been commenced near the present new electric light building. It is proposed to extend the line from Stellarton to Trenton, a distance of over three nules.

KINGSTON, ONT.—Mr. Newlands, architect, has completed the plans for the new public school to be erected on the Normal School lot. They will be considered at the next meeting of the School Board.—The governors of the general hospital have decided to erect an addition to their building, at a cost of \$20,000.

ST. JOHN, N. B.—The C. P. R. contemplate rebuilding their wharf at this place. The Carleton passenger station is also to be thoroughly repaired. The work of ballacting, rail-laying, etc will soon be commenced on the different sections of the company's road in this province. They intend spending about \$200,000 during the coming summer in improving the portion of their line in this province.

NIAGARA FALLS, ONT —Mr. W. I. Jennings, consulting engineer, Board of Trade Building Toronto, wants tenders for the electric apparatus required for the Niagara Lalls and River Road electric trainway. Mr. Jennings also wants tenders until the 11th inst. for the supply of 10,000 varids of broken limestone ballast, and for the construction of the following work in connection with the power house. Tunnel in rock (about 600 lineal feet), rock excavations, wheel pit in rock, earth excavations, framing, setting and filling tribs in head race, etc.

STRATFORD, OS1. It is the micrition of Mr. W. J. Marshall, of this city, to erect a \$2 500 residence on Albert street, to be of red brick. Tenders received until to-day. H. J. Powell, architekt. - Mr. Wm. Gordon, of this city, will probably creet a new three-storey business block on the corner of Ontario, Market and Erie streets to replace the block recently destroyed by fire. It will contain seven stores and two floors of offices, cost \$25,000. However, there is nothing definite yet. Mr. Gordon had plans prepared some years ago, but it is altogether fikely that Mr. Powell will re-draw them.

MONTREAL, QUE.—The Commissioners for the opening of Braudry street, between Craig and Notre Dame street, have sent their report to the Council. This improvement is the first section of a tunnel scheme which it is proposed to extend under the line of Brock street to the wharf.—Building permits have been granted as follows. M. S. Cuthburt, 2-storey bk. dwelling, Favard street, cost \$1,250; W. McLea Walbank, architect; H. P. Pepin, 3-storey stone and bk. dwelling, Laval avenue, cost \$5,000. J. B. Resther & Son, architects; E. W. Villeneuve, 4-storey stone and bk. dwelling, Laval avenue, cost \$6,000; G. de G. Languedoc, architect.

OTTAWA, ONT .- Plans are being prepared for offices and dye works which Mr. R. Parker is about to erect on Sparks street during the summer. The building will be of brick and three stories high.-Mr. Robert Surtees, City Engineer, will receive tenders until Wednesday, the 11th inst., for the excavation required for sewers and the construction of plank sidewalks and crossings. required by the Board of Works, for work to be done under the "Local Improvement By-law" during the current year. Also for the supplying of material and grading Catherine street, between Elgin and Bank streets. - A committee has been appointed to secure funds for the crection of a Sunday School building for St. Andrew's Church.

WINNIPEG, MAN.—Augustine Church in Fort Rouge is to be enlarged this summer.—The Building Committee of the Winnipeg exhibition has decided to erect the following additional buildings: Office, two stories, cost 5750; carriage house, cost \$1,000; horse stable, cost \$1,200; eattle stable, cost \$750, dining hall, cost \$1,000, dairy building, cost, \$1,500; improvement to grounds and drainage, cost \$1,000.—The Building Committee of the Manitoba College has been

instructed to advertise for tenders for the plumbing, heating and ventilation of the building. Messrs, McKenzie and Ross, of Toronto, contemplate the erection of a large six-storey office building, with a first-class opera house in the reat.

HAMILTON, ONT .- The Sewers Committee of the City Conneil has decided to construct a sewer on Queen street, from York to King street, the estimated cost, being \$5,000 -- Petitions have been presented for sewers on Hunter and Jackson streets. The plans prepared by Mr Mills architect, for alterations to the Grand Opera House have been approved by Mr. Whitney, and contracts will be awarded as soon as a meeting of directors can be convened. It is estimated the work will cost about \$20,000.-R. Clohecy, architect, wants tenders until to day for the erection of a brick dwelling on Catherine street south - The following building permits have been granted . W. P. Smith, two bk, cottages, Yonge st., between Wellington and Aurora sts., cost \$1,200, Robert McMillan, two bk, dwellings, Park st., between Barton and Murray sts., rost \$3,200. John Hennessy, a-storey bk, dwell ing, Euclid ave., between Barton st. and Copland ave., cost \$2,000. T. E. Leather, 2-storey bk. dwelling, Jackson St., between Hess and Caroline sts. cost \$3.500 Gilbert Anderson, 2-storey bk. dwelling, Garth st., south of Aberdeen ave., cost \$2,500. T. H. Pratt, two 2 storey bk. dwellings, John st., between Hannah and Main sts., cost \$3,000.

TORONTO, ONT, -Mr. Peter Meintyre is con sidering the erection of a large hotel at Island Park, to cost in the neighborhood of \$100,000, ---At a meeting of the Toronto Presbytery held on Tuesday last, permission was given to the trustees of College Street Presbyterian Church to borrow the sum of \$35,000 for alterations to the church and building a new school room.-The Water Works Committee have decided to call for tenders for the erection of a weigh scales, capable of weighing to tons - The City Engineer has reported in favor of the construction of the following works. An 8-foot 6-inch stone flag walk on both sides of Victoria street, from King street to Adelaide street, cost \$2,807; a 3-foot cement concrete sidewilk on both sides of Mineing lane. from Wellington street north to the north end of the lane, cost \$480. a Trinidad asphalt pavement in the same lane, to cost \$2,000, a Ironidad asphalt pavement on St. James avenue from Ontario street to Parliament street, cost \$5,500. sewer on Rosedale road, from Park road to Pine Hill road, -The Board of Directors of the Toronto Temperance Reformation Society has decaded to offer for sale the building on Temperance street known as Temperance Hall. Should an accentable offer be received, the directors will sell the same and proceed with the erection of a more commodious building on some convenient site. -Mr. Thos. Gray, of Wardell avenue, is about to erect a residence on the site of the one recently destroyed by fire. - Building permits have been granted as follows. Williams Bros. three att 2-storey and attic bk. dwellings, s. side Macpherson ave., w. of Avenue road, cost \$7,000; News Printing Co., addition at 106 Yonge st., cost 51,600. Jas. B. Brooks bk office and driving shed, 207 Gerrard St. east, cost \$3,500. S. J. Bottomley, 153 Augusta ave., four att. 2-storey bk. dwellings, 75 Augusta ave., cost \$4,000; Geo. Rennie, four att. 2-storey and mansard bk dwell ings, 69 Ontario st., cost \$6,000.

#### FIRES.

Messrs. P. D. Dodds & Co.'s paint establishment on Mills street, Montreal, was damaged by fire on Tuesday last to the extent of \$25,000. covered by insurance.-The residence belonging to the estate of the late John Campbell, M.P., at Weymouth, N. S., was totally destroyed by fire on Tuesday of last week. Loss, \$10,000. The following buildings at Waterloo, Que., were destroyed by fire on Wednesday last: The l'oster residence, E. D. Lawrence's store, J. O. Todd's store, A. S. Mewell's store, and the residences of Mrs. Eager, J. O. Todd, A. Wilson, F. Barrington, M. H. Temple and T. A. Knowlton. The loss is estimated at \$40,000.-The residence of Mr. Joseph Ferry, at Mardstone, Ont., was destroyed by fire on the 20th ultimo. Coss. \$2,000; insurance, \$1,000.—The south end school

house at Yarmouth, N. S., was destroyed by fire on Monday last. Insurance, \$6.50. - A disas trous fire occurred at Winnipeg on Sunday last destroying the following buildings. Princess Opera House, McGregor's livery stable, Frost & Woods implement warehouse. Green's feed store. Bawles grain warehouse the Salvation Army barmeks, six private residences and a block of The total loss is estimated at \$80,000. The Princess Opera House was insured for \$10,000 - The Grand Central Hotel and Douglass' general store at Elkhorn, Man., were burned on Saturday last. - The agricultural implement warehouse of M. Moody & Sons, at Terrebonne, Que., was burned on the 30th April. Loss, \$30,000.-A large grain elevator at Trenton, Ont., owned by Mr. K. Maybee, of Sidney, and occupied by Mr. F. F. Cole, of Toronto, was destroyed by fire on Thursday last .- The Royal Hotel at Brownsville, Qua, occupied by Mr. Upton, was destroyed by fire on Monday last.

#### CONTRACTS AWARDED.

WINNIPEG, MAN.—Mr. Andrew McBain has been awarded the contract for carpentering, and Burnet & Co. for masonry, for the erection of the new building for the Manitoba College,

WALKERVILLE, ONL: Messy, Goodman & White and Victor Williamson have received the contract for building the residence for Mayor Walker. It will cost in the neighborhood of \$15,000

Sr THOMAS, ONT.—The Cuy Council has accepted the tender of H. M. Douglas, of London, for artificial stone walks.—Mr. W. H. Ingram has let the contract for a new residence on Elizabeth street.

NIAGARA FALLS, ONT.—The Niagara Falls and River Road Electric Ranway Company have awarded the contract for iron bridges to the Hamilton Bridge Co. for fencing and culverts to Mr. Magann, Toronto, and for masonry to Senkler & Dohen.

HAMILTON, ONT W. A. Edwards, architect, has awarded contracts as follows for the erection of a residence on John street for Mr. Chas, Gurney Masonry, Geo. Webb., carpentry Sige & Smell, painting and decorating. Campbell & Co., plestering, Clapman & Son.

Toroyto, ONL. The Board of Works have awarded the following contracts. Sewers-St, Helen's avenue, R. Sinith and R. Wilson, cost \$6,352; Hazleton avenue, W. H. Cathro, cost \$3,517; Iane north of Elm. J. J. Booth, cost \$125; cobble stone pavement on lanc east of Spadina avenue, from Grange avenue to St, Patrick street. W. Jones, cost \$472; cedar pavements—Royborough avenue, D. L. Van Vlack, cost \$5,959; Iane between Queen and Britain streets, W. Jones, cost \$142, lane between Yonge and Victoria streets, W. H. Cathro, cost \$144.

MONTREAL, QUE,-Messrs, Miller Bros. & Toms have been awarded the contract for two electric elevators, one passenger and one freight, for the Carslake Hotel. Also one for the Hotel Dieu, Quebec .- The contract for the new church at Montreal South has been awarded to Mr. Geo. Beatty, of St. Lambert.-The Road Committee have accepted the following tenders for supplies Frothingham & Workman, bar iron, \$1.90 per 100 lbs.; forge iron, \$3.40, sheet iron, \$2.40; Montreal Rolling Mills, cut nails, per 100 lbs., \$2.18; T. M. Morgan, Portland cement, Crescent brand, 58 cents, and McNally & Co., Globe brand, 58 cents; Mr. Sheppard, square bricks, \$8.50, and bevelled bricks, \$10.50; Frothingham & Workman and the Montreal Rolling Mills. 20,000 lbs, of spikes at \$2.85; Ovide Dufresne & Bro., white pine, one inch, tongued and grooved, \$15. G. A. Grier, one inch rough pine, \$11.50. J. S. Shearer, spruce planks, \$19. J. & B. Grier, tamame floats, 81/2 cents per lineal foot, Joseph Brosseau, yellow pine, 11 in, by 3 in., \$32.70; The Standard Drain Pipe Co., tiles and drain

#### PERSONAL.

Mr. J. Alcide Chaussé, architect, Montreal, has removed from 1541 St. Catharine street and may after the 1st of May, 1892, be found at No. 153 Shaw street.

#### MUNICIPAL DEPARTMENT.

#### AN ENTERPRISING BAKER.

Here is a first-class story of local enterprise which comes direct from Truro. In the streets of that town are conduits of running water, like unto those well known of Cambridge men as the rivers Pot and Penn, for carrying off all manner of refuse. These conduits were till recently in such extremely bad repair that the water, which came down in considerable volume, used alternately to flood the streets and wash away the drains.

The corporation had no money for repairs, and were as much at their wits' end as the burghers of Hamelin with the plague of rats. Suddenly there dropped from the skies another "Pied Piper," in the shape of a poor, but honest, baker of bread who offered to renew the whole system of drainage if he might have the ues of the water which was thereby carried away.

With a haste rare in such matters, the agreement was drawn up, signed and concluded upon the spot, and, armed with unlimited powers for an indefinite number of years that baker borrowed money, rebuilt the culverts and took the whole of the water through his own back cellars, low down at the bottom of the town.

There he installed an undershot wheel, a dynamo and a battery of accumulators, from which he lighted his shop.

The next step was to canvass his neighbors privately and, pointing out the dainage done to their goods by gas, to offer to supply them with sufficient light for the amount of their annual gas bills, a move which also succeeded beyond all espectation. And there is the baker now supplying with as much efficiency as profit, and there is the Truro corporation gnashing its teeth and wondering how on earth to find a flaw in the agreement.

You cannot hire a drain or water pipe in Truro now for all its weight in gold.—

London Lightning.

The Review and Record, a paper devoted to real estate matters in Brooklyn, N. Y., concludes that few people have any conception of the amount of water which escapes from faucets left running during cold weather where there is danger of freezing over night. In the annual report of the Zanesville, Ohio, water works, recently issued, there is a table published which is sufficent to astonish the unthinking who indulge freely in the water waste business. The table given gives various sizes and pipes, head and pressure, and commences with an aperture the diameter of which is one sixty fourth part of an inch, equivalent to that of a cambric needle. Under a head-we will say of 150 feetequivalent to a pressure of almost 65 pounds to the square inch, the quantity of water which would escape during the year if always open, would reach 26,280 gallons, or through an onfice the size of a pin, equal to one thirty-second of an inch, the quantity escaping in the same time and under the same pressure will be 115,632 gallons. Where so large a quantity as that will escape from a small orifice it is only a question of figures to ascertain how much water is lost through the winter menths during the prevalence of

#### MUNICIPAL ENGINEERS, CONTRACTORS, AND MATERIALS.

#### APPARTUS FOR DETERMINING THE WEAR ON PAVING MATERIALS.

An appartus is in use at the German Government testing station at Charlottenburg, Berlin, employed to test the wear on paving and flooring materials, which as described in the "Zeitschrift fuer Transportwesen und Strasesnbau," consists in substance of a horizontal cast iron disk of about 31 ins. diameter, which, driven by a bevel gear, makes 22 revolutions per minute. Then 3/ oz. of Naxos powdered pumice is spread on the disk immediately in front of the testing piece in such a way that the whole amount of powder must pass the sample. This is pressed against the disk by a one-armed lever weighted with 66 lbs., so that a smooth surface of nearly 8 sq. ins. is exposed to the grinding process. After 1 to revolutions are completed, motion is suspended and the previously weighted testing piece, after being carefully dusted with a brush is weighed over again. This process is repeated four Then the sum of the different losses by wear, divided by the specific weight of the respective material, will give the amount of wear in cubic centimeters. Engineering News.

#### PERSONAL.

John Sutherland, for many years town clerk of Cobourg, died in that town on the 2nd of May, aged 79 years.

Established 1841.

## THOROLD CEMENT

**OVER** 10,000 BARRELS USED IN BUILDING THE GREAT

## ST. CLAIR TUNNEL

MANUPACTURED BY

ESTATE OF JOHN BATTLE.

Thorold, Ontarlo.

# ASPHALT PAVING

We are prepared to do first-class work on WALKS, FLOORS, CELLAR BOTTOMS, &c., with ROUK ASPHALT, which is conceded to be the best for this class of work.

## H. WILLIAMS & CO.,

Roofers and Pariors,

4 Adelaide Street East, - TORONTO.



PIPES,

Double Strength for rail.

way culverts, etc.

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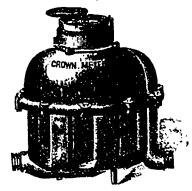
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Cedar for block paying, per	Whiting, dry, per 100 lbs 75 1 00 60 75 Paris white, Eng., dry 90 1 25 90 1 10	Morrison & Co., T, A	VI Hi	Manny & Co., E. A	xili
Cedar for Kerbing, 4 × 14,	Litharge, Am 616 8 616 8	The Ontario Term Cotta, Brick & Sewer		Miller Bros. & Toms	xiv
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Clapboarding, dressed 12 00 12 00 XXX sawn shingles, per M	n Newcastle " . 235 250	Maguire, William,	iv IV	Line and Stone	
16 m 265 275 340	11 Belgian " . 23: 240 11 Canadian " . 225 230	McNally & Co.	XI	Currie & Co., W. & F. P	xiv
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Roof Tiles	4d to 5d, " " " 60 to	Estate of John Battle	IV xiv	Gilmor & Casey	11
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First quality, f.o.b. at Campbellville	ed to sil cold out, not polished	Maguire, William	хıi	Paring.	
and quality, f.o.b	or blued, per 100 lbs 50 50 3d to 5d cold cut, not polished	McRae & Co	iv iv	Exculsion Pavement Co.	Χl
Ornamental, per 100 3 00 10 00 3 00 10 00	or blued, per 100 lbs 90 90	Morrison & Co., T. A	vi	McArthur & Co., Alex The Guelich Silica Barytic Stone Co	ix
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delivered	11/5 to 11/4 " " 1 135 135	Murison & Burge	yi 	Hortan, F	vi
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ing, per superficial yard 250 300 290 Credit Valley Brown Dimen-	254 and 254 44 44 1 100 100	Oakley & Holmes	П	Sanitas Mfg. Co	Ÿ
sion, per cubic foot 90 90 90 Credit Valley Grey Coursing,	2 and 2 " " " 115 115	Chimney Topping.		Ives & Ca. H. R. St. Johns Stone Chinaware Co	IV
per superficial yard 150 200 215	173 4110 174	Bremner, Alexander	IV	St. Johns Stone Chinaware Co	ix
Credit Valley Grey Dimen-	1 " " 250 250	Hansen, Harald M	xiv xii	Duthie & Sons, G	п
sion, per cubic foot 75 85 Madoc Rubble, delivered, per	SHARF AND FLAT FRESSED NAILS. inch, per 100 lbs. 1 35 1 35	Consulting Engineer.	~***	Forbes, Duncan	11
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		The Ontario Terra Cotta Pressed Brick & Sewer Pipe Co	vii	Stained and Decorative Glass	~17
Duty to be added to these	INDEX TO ADVERTISEMENTS	The Colman-Hamilton Co	iii	Castle & Son	v
prices.	IN THE CANADIAN ARCHITECT AND BUILDER.	Wright & Sons, C. B	xiv	Dominion Stained Glass Co Elliott & Son	¥
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Patta	Bent Glass Manufacturers.	Hyde & Co., F	xiv	Adamant Mfg. Co. Boynton Wall Plaster Co.	ix
Black, lamp 15 25 12 25 Blue, ultramarine 15 20 12 18	Polito, T II	Ríce Lewis & Son	IV	Strathy & Co., R. L. F	viii