

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/  
Couverture de couleur

Covers damaged/  
Couverture endommagée

Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée

Cover title missing/  
Le titre de couverture manque

Coloured maps/  
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur

Bound with other material/  
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:/  
Commentaires supplémentaires:

SOME PAGES ARE CUT OFF.

Coloured pages/  
Pages de couleur

Pages damaged/  
Pages endommagées

Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées

Pages detached/  
Pages détachées

Showthrough/  
Transparence

Quality of print varies/  
Qualité inégale de l'impression

Continuous pagination/  
Pagination continue

Includes index(es)/  
Comprend un (des) index

Title on header taken from: /  
Le titre de l'en-tête provient:

Title page of issue/  
Page de titre de la livraison

Caption of issue/  
Titre de départ de la livraison

Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# CANADIAN CONTRACT RECORD

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

EVERY THURSDAY

This paper reaches every week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and leading Contractors in all lines throughout Canada.

Vol. 8.

JULY 15, 1897

No. 24.

## THE CANADIAN CONTRACT RECORD,

PUBLISHED EVERY THURSDAY

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

Subscription price of "Canadian Architect and Builder" (including "Canadian Contract Record"), \$2 per annum, payable in advance.

C. H. MORTIMER, Publisher,

CONFEDERATION LIFE BUILDING, TORONTO.  
Telephone 2362.

New York Life Insurance Building, Montreal.  
Bell Telephone 2299.

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

Advertising Rates on application.



## CONSTRUCTION OF HORSE RING

Tenders addressed to the undersigned will be received through registered post up to

**Noon of Thursday, the 22nd Inst.,**

for the construction of a new Horse Ring in the Exhibition grounds.

Plans and specifications may be seen at the office of Mark Hall, architect, 61 Victoria street.

Each and every tender must be accompanied by a marked cheque, made payable to the order of the City Treasurer, or a cash deposit to the amount of \$50, which deposit will be forfeited to the city in the event of the party whose tender is accepted failing to execute the necessary contract and bond.

The deposit accompanying unsuccessful tenders will be returned. The lowest or any tender not necessarily accepted.

R. J. FLEMING, (Mayor)  
Chairman Board of Control.

Board Room, Toronto, July 7th, 1897



## NOTICE TO CONTRACTORS

### Tenders For Roadways and Sidewalk

Tenders will be received, by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to **NOON ON THURSDAY, THE 22ND INST., for the following works:—**

#### BRICK PAVEMENTS.

On Robert street, from Bloor street to College street.  
On Nassau street, from Spadina avenue to Bellevue avenue.

#### GRAVEL ROADWAY.

On Melbourne avenue, from Cowan avenue to Dufferin street.  
On Dunn avenue, from Queen street to the lake.

#### CEDAR BLOCK PAVEMENT.

On Gladstone avenue, from Queen street to Dundas street.  
On Queen street, from Gwynne avenue to Roncesvalles avenue.

#### SIDEWALK.

On west side Victoria street, from 175 feet north of Adelaide street to Richmond street.

Specifications may be seen and forms of tender obtained at the office of the City Engineer, City Hall, Toronto, on and after Thursday, July 15, 1897.

A deposit in the form of a marked cheque, payable to the order of the City Treasurer for the sum of 2½ per cent on the value of the work tendered for, must accompany each and every tender, otherwise they will not be entertained.

Tenders must bear the bona fide signatures of the contractor and his sureties, or they will be ruled out as informal.

Lowest or any tender not necessarily accepted.

R. J. FLEMING (Mayor)  
Chairman Board of Control.

City Hall, Toronto, July 9th, 1897.

## TO CONTRACTORS

Tenders will be received by the undersigned up to noon on **WEDNESDAY, 21ST INST.** for the various trades required in the erection of a small House in Rosedale. Plans and specifications are now ready, and may be seen at the office of

**DARLING & PEARSON,**  
Mail Building, Toronto.

## Tenders Wanted

Sealed tenders, addressed to the undersigned, will be received up to

**Noon of Monday, July 26th,**

for the construction of the improvement of the Thames Ditch and a branch of the same in the Township of East Zorra. Plans and specifications of the work can be seen at Parker's Hotel, Cassel. Offers will be received for a part or the whole of the work, or for the tile and catch basins separately. Tenders must be accompanied by a marked cheque, or cash, amounting to a per cent. of the offer, which will be returned when contract is entered into. Work must be completed by December 1st, 1897. Mark envelope "Tender for Drain," and address:

**JAMES ANDERSON,**  
Clerk East Zorra,  
Strathallan P.O., Ont.

### CONTRACTS OPEN.

**FRANCONIA, ONT.**—William Ecker will shortly erect two tenement houses.

**OXFORD, N. S.**—The sum of \$7,950 has been voted for a new school building.

**WOODSTOCK, N. B.**—It is probable that the town will purchase a stone crusher.

**GALT, ONT.** Cement walks to the value of \$1,200 will be put down this season.

**WOODSTOCK, ONT.**—Granolithic sidewalks will be constructed on a number of streets.

**GRAND FORKS, B. C.**—Contractors are figuring on the proposed waterworks system.

**CANBORO, ONT.**—The Society of Pilgrims contemplate erecting a place of worship.

**ATERCLIFFE, ONT.**—H. Jones has material on the ground for a \$3,000 brick residence.

**SAULT STE. MARIE, ONT.**—The construction of a sewerage system is being agitated.

**SANDON, B. C.**—Upwards of \$50,000 will be expended on buildings now in course of erection.

**DARTMOUTH, N. S.**—The ratepayers will be asked to grant \$1,500 for improving the waterworks.

**EAST FARNHAM, QUE.**—The Roman Catholic church congregation are erecting a new school, with hall.

**AILSA CRAIG, ONT.**—An engineer has estimated the cost of a waterworks system at \$3,800.

**FREDERICTON, N. B.**—The time for receiving tenders for the purchase of debentures

## Notice to Contractors

A new and thoroughly revised edition of the *Canadian Contractor's Hand-Book*, consisting of 150 pages of the most carefully selected material, is now ready, and will be sent post-paid to any address in Canada on receipt of price. This book should be in the hands of every architect, builder and contractor who desires to have readily accessible and properly authenticated information on a wide variety of subjects adapted to his daily requirements.

C. H. MORTIMER, Publisher,

Confederation Life Building, TORONTO.

## TENDERS FOR GRANOLITHIC WALKS

The Town of Listowel invites tenders for the construction of Granolithic Sidewalks to laid in the Town the present season. About 18,000 square feet are now passed by the Council. Specifications and forms of tender may be had by applying to the Town Clerk. Tenders will be opened on **MONDAY EVENING, JULY 15TH.** The lowest or any tender not necessarily accepted.

W. E. BINNING,  
Town Clerk.

Listowel, July 5th, 1897.

## RAILWAY CONSTRUCTION

### NOTICE

Sealed tenders for the construction of the Railway of the Valley east of the Richelieu River (about 24 miles), starting from Iberville to St. Thomas, in the County of Missisquoi, P. Q. and for the furnishing of the material wanted, will be received until the **20TH OF JULY, INSTANT,** at noon, at the office of the President, P. H. Roy, No. 4 St. Lawrence street, Montreal.

A copy of the specifications and conditions can be seen at the offices of Mr. Chas. D. Maze, Civil Engineer, No. 22 St. John street, Montreal.

Each of the tenders, sealed as aforesaid, must be endorsed as follows: "Tenders for the Works on the Railway of the Valley East of the Richelieu River. The Company does not pledge itself to accept the lowest or any of the tenders."

By order,

L. H. TRUDEAU,  
Secretary-Treasurer.

tures has been extended until the 15th inst.

**NELSON, B. C.**—The Nelson Electric Light Co. has decided to increase the capacity of its plant, at a cost of \$10,000.

**LISTOWEL, ONT.**—On the 27th inst. the ratepayers will vote on a by-law to raise \$15,000 to construct a system of water-works.

**PARRSBORO, N. S.**—The ratepayers have voted \$3,000 for building another school, two stories, and containing four rooms.

**MONCTON, N. B.**—The Y.M.C.A. want tenders for \$11,000 of debentures. Address F. S. Sharpe, 47 Canterbury street, St. John.

**ST. THOMAS, ONT.**—A proposition made by J. H. Stull to electrify the street railway is under consideration by the city authorities.

**ST. JOHN, N. B.**—Mr. Peters, C.E., has estimated that the cost of a wharf in connection with the harbor improvements will be \$98,200.

**BERLIN, ONT.**—Plans for the new passenger station to be built here have been completed. The building will be 102 feet long, with tower.

**PORT ARTHUR, ONT.**—The by-law to provide funds for constructing a water-works system was carried by the ratepayers last week.

**PETERBORO, ONT.**—S. R. Armstrong, town clerk, wants tenders before Thursday, July 22nd, for the construction of 15,000 feet of pipe sewers.

**STRATFORD, ONT.**—The construction of sewers on several streets will be undertaken at once.—Mr. W. Y. VanBuskirk has been appointed city engineer.

**VERNON, B. C.**—By-laws will be submitted to the ratepayers to provide \$53,000 for waterworks, \$12,000 for an electric light plant, and \$10,000 for a city hall.

**VICTORIA, B. C.**—Tenders for the erection of a jail at Kamloops, B. C., will be received by W. S. Gore, deputy commissioner of lands and works, until the 15th inst.

**CANNINGTON, ONT.**—J. T. V. May has completed plans for a three-story hotel, 47x63 feet, solid brick, for Thomas Roach, of Brechin, for which tenders are now being taken.

**ST. CATHARINES, ONT.**—The city will construct a number of concrete sidewalks.—The question of purchasing a stone crusher is under consideration by the Board of Works.

**CHARLOTTETOWN, P. E. I.**—Richard Smith, of the Public Works Department, will receive tenders until Thursday, July 29th, for rebuilding the wharf at Dingwall's shore, lot 40.

**PERTH, ONT.**—A by-law to raise \$30,000 to construct a sewerage system has been defeated by the ratepayers.—A by-law to grant \$5,000 for an electric railway from Perth to Lanark has been defeated.

**NIAGARA FALLS, ONT.**—The Canadian Power Company has commenced work on its proposed power channel, which will be 200 feet wide at the bottom and about 4,000 feet long, extending from the Chippewa creek to the head of the Dufferin Islands.

**WINDSOR, N. S.**—Tenders are asked by the School Board, addressed to C. De W. Smith, chairman, until July 31st, for erecting a brick and stone school building here. Plans may be seen at the offices of the town clerk and Messrs. Elliott & Hopson, architects, Halifax.

**GUELPH, ONT.**—John A. Trimble, architect, will receive tenders until Wednesday, August 4th, for the heating and fittings required in the registry office.—H. J. Powell, architect, of Stratford, wants tenders until Saturday next for the erection

of a block of stores in this city for D. Coffee.

**PEMBROKE, ONT.**—Mr. Brough, C.E., has prepared plans for a general sewerage system, which have been adopted by the town council and forwarded to the Provincial Board of Health for approval. The estimated cost of the work is \$16,588.80. M. McKay, chairman of committee.

**WINNIPEG, MAN.**—Plans have been prepared by Chief Rogers for a new central fire-hall, two stories, 110x66 feet, with attic and basement.—The Lake of the Woods Milling Company will commence work next week on an elevator at Forest. The same company contemplate erecting other elevators at different points.

**SEAFORTH, ONT.**—William Ballantyne asks tenders until Friday next for improvements to the public school building.—A. G. Smillie, Hensall P.O., will receive tenders until Wednesday, the 21st inst., for the construction of drainage work on the 6th, 7th and 8th concessions. Plans may be seen at the office of the clerk, or at the office of F. W. Farncombe, C.E., London, Ont.

**RENFREW, ONT.**—Tenders for furnishing materials and laying about 35,000 feet of water mains and 19,400 feet of sewers are asked until Tuesday, 20th inst. Tenders for pumping machinery, boilers and water tower will be received until the 27th inst. For particulars address Willis Chipman, chief engineer, 103 Bay street, Toronto, or J. K. Rochester, town clerk, Renfrew.

**QUEBEC, QUE.**—H. Staveley, architect, will receive tenders until noon of July 20th for the erection of a building on MacMahan street for A. E. Pfeiffer.—At a meeting of the promoters of the proposed bridge across the St. Lawrence, it was decided to complete plans and specifications and call for tenders in November.—Mr. Painchaud will erect a residence on Ste. Julie street.

**CHATHAM, ONT.**—Major H. A. Gray, of the Dominion Public Works Department, made a trip last week up the Little Bear creek and through Mitchell's Bay, taking measurements and getting estimates of the cost of carrying out certain improvements.—Tenders for the erection of an electric light building, brick, with steel truss and metal roof, will be received by Ald. T. A. Smith until the 17th inst.—Steps are being taken to secure the erection of swimming baths.

**ROSSLAND, B. C.**—The West Kootenay Power & Light Company has decided to double the capacity of its plant. A large central compressor will be erected at this point, for which tenders have already been asked.—The Columbia & Western Railway Company have decided to standardize the narrow gauge railway from Trail to Rossland. A standard gauge equipment has been ordered, and tenders are now invited for the work, estimated to cost about \$200,000.

**OTTAWA, ONT.**—Arnoldi & Ewart, architects, have prepared plans for a red brick building on Sparks street, to be used as a departmental store. It will be 60x99 feet, three stories high, containing all modern improvements.—E. L. Horwood, architect, is open to receive tenders up to July 19th for the erection of St. Luke's general hospital.—Surveys are now being made for the construction of the Pontiac & Pacific Junction Railway from Hull to Aylmer. As soon as these are finished, which will probably be within three weeks, construction work will be commenced.

**LONDON, ONT.**—Tenders are invited until the 17th inst. for a residence for W. J. Reid, from plans prepared by Alfred Bodley, architect. The building will be 48x80 feet, three stories high, of terra cotta and brick, covered with pan tiles. Same architect is preparing plans for alterations to "Norwood" for Mr. Mills.—

The school trustees have referred the question of building a new school to a committee.—R. J. Wood has been granted a building permit for a brick residence on Simcoe st., to cost \$1,000.—A. O. Graydon, city engineer, wants tenders for plumbing at the police station.—Tenders are invited by the School Board for repairs to the public schools, including two metallic ceilings in Victoria school.

**KINGSTON, ONT.**—T. O. Bolger, city engineer, invites tenders this week for an artificial stone sidewalk on Montreal st.—The nurses at the General Hospital have undertaken to raise funds for the erection of a nurses' home.—It is said to be the intention of the government to erect a drill shed costing \$35,000, exclusive of site.—A movement is on foot to form a joint stock company for the purpose of erecting a large opera house in this city.—The Barnett & Record Company, of Minneapolis, who have the contract to erect the elevator for the Montreal Transportation Company, hope to commence work at an early date. The spile dock is to be extended 200 feet.—William Newlands, architect, of this city, has prepared plans for a Masonic temple and music hall to be built at New Glasgow, N.S.; brick and stone, three stories, 80x100 feet.

**MONTREAL, QUE.**—C. St. Jean, architect, is calling for tenders for a "Chatelet" to be erected at St. Antoine de Richelieu for L. J. Cartier.—A. T. Taylor, of Taylor & Gordon, architects, has prepared plans for the new headmaster's house and gymnasium at Lennoxville. Both these buildings will be proceeded with immediately.—Tenders for the construction of the Railway of the Valley from Iberville to St. Thomas, a distance of 24 miles, and for the furnishings of the material, are asked until Tuesday, July 20th. Specifications may be seen at the office of C. D. Maze, C.E., 22 St. John street, this city, and tenders are to be addressed to the president, P. H. Roy, No. 4 St. Lawrence street.—The Water Committee has furnished to the Council the following estimate of work to be carried out this year: Laying of mains, \$15,000; new services, \$15,000; ten new valves, \$3,500; alternating valves, \$6,500; connecting main, \$500; repairs to reservoir, \$10,000; repairs to permanent pavement, \$6,000.—The ratepayers of Notre Dame street west have asked that the street be paved with asphalt to the city limits.—Mr. Tarte, Minister of Public Works, has submitted plans for harbor improvements to the Harbor Commissioners. It is proposed to construct four new piers from 600 to 700 feet in length and 230 feet wide. The total cost of the improvements will probably be above \$2,000,000.

**HAMILTON, ONT.**—It has been resolved to proceed with the erection of a wing to the General Hospital, and tenders for construction are asked by the city clerk.—The following building permits have been granted: Robert Clohocy, two-story brick dwelling on Erie ave., for William Hallsey, cost \$1,300; Thomas Lovejoy, two-story brick dwelling on Cannon st., for B. Salisbury, cost \$1,400.—It is rumored that George E. Tuckett contemplates building a modern opera house in this city, but the report lacks confirmation.—At the last meeting of the Sewers Committee of the City Council, it was decided to proceed at once with the building of interception works at Ferguson avenue. Messrs. William and Walter Stewart were appointed architects to prepare the necessary plans, etc.—The city engineer has recommended the purchase of a steam road roller.—The Board of Works have adopted a scheme for permanent roadway improvements, involving submission to the ratepayers of a by-law to raise \$110,000 for the work.—The city engineer has recommended the following new pavements: Brick—King st., cab stand east of Gore Park; Main st., James to Catherine. Macadam—James st., Hunter to

Aberdeen ave.; Barton st., James to Wentworth; Stuart st., James to Caroline; King st., Bay to Lock, and Wellington to Wentworth; Main st., Catherine to Wellington, and Macnab to James; Macnab st., Main to Stuart (except from King to Merrick); Market st., Macnab to Caroline; John st., Gore to Murray. Tar macadam—York st., Macnab to Lock; John st., King to Gore, and Main to Hunter; King William st., John to Mary; Hughson st., Main to Gore.—E. L. Rastick, architect, has submitted plans for new station and sheds for the Hamilton & Beamsville Railway.

TORONTO, ONT.—Clarence C. Cuff, architect, Yonge st. arcade, is preparing plans for alterations over bank building and for remodelling two stores, corner Queen and Yonge streets, for Mr. G. P. Magann, 174 King st. east. The improvements will cost \$17,000; elevators, steam heating, and all modern improvements.—The City Council has given notice that it is proposed to construct the following works: Gravel roadways with wood curbs, on Fuller st., from Queen st. to Pearson ave., cost \$1,770; on Lisgar st., from Afton ave. to Dundas st., \$1,440; on Peel ave., from Gladstone ave. to Dufferin st., \$560; on Waterloo ave., from Gladstone ave. to Dufferin st., \$555; on Beaconsfield ave., from Afton ave. to Dundas st., \$1,540; on Alma ave., from Gladstone ave. to Dufferin st., \$555; on Pearson ave., from Sorauron to Roncesvalles aves., \$2,020. Asphalt pavement on Church st., from Wellington to Queen sts., cost \$15,500. Brick sidewalks on College st., south side, from Markham st. to Palmerston ave., \$219; on Queen st., north side, from University to Simcoe sts., \$577; on Queen st., south side, from Massey st. to a point 45 feet west of Strachan ave., \$83; on Bloor st., north side, from Yonge to Sherbourne sts., \$1,815.—The Toronto Railway Company recently invited competitive plans for a new office building to be erected at the corner of Church and King streets, and have accepted the design submitted by Messrs. Darling & Pearson. The building will be three stories, and will cost about \$30,000.—Hon. J. I. Tarte, Minister of Public Works, recently inspected the harbor at this place, with a view to determining upon the protection necessary.—Building permits have been granted as follows: Wm. A. Simpson, bk. and mansard roof factory, 314 Queen st. west, cost \$1,600; T. McConnell, 18 Matland st., two 2-story and mansard roof bk. dwellings, 170 Richmond st. west, cost \$2,000; D. Todd, 107 D'Arcy st., bk. fronts and casing to 11 houses, 294 Wilton ave., cost \$4,000; Wm. Scott, two det. 2 story and attic bk. dwellings, north side King st., near Cowan ave., cost \$6,000.

#### FIRES.

McGregor's saw and grist mills at Rothsay, Ont., were completely destroyed by fire on the 7th inst.—The cattle and horse stables on the Exhibition grounds at Peterboro', Ont., were burned a few days ago.—The summer residence of W. Morrison, of Brockville, located at Villa Minerva, was burned on the 6th inst. Loss, \$1,300; insurance, \$800.—H. M. Fowd's woolen mills at Hastings, Ont., were consumed by fire last week. Loss on building, \$2,000; no insurance.—The Edgington House at Edgington, Ont., owned by Charles Clark, has been burned; no insurance.—A residence at Warkworth, Ont., owned by William Brown, was destroyed by fire on the 7th inst.—The town hall and fire hall at Gravenhurst, Ont., were burned on Sunday last. Loss, \$3,500; insurance, \$2,300.

Sanderson, Percy & Co., paints, Toronto, have compromised at 60 cents on the dollar.

#### CONTRACTS AWARDED.

ST. STEPHEN, N. B.—The contract for sewer construction has been let to C. N. Vroom, at \$4,400.

BROCKVILLE, ONT.—The contract for granolithic sidewalk has been awarded to Booth & Dolan.

FREDERICTON, N. B.—The tender of Alex. S. Fleming for improvements to the city hall interior, at \$2,325, has been accepted.

RENFREW, ONT.—T. Burton is the successful tenderer for the Isolation Hospital, at the price of \$2,150. Eleven tenders were received.

ALVINSTON ONT.—J. Z. Long, architect, of St. Thomas, has let the contract for a Presbyterian church to be built here to M. Gillespie & Co.

CANNINGTON, ONT.—The township of Brock have let to Armstrong & Hart the building of a pile bridge on the 11th concession, the plans for which were prepared by J. T. V. May.

HANOVER, ONT.—The contract for the Hollinger & Ball Chair Co.'s factory has been let to the Disney & Devlin Manufacturing Co. The building will be 42 x 100 feet, three stories and basement.

CHATHAM, ONT.—The tender of the Thomson Electric Company for an electric light plant has been accepted by the council, the figure being \$9,130. The boilers and engines will be supplied by Parks Bros., at \$2,800.

ACTON, ONT.—W. H. Storey & Son have awarded the contract to cover their new tannery building to Daniel Allen, Galt, patentee Allen's composite roofing. H. Grindell has awarded the contract for roofing his new foundry building to same contractor.

TORONTO, ONT.—Contracts have been awarded by the city as follows. Cedar block pavement on Harbord street, D. L. Van Vlack, \$3,749; sewer on Peel avenue

and Dufferin street, A. J. Brown, \$954; piling on Lake street, west of Lorne street, Bryce & Co., \$884.

GUELPH, ONT.—John Teehan is building a two story pressed brick residence, 20 x 42 feet. Contracts have been let as below: Masonry, James McCann; carpentry, Steffler & McKenzie; plastering, Mr. Robinson; tinsmithing, Mr. Howard; painting, W. Holeman.

BRANTFORD, ONT.—The repairs to Brantford Collegiate Institute, amounting to \$2,700, have been awarded to Phillip Henry Secord, at \$2,002.25, Charles H. Taylor securing the gas-fitting and plumbing, at \$419.85.—J. W. Taylor has been given the contract for altering a dry-goods store. Hewitt & McLaren are architects for the above works.

LONDON, ONT.—Tenders for the new bridge and viaduct at King street were received by the city council as below: Beckett & Chalmers, concrete, \$3,883; stone, \$5,550. Fallows & Lewis, concrete, \$3,874; stone, \$4,680.45. Burnett & Son, concrete, \$4,550; stone, \$4,787. Peterboro' Bridge Co., concrete, \$3,605; stone, \$4,300. It is probable that the latter tender will be accepted.

WINDSOR, ONT.—The 600 feet of steel piping required for waterworks purposes will be supplied by McGregor & Sons, of Detroit.—The following tenders were received for the purchase of \$10,000 of debentures. H. O. Hara, Toronto, \$10,408.62, Aemilius Jarvis, Toronto, \$10,403.75; Bank of Commerce, Windsor, \$10,376; C. Ferrie, of Hamilton, \$10,340.33; James A. Meldrum, Toronto, \$10,275.50; G. A. Stimson & Co., Toronto, \$10,226; Mr. Baby, Detroit, \$10,100. It is probable the tender of Mr. O'Hara will be accepted.

HAMILTON, ONT.—Tenders for annual supplies have been accepted as below. Cement, \$2.20 per barrel, W. Freeman; lime, \$1 per barrel, H. Dow, castings,

# "ASBESTIC"

## The King of Wall Plasters

FIREPROOF, being purely Asbestos, which is incombustible.  
NON-CONDUCTOR OF HEAT - NO CRUMBLING OR CRACKING  
WEIGHS LESS and is INTRINSICALLY CHEAPER  
\* than any other Plaster.

A few of the principal Buildings PLASTERED WITH ASBESTIC

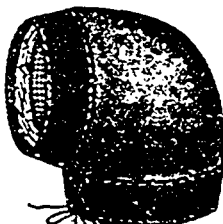
- THE McDONALD BUILDING, Victoria Square, Montreal.
- THE YOUNG WOMEN'S CHRISTIAN ASSOCIATION BUILDING, Montreal.
- THE ROYAL VICTORIA COLLEGE, Montreal.
- THE PROTESTANT INSANE ASYLUM, Verdun, near Montreal.
- THE GRAND HOTEL, St. Hyacinthe, Que.
- THE NEW CUSTOMS-APPRAISERS STORES, NEW YORK, now building, which will consume 5,000 tons.
- THE PARLIAMENT BUILDINGS, OTTAWA, portion of which was recently destroyed by fire and rebuilt.

Write for  
Pamphlet and  
full information.

## The American Asbestic Co.

100 William Street - NEW YORK

SOLE PROPRIETORS OF "ASBESTIC" for United States and Canada.



ELBOW

## MICA BOILER AND STEAM PIPE COVERINGS

The Highest Non-Conductor and the Cheapest Covering on the Market.

Full Particulars from

The Mica Boiler Covering Co. - 9 Jordan St., Toronto  
MONTREAL WINNIPEG

\$2.40 per 100 pounds, A. Gartshore; sand, 82 cents per yard, G. Freeth; sewer pipes, Hamilton & Toronto Sewer Pipe Co.—E. L. Rastrick has let contracts for manse for St. John's Presbyterian church, Grimsby, brick school for S.S. 7, Barton, and has school-house for S.S. No. 3, Barton, about finished.—Stewart McPhie, architect, has let contracts for brick residence on King street east and for alterations to large residence on Catherine street.

MONTREAL, QUE.—The contract for a large flight of steps, with modifications, to be built at St. Vincent de Paul church, has been awarded to O. Martineau. Mr. Jos. Venne is the architect.—Contracts have been awarded as follows: One warehouse building on St. James street, three stories, brick front, for the S. Carsley Co., Ltd., A. F. Dunlop, architect—masonry, Wighton & Morrison; carpenter and joiner's work, Simpson & Peel; bricklaying, Wighton & Morrison. Resther & Son, architects, reparations of a house on Gullbault street for J. C. Clark—masonry, Boucher & Huberdeau, carpenter and joiner's work, Albert Neville, plastering, William Bryner & Son; plumbing, Sicotte & Co.; painting, T. Lenoir.

QUEBEC, QUE.—The contracts for the restoration of Union Bank, at the Basse Ville, have been let as follows: General contractor, S. Peters; sub-contractors—masonry, A. Fackney, painting, J. M. Tardivel; plumbing and heating, John Walker; elevator, Miller Bros. & Toms; vaults, J. & J. Taylor, of Toronto. Harry Staveley, architect.—Building permits have been granted as follows: Reparations of a house, corner Desfosses and St. Dominique streets—contractor, Francis Parent. Mansard roof reparations of a house on Richardson street for F. X. Gendron—contractor, M. Mahenx. Roofing, corner of d'Aiguillon and St. Augustin streets—contractor, P. P. Giguere.

**STRAIGHTENING A CHIMNEY STACK.**

The straightening of a chimney stack at a brick and tile works located at Earnest, Pennsylvania, was recently accomplished in a novel manner. The stack is 122ft. high, 11ft. square at the base, tapering somewhat at the top, and weighs 400-tons. The top was found to be leaning 45in. from the vertical line. To the right of the chimney, 10in. of brickwork was removed from the foundation on three sides. As the bricks were removed, square blocks of wood were inserted, until three sides of the structure rested on the blocks. Between the blocks substantial brick piers, 6in. high, were built, leaving a space of

4 1/2 in. between the top of the piers and the bottom of the undermined brickwork. The blocks were then set on fire and kept burning evenly and uniformly, and as the blocks were reduced to ashes the stack slowly righted.

The painter who submits an estimate of work to be done under the direction of an architect always has a better chance of putting in an acceptable price if he has done work for the same man before. Every architect has his little idiosyncrasies and his peculiar notions as to what the various clauses in the specification mean. When these little peculiarities are known the price is most likely to be one which will be acceptable.

**SCORIA PAVING BLOCKS** are the Best All-Round Paving Material yet discovered. W. H. KNOWLTON & CO., Dealers in Contractors' Supplies, 36 King St. E., Toronto

**EVERY ENGINEER AND CONTRACTOR**

Should possess a copy of the Second Edition of the Canadian Contractors' Hand-Book, a compendium of useful information for persons engaged on works of construction, containing upwards of 150 pages. Price \$1.50; to subscribers of the CANADIAN ARCHITECT AND BUILDER, \$1.00.

C. H. MORTIMER, Publisher, Confederation Life Building, TORONTO.

**MONTREAL PIPE FOUNDRY CO., LTD.**

Successors to DRUMMOND McCALL PIPE FOUNDRY CO., LTD. Manufacturers of

**CAST IRON WATER and GAS PIPES**

and General Water and Gas Special Castings.

Prices on Application.

Offices, Canada Life Building, MONTREAL.

**THE THREE RIVERS IRONWORKS CO.**

Montreal Office: IMPERIAL BUILDING.

THREE RIVERS, P. Q.

MANUFACTURERS OF

**Cast Iron Water and Gas Pipes**

of best quality, from 2 inches in diameter.

HYDRANTS, VALVES and GENERAL CASTINGS.

**THE STANDARD DRAIN PIPE CO.**

OF ST. JOHNS, P. Q., (LTD.)



Manufacturers of Salt-Glazed Vitrified SEWER PIPES

Double Strength Railway Culvert Pipes, Inverts, Vents,

AND ALL KINDS OF FIRE CLAY GOODS

ALEX. GARTSHORE, PRESIDENT.

J. G. ALLAN, SECY & TR.

JAS. THOMSON, VICE PRES'T & GEN'L MGR

ESTABLISHED 1870

INCORPORATED 1896

**GARTSHORE-THOMSON PIPE & FOUNDRY CO. LTD.**

MANUFACTURERS OF CAST IRON WATER AND GAS PIPES, HYDRANTS, VALVES, AND ALL KINDS OF WATER WORKS SUPPLIES.

HAMILTON, ONT.

**MUNICIPAL DEBENTURES** wanted for foreign clients. We can place Debentures direct with foreign clients without charge to municipalities.

: : : Commission allowed to persons introducing new business : : :

**ÆMILIUS JARVIS & CO.** (Member Toronto Stock Exchange) Stock and Bond Brokers. Investment Agents. 23 King St. West, TORONTO

ELECTRIC RAILWAY BONDS PURCHASED.

STOCK EXCHANGE ORDERS PROMPTLY EXECUTED

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

DEBENTURES BOUGHT

Municipalities saved all possible trouble.

G. A. STIMSON & CO.

Investment Dealers  
9 Toronto Street - TORONTO

ARTIFICIAL STONE PAVEMENTS

SIDEWALKS A SPECIALTY

CORPORATIONS Will do well to consider our work and prices before letting contracts

The Silica Baritic Stone Company of Ontario, Ltd.

WALTER MILLS, General Manager. Head office: INGERSOLL, ONT.

Flush Your Sewers with THE MILLER AUTOMATIC SYPHON (PATENTED)

Received HIGHEST AWARD at the World's Columbian Exposition for

- (1) SIMPLICITY OF CONSTRUCTION,
- (2) EFFECTIVENESS, (3) RELIABILITY

Write for Prices and Particulars.

VICTOR HILL, General Agent. 39 D'Arcy St. TORONTO.

ST. LAWRENCE FOUNDRY COMPANY, LTD. Manufacturers of

CAST-IRON WATER & GAS PIPES.

ARCHITECTURAL IRON & STEELWORK.

Front St. East TORONTO, ONT.

THE HAMILTON AND TORONTO SEWER PIPE CO. (LIMITED.)



FOR SEWERS, CULVERTS AND WATER PIPES. INVERTS For Brick Sewers

Write for Discounts

HEAD OFFICE AND FACTORY: HAMILTON, CANADA

STEAM AND POWER

FOR ALL DUTIES



NORTHEY Co. LTD.

TORONTO, ONT.

THE LAURIE ENGINE CO., MONTREAL  
Sole Agents for Province of Quebec.

CAST IRON WATER PIPES

From 4 in. to 36 in. Diameter.  
BELL AND SPIGOT • TURNED AND BORED  
AND EVERYTHING NECESSARY FOR

A Complete Water or Gas System

SUPPLIED BY The LONDONDERRY IRON CO., Ltd.

LONDONDERRY, NOVA SCOTIA

THE MOST COMPLETE IRON WORKS IN CANADA (Established 1852.)

Send for Drawings and Estimates of our work.

ALL PIPES CAST VERTICALLY

- WE MAKE
- PIG IRON . . . . .
  - WATER PIPES . . . . .
  - PUDDLLED BAR . . . . .
  - HYDRANTS, VALVES . . . . .
  - PIPE SPECIALS . . . . .
  - HEAVY CASTINGS . . . . .
  - STRUCTURAL WORK . . . . .
  - ARCHITECTURAL WORK . . . . .
  - MACHINE WORK . . . . .
  - HYDRAULIC MACHINERY . . . . .
  - TURBINES . . . . .
  - BAR IRON . . . . .

The Central Bridge and Engineering Company, Ltd.

Capital Stock ₣ PETERBOROUGH, ONT. ₣ \$200,000.00

WM H LAW Manager and Engineer

Manufacturers of

RAILWAY and HIGHWAY BRIDGES

Viaducts, Piers, Roofs, Turntables, Girders and Architectural Work

:: CAPACITY: 5,000 TONS PER ANNUM ::

"RAMAPO" SAFETY SWITCH STANDS



# MUNICIPAL DEPARTMENT

## TO MUNICIPAL OFFICERS.

The CONTRACT RECORD is desirous of publishing, as far as possible, advance information regarding projected works of construction in all parts of Canada, such as sewerage and waterworks systems, railways, street pavements, public and private buildings, etc. Municipal officers would confer a favor upon the publisher by placing at our disposal particulars of such undertakings which are likely to be carried out in their vicinity, giving the name of the promoter, character of the work, and probable cost. Any information thus furnished will be greatly appreciated.

## NEW CEMENT PAVEMENT.

A writer in the Engineering Record gives the following description of an improved cement pavement adopted for the streets of Bellefontaine, Ohio:

The street was excavated to a depth of 12 inches below the proposed surface of the finished pavement, and a course of broken stone 4 inches deep, well rolled and compacted, was put in, the surface of which conformed to the surface of the pavement. The bottom course of concrete, serving the same purposes as a concrete base to a brick street, is of 1 part cement to 4 parts clean gravel, and in this case 4 inches thick.

It would answer the purpose 6, 8 or 10 inches thick, but the amounts of gravel used should be increased to 6, 8 or 10 parts to 1 of cement. The gravel used was 1 part coarse, sharp sand to 2 of pebbles. Pebbles should be all sizes up to that of a walnut. In this improvement the Buckeye brand of Portland cement was used. Beneath the contract on the soil base, adjoining the curblines, rows of 4-inch drain tile were laid. The mixing of concrete should be done by machine to secure thorough as well as rapid work. The consistency of the mixture was as usual in the laying of granitoid and concrete walks. The top course was 2 inches thick, 1 part cement to 1 of sand. One part of the street was surfaced with mortar made with pit sand of good quality. In another portion, finely crushed flint and granite from boulders gathered from the fields was used in the topping. This latter makes much the more reliable top in case heavy wear is anticipated.

The soil in places was clay, in others gravel. Where a porous gravel soil was found, it was well rolled and concrete put on at once without the use of broken stone. The concrete was put in 5 foot courses, and in blocks 5 feet long in the course. Each course sloped from the center of the street towards the curb, and each by an increasing amount respectively .03', .06', .10', .14' and 17', giving the amount of the fall below the center of street at each joint

as given in the cross-section. The joints of the course coming over the pipes laid in the street were beveled sufficiently that it might be removed and replaced with slight injury. The curb used did not differ materially from that ordinary specified. The surface when well compacted by thorough floating, and before set, should be ribbed or pitted by the use of a roller or other device, the figure or pattern of which should be somewhat large, and adapted to securing a good foothold for horses.

The depressions, however, should be shallow. In this case the joints of the 5-foot square blocks ran parallel to and at right angles to the curb line. Experience would indicate that it is advisable to have them run diagonally. It is not very material by what means the joints in the concrete base are made, but it would seem that the sound of traffic might be considerably deadened by having these joints made slightly open, sufficient to receive a sand or stiff tar filler. The street is not a noisy one in any case, but there is a strong probability that it could be made a most quiet one for residence streets. The joint in the topping, must be immediately over that in the base, and cut entirely through, and by whatever device this joint is made, it should result in making the edges of the blocks the densest and soundest part of the surface.

It is really surprising how perfectly this style of street, when well made, comes to filling all the requirements of a first-class street. It is easily cleaned with a hose and water, and neither temperature nor moisture affects it. It will absorb no impurities, cannot decay, and its limy composition renders it disinfectant in its influence. It is quite free from rumbling, does not crack or fissure or become pitted, requires almost no alteration or repairs, is durable, and notwithstanding its limited use thus far, bids fair to rival granite in durability. It will excel brick in economy and rival asphalt in popularity.

The greatest density of population in the world, says the Indian Engineer, is claimed for Bombay, and is only disputed by Agra. The population of Bombay amounts to 760 persons per acre in certain areas, and in these sections the street area only occupies one-fourth of the whole. If the entire population massed in the streets for any purpose, the density would equal 3,040 persons per acre.

## TEST OF ROAD MACHINERY.

According to the Orangeville Sun, the County Council of Dufferin recently made arrangements with the Austin Road Machine Co., the Sawyer-Massey Co. and the Good Roads Machinery Co. to give an exhibition test of their several road machines, that they might have the pleasure of seeing them in operation, and thereby judging the merits of their different machines.

The exhibition contest was given on West Broadway, on the outskirts of the town; this is a pretty hard piece of road, its foundation being principally of the old corduroy type, covered with heavy coats of gravel. It was a good place to test the merits of the several machines, and any slight deficiency in any one of them was easily discerned. The staying qualities of the Steel Champion were especially noticeable. The simplicity of its mechanism, its lightness of draft, its capacity, its easy system of operation and its appearance of durability soon won for it many friends.

This machine has taken part in many contests, and over 500 of them are now in use in Canada. It is manufactured at Hamilton, Ont., and was the first to be manufactured in this country. The best material, talent, workmanship and scientific construction are all combined so as to give the best possible results.

The Council, after seeing the work done by the three machines, decided to purchase the Steel Champion, and have placed an order with the company for seven of these machines, which will be delivered at once. This will place one machine at the disposal of each municipality.

## UTILIZING REFUSE.

A dispatch from London, Eng., says that Lord Kelvin, professor of natural philosophy in the University of Glasgow, recently opened the works established by the municipality of Shoreditch, which are designed combinedly to destroy the local refuse, generate electric light and supply hot water to the public baths and laundries. Lord Kelvin described the project as an extremely happy combination of scientific knowledge and mechanical skill, and said that it had required remarkable courage in its application. It is believed that the works will effect a great economy. They will consume yearly 20,000 tons of refuse which has hitherto been carried to barges and then dumped into the sea at great expense.

It is understood that Mr. Tissiman, city clerk of Chatham, Ont., has tendered his resignation.

# JOSSON CEMENT .. Manufactured at.. NIEL ON RUPELL

Is the Highest Grade Artificial Portland Cement and the Best for High Class Work. Has been used largely for Government and Municipal Works.

TO BE HAD FROM ALL CANADIAN DEALERS

C. I. de Sola, Manager in Canada .. 180 St. James Street, MONTREAL

BELLHOUSE, DILLON & CO., 30 St. Francois Xavier St., Montreal  
Sole Agents for the Compagnie Generale des Asphaltes de Franco (Rock Asphalt).

# PORTLAND CEMENT NORTH'S CONDOR

Paving and Fire Brick a Specialty

SITTING LION and WHITE CROSS Brands

NORTH'S "CONDOR" BRAND AWARDED FIRST PRIZE AND GOLD MEDAL AT THE ANTWERP EXHIBITION

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

ENGINEERS

**WILLIS CHIPMAN**

B. A. Sc. (McGill).  
Mem. Civ. Soc. C. E.

Mem. Am. Soc. C. E., M. Am. W. W. Ass'n.

**Civil and Sanitary Engineer**  
TORONTO

**WM. NEWMAN, C. E.**

A. M. Can. Soc. C. E., M. Am. W. Wks. Assn.

CITY ENGINEER OF WINDSOR.

**Civil and Sanitary Engineer**  
Waterworks, Sewerage, Drainage, Pavements, &c.  
Fleming Block - WINDSOR, ONT.

**GEO. WHITE - FRASER**

C. E., D. T. S., A. AM. INST. ELEC. ENG  
CONSULTING

**ELECTRICAL ENGINEER**

Electric Railways and Electric Light.  
SPECIALTY. Specification and Superintendence of

**MUNICIPAL PLANTS.**

18 Imperial Loan Building - TORONTO.

**VAUGHAN M. ROBERTS.**

**Civil and Sanitary Engineer**

Waterworks, Sewers, Electric Light,  
Electric Railways.

Plans and Specifications prepared.—Work  
Superintended. 18 Ontario Street,  
ST. CATHARINES

**DAVIS & VAN BUSKIRK**

Graduates Royal Military College Canada.

**CIVIL ENGINEERS**

SPECIALTY: Municipal Engineering, including  
Drainage, Sewerage, Sewage Disposal, Water-  
works, Roadways and Bridges.

W. F. Van Buskirk, A. M. Can. Soc. C. E., Stratford.  
Wm. Mahlon Davis, M. Can. Soc. C. E., Woodstock

**J. McDougall, C. E.,**

ENGINEER OF THE COUNTY OF YORK

**GENERAL MUNICIPAL ENGINEER**

Consulting Engineer for Municipalities in regard to  
Electric Railway and other Franchises.

Specialties: Bridges, Foundations, Electric Railways,  
and Roads. Surveys made; Plans, Specifications and  
Agreements prepared, and work superintended.

COURT HOUSE, - TORONTO.

**Paving Granite**

Granite Sets for Street Paving. — CURBING cut  
to any shape ordered. — Fine Rich Colors for  
Building and Monumental Purposes.  
Quarries, St. Philippe d'Argenteuil, P. Q.

Address all communications to

**JOS. BRUNET - COTE DES NEIGES, MONTREAL**

Municipal Officers, Town Clerks, &c.,  
are requested to mention the CANADIAN  
CONTRACT RECORD when corresponding  
with advertisers.

**THE JENCKES MACHINE CO.**

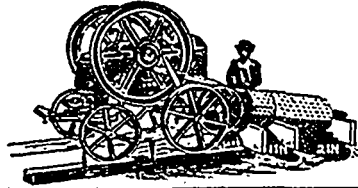
30 Lansdowne Street, SHERBROOKE, QUE.

Builders of

**STONE AND ORE CRUSHERS**  
and Macadamizing Machinery.

Complete Plants Planned and Erected.

Write us for Catalogue No. 5, relating to Crushing Machinery.



THE PIONEERS IN CANADA IN THE MANUFACTURE OF ROAD-MAKING MACHINERY

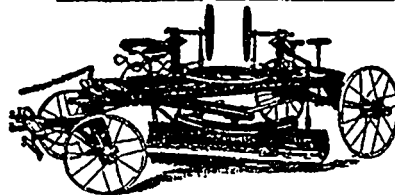
This Cut represents our

.. STEEL CHAMPION REVERSIBLE ..

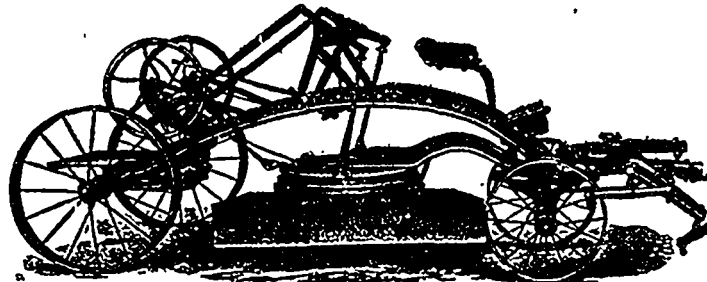
**ROAD MACHINE**

Simplest in Construction, Strongest in its Parts, Easiest in  
Operation; the Most Durable and Efficient  
Road-Making Machine Manufactured.

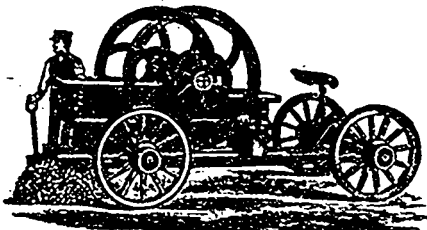
Address— **GOOD ROADS MACHINERY CO.**  
HAMILTON, CANADA.



**AUSTIN**  
**Reversible**  
**ROAD**  
**GRADER**



**BEST....**  
**FINISHED**  
**MOST... COMPLETE.**  
We claim to have  
attained....  
**PERFECTION**



Austin Rock Crusher.

Branch Houses

LONDON, ONT.

WINNIPEG, MAN.

ST. JOHN. N. B.

**F. C. Austin Manufacturing Co.**

Cor. Carpenter St. and Carroll Ave.,

**CHICAGO, ILL.**

Manufacturers of . . .

A Full Line of **EARTH-MOVING and ROAD-MAKING MACHINERY**

New Era Graders, Wheel Scrapers, Leveling Scrapers, Dray Scrapers, Plows, Reversible Road Rollers, Ditching Machines, Street Sprinklers, Street Sweepers, Well Drilling Machinery, Etc.; Etc.



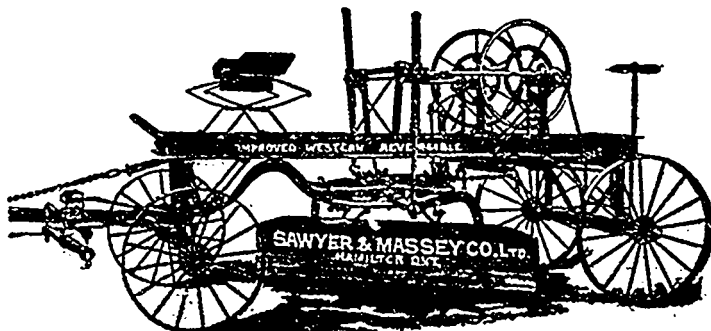
**ROAD MAKING MACHINERY**

We are prepared to supply Municipalities, Contractors, etc., with the Latest Improved . . .

**ROAD MAKING MACHINERY**

Catalogues on Application.

Correspondence Solicited.



**Sawyer & Massey Co., Ltd.**

HAMILTON, ONT.



Prices of Building Materials.

INDEX TO ADVERTISEMENTS

In the "Canadian Architect and Builder."

LUMBER. TAID QUOTATIONS.

Table with columns for Toronto and Montreal prices for various lumber types including Mill cull boards, Shipping cull boards, Hemlock scantling, Cedar for paving, etc.

Table for BRICKS and SAND, listing prices for Common Walling, Good Facing, Sewer, Pressed Brick, and various sand types.

Table for STONE, listing prices for Common Rubble, Large flat Rubble, Foundation Blocks, Granite, etc.

Table for OHIO FREESTONE, listing prices for No. 1 Buff Promiscuous, No. 1 Buff Dimension, etc.

Table for CRATED VALLEY STONE, listing prices for Rubble, Brown Coursing, etc.

Table for LONGFORD STONE, listing prices for Rubble, Ashlar, etc.

Large index table listing various trades and services such as Architects, Ooments, Lime, Reflectors, Roofers, Plasterers, etc., with associated company names and page numbers.

Table for Kent Free Stone Quarries Moncton, N.B., listing prices for River John, N.S., Quebec, etc.

Table for SLATE, listing prices for Roofing, Terra Cotta Tile, etc.

Table for PAINTS, listing prices for White lead, Red lead, Yellow ochre, etc.

Table for CEMENT, LIME, etc., listing prices for Portland Cements, German, London, etc.

Table for Toronto and Montreal Cement prices, listing Hydraulic Cements, Portland Cement, etc.

Table for HARDWARE, listing prices for Cut nails, Steel, etc.

Table for Iron Pipe, listing prices for Iron pipe, Lead pipe, etc.

Table for Galvanized Iron, listing prices for Galvanized Iron, Steel Beams, etc.