

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:

- 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:/  
La 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 THE CONTRACT RECORD

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. 6.

DECEMBER 26, 1895

No. 47.

## 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.

Subscribers who may change their address should give prompt notice of same. In doing so, give both old and new address. Notify the publisher of any irregularity in delivery of paper.

## Notice to Contractors

### CANADIAN CONTRACTORS HAND-BOOK

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.

Price, \$1.50; to subscribers of the *CANADIAN ARCHITECT AND BUILDER*, \$1.00. Address

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

## TOWN OF MOUNT FOREST WATER WORKS

Plans and specifications for a System of Water Works for the Town of Mount Forest, with tenders for the cost of completion of the works from Woodland Springs, will be received by the undersigned up to the

10th Day of January, 1896

The Council do not bind themselves to accept any system or any tender that may be submitted, but any tender that may be approved of must, before being accepted, have a deposit accompanying same of \$5,000.

W. G. SCOTT,  
Chairman Fire and Water Committee.

The Booth Copper Co., of Toronto are applying for incorporation, to manufacture boilers, metal goods, etc.

The Maritime Nail Co., which has recently been formed at St. John, N. B. will commence operations about the 1st of January.

## CONTRACTS OPEN.

MADFORD, Man.—Fred Doubt will build in the spring.

PEMBROKE, ONT.—A Protestant Hospital will probably be built here.

LEAMINGTON, ONT.—Edward Tyhurst will probably build a large brick hotel in the spring.

NEW HAMBURG, ONT.—T. H. McNelly will make alterations to the woollen mills and add new machinery.

OSHAWA, ONT.—Tenders for the purchase of \$3,000 debentures are invited by E. I. Rowse, until the 28th inst.

WINGHAM, ONT.—A by-law will be submitted to the ratepayers to raise funds for laying granolithic sidewalks.

ST. JOHN, N. B.—The Buctoche & Moncton Railway Co. propose to extend the line to Richibucto in the near future.

GRAND MERE, QUE.—The Laurentine Pulp Company have decided to erect a large paper mill on the St. Maurice river.

MOUNT FOREST, ONT.—The by-law to grant a loan of \$5,000 to the Zoeliner & Co. Furniture Co. was carried recently.

PORT ARTHUR, ONT.—A by-law will be voted on by the electors on the 7th of January to purchase the waterworks plant.

PORTAGE LA PRAIRIE, MAN.—Dr. Jas. Cowan has purchased property and will probably erect a brick block thereon next Spring.

GALT, ONT.—McGregor, Gourlay & Co. are considering the removal of their factory to another town or the rebuilding of their works here.

HALIFAX, N. S.—The Wanderers Amateur Athletic Club are considering the erection of a club house and gymnasium at a cost of \$2,000.

VICTORIA, B. C.—The Jubilee Hospital Board have accepted plans for a new operating room, to cost \$3,500 and tenders will shortly be called.

VANCOUVER, B. C.—J. Griffiths, of Mount Pleasant, will build next year on Cordova street in this city, a brick block, three stories, with frontage of 66 feet.

HULL, QUE.—Frank Hibbard, C. E., favors the construction of a small bridge across the Brewery Creek at end of Wall street. A new incinerator will be erected next spring.

FREDERICTON, N. B.—Mr. Chipman, C. E., of Toronto, estimates the cost of a system of sewerage at about \$76,000. His report will be presented about the last of January.

SAULT STE. MARIE, ONT.—The Public School Board invites plans from architects for a four-roomed brick or stone school, the successful competitor to receive \$40 for his plans.

WINNIPEG, MAN.—The question of water supply will likely be taken up by the next council. Two sources of supply are to be considered, viz: the Assiniboine river and artesian wells.

EMBRO, ONT.—It is probable that the C. P. R. will build an electric line to this place. Mr. Williams, inspector of the western Division, was in town recently in connection with the matter.

ST. CATHERINES, ONT.—The County Council have finally passed the by-law granting to the Lincoln Street Railway and Traction Co. the privilege of constructing a railway along the Queenston and Grimsby stone road.

COLLINGWOOD, ONT.—The Great Northern Transit Co. will probably rebuild one of their steamers. Should they not rebuild, it is probable that a contract will be given for a new steamer. Manager Andrews of the Collingwood Dry Dock and Shipbuilding Company is preparing plans.

NIAGARA FALLS, ONT.—The Niagara Falls Metal Works Co., recently organized, will build a factory, 120 ft. x 40 ft., with two wings 40 x 40 ft. and 40 x 120 ft. respectively, and another building of considerable size. Materials, stone and brick. Building operations will be commenced at once.

LONDON, ONT.—Contracts are being let for materials necessary for the construction of the G. T. R. shops.—An electric elevator will be put in the Grigg House next spring.—The agreement between the city and the G. T. R. has been signed by the mayor. The city gives the company a bonus of \$100,000.

WOODSTOCK, N. B.—A meeting of the directors of the Centreville Railway Co. was held here last week, at which were present: Geo. T. Baird, John Conner, F. P. Killeen, B. Mahone, Frank Lawlor and R. W. Conner. It is understood measures were agreed to with a view of pushing forward the work of construction.

ST. JOHNS, QUE.—The subway or discharge tunnel under the canal will likely be constructed next spring by the Dominion Government.—A committee has been formed here, with Mayor O' Cain as president, for the promoting of the scheme of building a canal between Montreal and St. Johns via Chambly.

WOODSTOCK, ONT.—The County Clerk states that in the next few years several new bridges will be built in Oxford county. The new council will take up the question of buying up the toll roads, which would necessitate the building of new bridges to replace those on the toll roads.—The Anderson Furniture Co. will build in the spring a mammoth saw mill to cut 60,000 feet of lumber per day.—R. Whitelaw is thinking of adding an electrical department to his engine business.

BROCKVILLE, ONT.—Quotations have been asked from local lumber dealers for supplying 500,000 feet of square timber to the International Bridge Co., which indicates that the proposed bridge will be proceeded with in the spring. It is 10 to 16 to 30 feet long, 12 inches square, and faced on both sides, and will be used for the caissons, which are to be sunk to

support the piers. The structure itself will be of steel.—A syndicate of local men propose to reclaim about 1,000 acres of marsh land near this town.

MONTREAL, QUE.—The Harbor Commissioners invite tenders until Tuesday, the 31st inst., for the supply of timber and planks required for next year. Address, Alex. Robertson, Secretary.—The Board of Governors of the Protestant Hospital for the Insane will ask permission from the Government to issue bonds for \$35,000 for the erection and equipping of more buildings, present ones being inadequate.—The Provincial Government will be required at no distant date, to either enlarge the present court house or erect a new building.

HAMILTON, ONT.—The sewerage committee has adopted the report of Mr. Kuickling, C. E., of Rochester, relative to the abatement of the east end trouble. The idea is to divert the sewage from Wentworth street, at a cost of \$25,000.—The City Engineer estimated that the cost of constructing a brick sewer from Wentworth street to the proposed site for a pumping station near the foot of Victoria avenue, with a three foot steel pipe into 30 feet of water, would cost \$51,000, and that the extension of the east end sewer by a steel pipe into deep water will cost the same amount.—Building permits have been granted as follows: R. Smith, two-story brick dwelling on Erie avenue, cost \$1,200; James Millman, two storey brick dwelling on Oak avenue, cost \$1,000.

QUEBEC, QUE.—A division has been made of St Roch parish, and a new church will be erected, the plans for which are said to be prepared.—E. Berliquet, architect, of this city, at the request of the Right Revd. Dr. McDonald, has prepared plans for a new Roman Catholic Cathedral, to be erected in Charlottetown, P.E. I., at a cost of between \$80,000 and \$100,000.—A deputation waited on the Provincial Gov't recently requesting that action be taken at once to extend the Quebec and Lake St. John railway to St. Alphonse. The Government promised consideration.—A company to build a cold storage warehouse here is being formed.—The provincial government has been asked to grant financial aid to complete the Montford railway.—D. Ouellet, architect, will call for tenders next week for the erection of a convent.

OTTAWA, ONT.—It is the intention of the Department of Railways and Canals to shortly call for tenders for the section of the Trent Valley Canal between Peterboro and Nassau.—Messrs. J. W. McKrae, Hector McKrae, Geo. P. Brophy, John Brophy, and S. H. Fleming have purchased a plumbago mine about eight miles from Calabogie, and will operate it next spring.—A movement is on foot here for the establishment of an institute for trained nurses in connection with the Roman Catholic hospital.—The following notices of applications to parliament for legislation next session have been given: by the Sault Ste. Marie and Hudson Bay Railway Co., for an extension of time; by the Ontario Peat Fuel Co., to operate a branch line of railway in Welland County; by the Kingston, Napanee and Western Railway Co., for an extension of time, to lease the line of the Bay of Quinte Railway & Navigation Co., and to build branch lines to the mineral districts; by the Thousand Islands Railway Co., for an extension of time and to run by electricity.—A free site has been offered to the Westinghouse Air Brake Co., of Pittsburg, to establish their proposed Canadian factory here.—At the January elections three by-laws will be voted on, one to establish a public library, another to grant \$40,000 for new exhibition buildings, and the third to grant \$45,000 for improvements to the fire protection, which includes the erection of a new station.—

The Building Committee of the Protestant Hospital Board have decided to call for competitive plans for the proposed addition to the hospital, not to exceed a cost of \$45,000. The addition will be built to the east end of the hospital, and will likely be fire proof.—The Dominion Government will again be requested to grant assistance towards the building of the Interprovincial bridge at Nepean Point. The city has granted \$150,000 and the Ontario Government \$50,000 towards the work.—M. Calderon, architect, desires tenders until the 31st inst., for the erection of a terrace of dwellings on Cooper street.

TORONTO, ONT.—The Northey Mfg. Co. are asking for tenders until noon today (Thursday) for the erection of two factory buildings. Plans may be seen at their factory, King street subway.—A committee of the City Council has been appointed to report on improvements to the Yonge street wharf.—The Court of Revision has confirmed petitions for a brick sidewalk on Queen street, south side, between John street and Spadina avenue, and a macadam roadway on Jarvis street, between King and Queen street.—The Council has given notice that an asphalt roadway will be constructed on first lane west of Yonge street, from Temperance street to Adelaide street, and on lane lying between Temperance and Adelaide streets, running westerly 313 feet. Estimated cost \$2,100.—A sufficiently signed petition for the construction of asphalt pavement on Berkeley street, between Gerrard and Carlton streets, has been received by the City Clerk. The petition for a new cedar block pavement on old foundation on Yorkville avenue still requires two signatures.

#### FIRES.

The premises of Williamson & Hilton, spice manufacturers, Winnipeg, Man., were recently damaged by fire to the extent of \$20,000.—The car factory of Patterson & Corbin, St. Catharines, Ont., was badly gutted by fire on the 20th inst. The loss is \$12,000, principally on machinery and car fittings.—David Price's hotel at Dunnville, Ont., together with store and dwellings adjoining, were burned on the 18th inst. Loss \$4,500.—The residence of John T. Rutledge, at Portage la Prairie, Man., has been destroyed by fire.—The railway station at Gracefield, Ont., has been burned.—The dwelling house of Wm. Forrest, at Eastwood, Ont., was destroyed by fire on the 19th inst. No insurance.—The vinegar works operated by S. Allen, at Norwich, Ont., were burned on Saturday last. Loss, \$30,000; insurance, \$10,000.—The fine residence of Dr. J. G. Yeman at Stratford, was completely consumed by fire on Monday last. Loss, \$6,000, mostly covered by insurance. Fire at Vancouver, B. C., on the 24th inst., gutted Cassidy's lumber and shingle mill and factory, Spicer's mill kiln and the British Columbia Cooperage Works. Loss \$56,000.

#### CONTRACTS AWARDED.

ST. STEPHEN, N. B.—The New Brunswick Red Granite Co. is supplying slabs for the city hall, at Philadelphia.

MITCHELL, ONT.—Geo. Woods of this place, has been given the contract for the new school house in school section No. 2.

TORONTO, ONT.—The Metallic Roofing Co. have supplied their embossed metallic ceiling for the Gendron Mfg. Co's factory throughout.

LEAMINGTON, ONT.—The tender of the Globe Furniture Co., of Walkerville, has been accepted by the School Board for school furniture.

ST. JOHN, N. B.—Thomas D. Adams will probably be awarded the contract for the construction of the Gulf Shore Rail-

way Co.'s line.—Whitman Brewer, of St. Mary's has been awarded the contract for building a bridge across Vaughan's Creek and for a breakwater.

OWEN SOUND, ONT.—The Owen Sound Portland Cement Co. have sold to Mr. Onderdonk, of Hamilton, 1,500 barrels of their Portland Cement.

FORT STEELE, B. C.—The contract for a tunnel on the Dibble group of mines, has been let to Scott, Brander and Dale. The length will be 200 feet.

KINGSTON, ONT.—The tender of the Canadian Locomotive and Engine Co. has been accepted for a new boiler for the waterworks plant. Contract price \$1,200.

BRANTFORD ONT.—The Waterous Engine Works Co. have been awarded a contract by the Peoples Heat and Light Co., of Halifax, for the construction of a coal elevator.

STRATFORD, ONT.—The contract for sewer pipes necessary for the extension of the sewerage system in this town has been awarded to the Hamilton and Toronto Sewer Pipe Co.

CHATHAM, ONT.—Park Bros., of this city, have been awarded the contract for pumps and machinery for the Dauphin drainage scheme in Tilbury. Operations will begin in the spring, and about 3000 acres of land will be reclaimed.

MONTREAL, ONT.—Tenders for the supply of 13,000 feet of hose have been awarded by the Fire Committee as follows: Canadian Rubber Company 5,000 feet Maple Leaf at 75c.; John Martin, Son & Co., 3,000 feet American Double Jacket at 92c.; A. W. Fleming, 3,000 feet Keystone; J. A. Ogilvie & Sons, Rob Roy Cable at 80c.; and B. J. Coghlin, Double X Multiple at 90c.

LONDON, ONT.—Contracts have been let as follows for works in connection with the new Bank of Toronto building: Brickwork and masonry, Ed. Martyn; carpenter work, Wm. Tytler. estimated cost, \$18,000.—W. Reath, of St. Thomas, has been awarded the contract by the Dominion Bridge Company, to construct the framework of the new iron bridges to be constructed on the L. & P. S. over Mill and Kettle Creek. The bridges will be almost 1,200 feet long.

#### SOME TECHNICAL TERMS.

Architrave.—That part of a column which lies immediately upon the capital, and is the lowest member of the entablature; the mouldings round doors and windows.

Archives.—A public building; the place where ancient records are kept.

Apex.—An angular point or tip, as the end of a spire on a church steeple.

Ashlar.—Free stones as they are brought from the quarry; the facing of square stones on the front of a building.

Asphalt.—A kind of bitumen used for cementing and giving firmness to stones, brickwork, etc., and for paving roads. It is found in a soft and liquid state on the surface of the Dead Sea.

Banker.—A stout bench used by bricklayers and stonemasons to prepare their bricks and stones for a building.

Bay.—A bulge, a recess in a wall, or window built out; is the same as bow.

Bead and Butt.—When the panels in joinery are beaded on the two sides only.

Bead and Flush.—When the panels are beaded all round.

Braces.—Pieces of timber used to brace or stay studding and principals.

Breastsummer.—A strong horizontal to support an upper wall.

Caisson.—A chest; a chest of timber floating between piles, and loaded with stones until it rests on the ground.

Camber.—Screwing up the center of a tiebeam so as to give the form of an arch for greater strength.

Cantilever.—A small beam transversely

fixed to support a structure, as stairs, etc.

Claircolle.—Preparing walls or ceilings for decoration by giving a coat of size.

CORBEL.—Stones or bricks, etc., projecting from a wall to carry a plate for roofs, floors, etc.

Cornice.—A moulded projection to make a finish to the top of a room; an ornament over a window.

Cul de Sac.—An alley blocked up at one end.

DERRICK.—Upright poles, etc, used as a crane for raising beams, stones, and other material into their places.

DOVETAIL.—A joint made by inserting one piece of timber into another in the form of an inverted wedge or a dove's tail.

Dado.—The decoration of the lower part of a room.

Embrasure.—The enlargement of the aperture of a door or window, or the inside of a wall, to give greater to the opening of the door or casement, or for admitting more light.

Entablature.—The whole of the parts of an order of architecture above a column, comprising the architrave, frieze and cornice.

Estrade.—A level place, or balcony.

Extrados.—The upper surface of an arch.

Fascia.—A broad list, fillet or band used in architraves and pedestals; the projection over a shop front.

Fillet.—In architecture, a small member of moulding (listel); a strip of wood fastened so as to carry any board, etc., mortar bedded in a corner.

Frieze.—That part between the architrave and cornice: an enrichment at the top of the wall in a room; the stone that carries a mantel.

Groined.—Divided, as a ceiling with semi-circle arches joining so that every two form a groin.

Ichnography.—A ground plan or horizontal section of a building.

Intrados.—The under surface of an arch; the soffit.

Jamb.—The upright timbers of door and sash frames; the side pieces of a mantelshelf.

Joist.—Stout pieces of timber laid from wall to wall to form the floor of a building.

King Post.—An upright post in the centre of the principal of a roof.

Lewis.—An iron instrument in three pieces fixed in stone, by which it is raised to where required.

Louvre.—An opening for the emission of smoke.

Mullion.—The divisions in Gothic windows.

Munton.—The vertical divisions in a door between the stiles.

Mortise.—An opening cut in a piece of wood in joinery to receive another piece called the tenon.

Principal Beam.—The cross piece of timber on which the principals of a roof are formed.

Principal Rafter.—The angle pieces of timber fixed on the tiebeam, and forming the principals of a roof.

Pilaster.—A column set in a wall or other work, or placed so as to appear so.

Plinth.—The base of a pedestal; the

lowest member of a column; anything shaped like a brick.

Priming.—In painting the first coat.

Pole Plate.—A wooden plate placed over the ends of principals as a formation for gutters, etc.; sometimes to carry common rafters, and is over the wall plate.

Purlin.—Those pieces of timber laid on the principal rafters to give support to the common rafters.

Quoin.—A stone placed in the corners of brick buildings to strengthen them.

Queen Posts.—Two upright posts placed half way from the centre of the principals of a roof.

Rails.—The cross pieces in framed joinery.

Rebate.—A groove sunk on the edge of any piece of joinery, as a door jamb.

Rectangular.—A figure the sides of which are all right angles.

Ridge.—The centre piece of timber at the top of a roof, on either side of which the tops of the rafters are fixed.

Rostrum.—A stage or platform for orations.

Scarf.—The joining and bolting of two pieces of timber transversely.

Soffit.—The under side of an overhanging erection, as under stairs, etc.

Stays.—Pieces of timber to make an erection more firm.

Stile.—The perpendicular pieces in joinery, as the two side pieces of a door.

EUREKA



MINERAL WOOL

SECTIONAL

## STEAM PIPE and BOILER COVERING

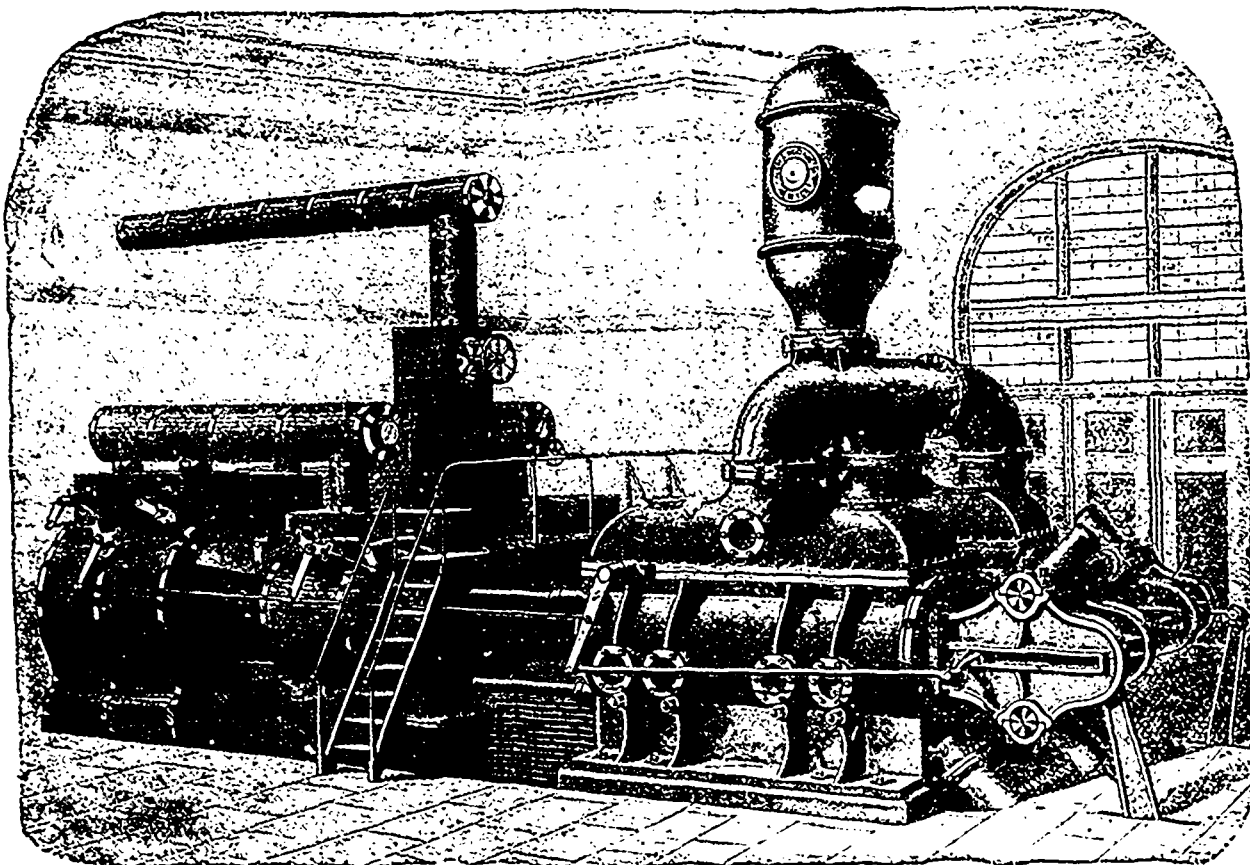
Gives Dry Steam at long distances without loss of power.

ASBESTOS GOODS & ENGINE PACKINGS

EUREKA MINERAL WOOL & ASBESTOS CO., - 124 Bay St., TORONTO

# JOHN McDOUGALL

• • Caledonian Iron Works • •



OFFICE:

Corner William and  
Seigneurs  
Streets,  
MONTREAL

HYDRAULIC  
MACHINERY

CONDENSERS

... AND ...

WATERWORKS  
SUPPLIES

WATER METERS

METERS

for all services

MANUFACTURERS  
OF

Machinery for Elec-  
trical Work, etc., etc.  
Boilers, Engines . . .  
Forgings, Girders,  
Castings, Shaftings,  
Pulleys, Gearings  
Bearings, etc. . . .

AGENTS IN CANADA FOR THE

# Famous Worthington Pumps

**MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS****BUILDING CONSTRUCTION UNDER DIFFICULTIES.**

The limited amount of street space accorded to contractors by the municipal authorities for buildings under construction has long been a serious embarrassment to contractors and a considerable impediment to rapid building construction, says the American Contractor. Not that the public should be called upon to give up any more space than at present; we were merely considering the matter from the contractor's standpoint.

The great loss in rents which is sustained by the owner during the period of construction is another serious matter which the enterprising contractor is called upon to overcome. There is almost always a stipulation in the building contract that the completed structure shall be turned over to the proprietor on a specified day, and for failure to complete the work on the day named, a daily forfeit is exacted, which is to reimburse the owner for loss of rent during the additional time required to complete the structure.

As an incentive to rapid work a bonus is frequently offered the contractor for every day saved from the allotted time allowed for the execution of the contract. This is as it should be. How some of our contractors manage to do such good work in such short time allotted is often a mystery.

It is a well-known fact that many wealthy owners of extremely valuable business property in our large cities refrain from replacing their out of date buildings with substantial modern structures simply because of the great financial sacrifice entailed by the loss of rents. Modern methods of rapid building construction are designed to overcome such embarrassments. The period involved in the construction of a building, especially if it be a large one, is one of the most important questions which enters into the whole problem of building construction. To erect a million dollar office building in eight months, which it formerly required sixteen months to build is frequently a saving in rents of \$30,000 to \$40,000.

The subject of night work on large buildings has received a great deal of attention of late. The constantly decreasing cost of electric light service, the ease with which such illumination can be adjusted to meet the requirements of artisans, the disposition of mechanics to work beyond hours where there is pecuniary inducement to do so, and the recent invention of perfected machinery whereby a vast amount of heavy manual labor is avoided, are considerations which are contributing to make nightwork on a certain class of business buildings most feasible.

We have watched with much amusement the serious matter-of-fact way in which certain union organizations in the building trades pass resolutions and frame cast-iron rules in condemnation of night work, and later have watched them utterly ignore these fine resolutions and by-laws where the contractor, pinched for

time and goaded by the impatient owner, offers his union men a bonus voluntarily for their services after hours.

The old adage reads: "Where there's a will there's a way." A newly coined phrase might read: "Where there's cash all things are possible," too much so sometimes. We are of opinion that during the coming season there will be considerable night work, and that work during all of the twenty-four hours will be a conspicuous feature where the exigencies of the occasion demand that the work be "rushed."

Non-inflammable paint can be made as follows:—To a gallon of a mixture of equal parts of lime-water and vinegar, one half pound of salts, one quarter-pound of alum, and one quarter pound of

**DEBENTURES PURCHASED**

Municipalities issuing debentures, no matter for what purpose, will find a ready purchaser by applying to **G. A. STIMSON, 9 Toronto Street, Toronto.** Any assistance required in computing calculations in connection with sinking fund, etc., will be gladly given. N.B.—Money to loan at lowest rates on first mortgage.

**Imperial Trusts Company of Canada**  
32 CHURCH STREET, TORONTO  
Capital, \$400,000.

The Company is ready at all times to purchase MUNICIPAL DEBENTURES, and has always such Securities on hand for sale. Allows 4% interest per annum on money, and takes charge of Sinking Funds on special terms. **J. S. LOCKIE, Manager.**

**The London and Canadian Loan and Agency Co., Ltd.**  
Capital, \$5,000,000.00.

MUNICIPAL DEBENTURES PURCHASED.  
MORTGAGES PURCHASED.  
MONEY TO LOAN AT CURRENT RATES.  
103 Bay St., Toronto. - **J. F. KIRK, Manager.**

white vitriol are added, each in the form of a powder. The mixture is then boiled. One gallon of linseed oil or drying oil of any other convenient sort is added and the boiling repeated. After the addition of one gallon of crude petroleum the mixture is once more heated to the boiling point and is then ready.

**DEBENTURES PURCHASED.**

WE will pay the highest price for MUNICIPAL DEBENTURES. We tender our services to those not having books to make for them the calculations necessary when issuing debentures payable in annual instalments. **EMILIUS JARVIS & CO.** (Member Toronto Stock Exchange), 23 King St. W., Toronto.

**EUREKA CONCRETE (**  
**) PAVING COMPANY**

FOR SIDEWALKS,  
STABLE FLOORS,  
CELLAR FLOORS,  
BREWERY FLOORS, ETC

**A. GARDNER & CO.**

17 Yonge St. Arcade - TORONTO  
Telephone 2147

**W. McNALLY & CO.**

Building and Contractors'  
Supplies . . . . .

**SEWER PIPES & PORTLAND CEMENTS**

PATENT WALL PLASTER—The hardest, quickest drying and cheapest material made.

Corner McGill and Wellington Streets, MONTREAL

**THE THREE RIVERS IRONWORKS CO.**  
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.

**Drummond McCall Pipe Foundry Company,**

MONTREAL

MANUFACTURERS OF

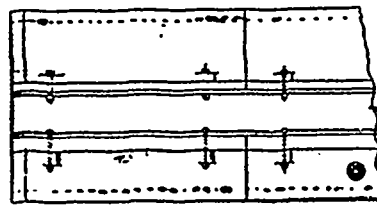
**CAST IRON WATER AND GAS PIPES**

WORKS: LACHINE, QUE.

PRICES ON APPLICATION.

**HERCULES INDESTRUCTIBLE CULVERT**

20 per cent. more water-way than circular form.



Unrivalled for Strength. Durability Cheapness.

Made in sizes of 20 in., 24 in., 30 in., 3 ft., 4 in. and 5 ft.

Write for prices to **EDWIN W. SMITH**  
344 Garth St., Hamilton, Ont.

**THE G. & J. BROWN MFG. CO.**

Railway and Contractors' Plant.

**BRIDGE BUILDERS**

BELLEVILLE, ONT.

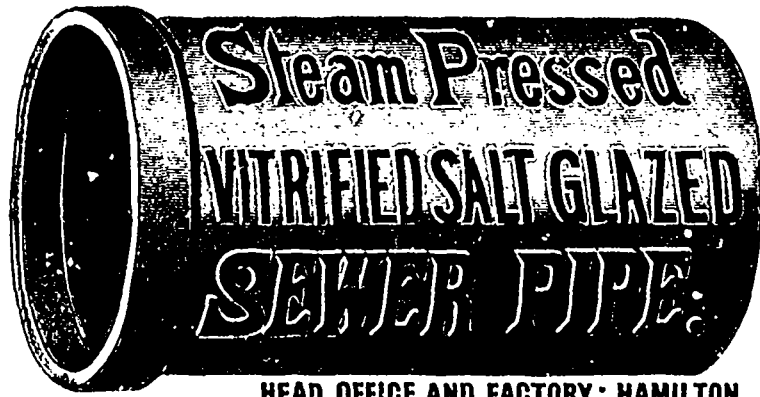
MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

**Paving Granite**

Granite Sets for Street Paving.  
CURBING cut to any shape ordered.  
Quarries, St. Philippe d'Argenteuil, P. Q.  
Address all communications to  
**JOS. BRUNET - COTE DES NEIGES, MONTREAL**

**MERRIFIELD & WESTCOTT . . .**  
ENGINEERS and CONTRACTORS  
— FOR —  
**WATER WORKS AND GAS PLANTS**  
269 Front Street East TORONTO.

**HAMILTON AND TORONTO SEWER PIPE CO.**



— FOR —  
**SEWERS,**  
CULVERTS.  
AND  
WATER PIPES.  
**INVERTS**  
Fire Brick Sewers,  
Write for Discounts.  
HEAD OFFICE AND FACTORY: HAMILTON, CANADA.

**LAW BROS. & Co.**

FOUNDERS AND MACHINISTS

OTTAWA, ONT.

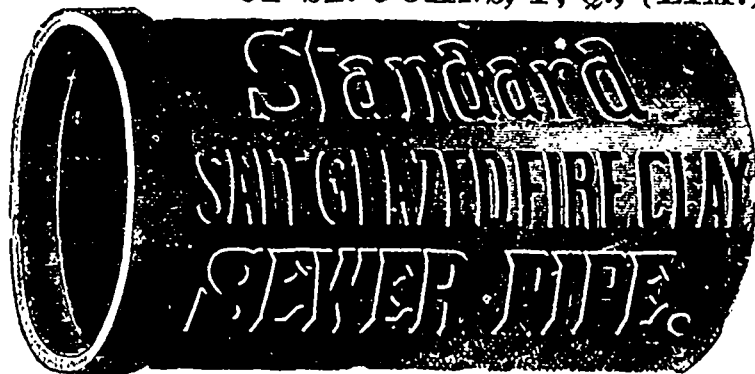


Hydrants  
Valves  
Waterworks Supplies  
Specials

Also CASTINGS of every description.

**THE STANDARD DRAIN PIPE CO.**

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



Manufacturers of  
Salt-Glazed  
Vitrified  
**SEWER  
PIPES**  
Double Strength  
Railway Cul-  
vert Pipes,  
Inverts, Vents,  
AND ALL KINDS OF FIRE CLAY GOODS.

**STEAM AND POWER**

FOR ALL DUTIES



**NORTHEY Co.**  
LTD.  
TORONTO, ONT.  
THE LAURIE ENGINE CO., MONTREAL  
Sole Agents for Province of Quebec.

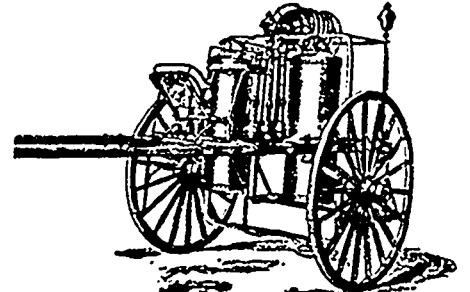
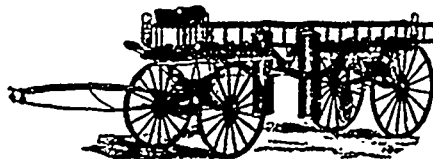
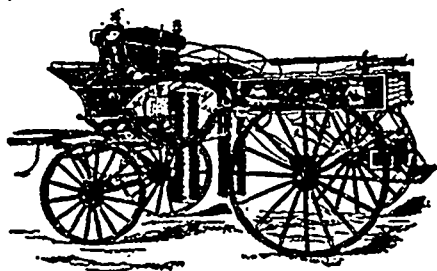
**Kingston Chemical Fire Engine Co.**

KINGSTON, ONT.

MANUFACTURERS OF THE

**WILSON  
PATENT**

**CHEMICAL FIRE ENGINE**



This machine is the most powerful fire fighter. It has two cylinders, 40 gallons capacity each. The combination of chemicals will not freeze, renders material with which it comes in contact non-inflammable, and will not corrode when not in use. For full particulars, write to the Head Office of the Company at Kingston.

D. D. WILSON, Managing Salesman.

JOHN BREDEN, Sec.-Treas., KINGSTON, ONT

For reference address H. YOULDEN, Chief Fire Department, Kingston.

# MUNICIPAL DEPARTMENT

## LEGAL DECISIONS AFFECTING MUNICIPALITIES.

**LEWIS V. CITY OF LONDON.**—Judgment by Judge McMahon, in the Court of Common Pleas at Toronto in action tried without a jury at London. Action to recover against the corporation of the city of London the damages which the plaintiffs sought but failed to recover against the defendants in *Lewis v. Alexander*, 21 A.R., 613, and 24 S.C.R., 551. Judgment for plaintiffs for an injunction restraining defendants from permitting filth and refuse from water-closets or other noxious or foul matter from being carried on to the premises of the plaintiffs, and declaring plaintiffs right to damages, with a reference to the local Master at London to assess the same, and with costs of action and reference. Injunction suspended for five months to enable defendants to abate the nuisance, with liberty to apply to extend the time.

**Stafford vs. The City of Montreal.**—Plaintiff is proprietor of a lot of land and premises on Sebastopol street, Point St. Charles, in the City of Montreal, under deed of 24th November, 1886. He owned the land and premises in the year 1890, when the defendants, for the public benefit, authorized the Grand Trunk Railway Company of Canada, to construct a permanent subway at a place commonly known as "The Crossing," on Wellington street, where Sebastopol street connected directly with Wellington. The construction of the subway changed the level of Wellington street, and cut off direct communication with Sebastopol. Instead of direct communication, a small passage from twelve to fourteen feet wide was made leading from Sebastopol street to Congregation street, and thence through the subway to Wellington. Plaintiff claims that, being thus deprived of his full access to Wellington street, his property has been damaged and decreased in value for all time, and he claims five hundred dollars indemnity. Defendants plead a general denegation in fact and in law. This case is almost identical with that of *Drummond vs. Mayor, Aldermen and citizens of Montreal*, decided by the Privy Council in England and reported in the 22nd vol., L. C. Jurist. In that judgement, their Lordships state:—"It certainly then appears that, in France, the depreciation caused to a house by stopping one end of a street, supposing it to remain open at the other, is not regarded as an interference with a servitude, nor (standing alone) such direct and immediate damage as will give a title to indemnity, and, if this be so, there seems to be no reason or authority for declaring the law to be otherwise in Canada." *Demolombe, Traité des Servitudes*, at No. 699 B., deals directly with such a

case as the present one, and specifically states that the public authorities may make, without indemnity, such alteration for general utility, Pages 205: "Comme si, par exemple, l'administration dominait la largun de le place ou de la rue. Ou meme si elle fermait la rue par l'un de ses tous, de manion a en faire une impasse." In this case, the defendants did not go so far as to make an impasse; they left a narrow passage. Plaintiff, although his access has been diminished, has, within a short distance of his property, Farard street, through which to communicate with Congregation street, and thence to Wellington. The authorities on the French law, hold that, in such a case, the droit d'accès is not materially interfered with. Then, it must have been evident, from the nature of the place, even in 1886, date of plaintiff's purchase, that at some future time, a subway or other means of avoiding the railway crossings would have to be made for the protection of the public at the Point, when the construction complained of had been erected, and though it cannot be contended that such a subway was unforeseen at the date of plaintiff's purchase, under these circumstances plaintiff's action is dismissed.

### SLATE DEBRIS FOR PAVEMENTS.

Why should not the slate debris brick be tried for street pavements? asks the British Clayworker. We are aware that several attempts have been made to utilize slate debris, but we do not know of any concern that may be said to be making slate bricks for the market with a large amount of success. And yet the difficulties in the matter of machinery have been overcome, and in one recent case of failure at least, there was no difficulty as to capital.

Talking the other day to a well-known firm who have made a life-long study of the tests of various materials, we were informed that, in the course of certain trials, it was found that a brick made of slate debris was one of the strongest and hardest materials they had ever tested. So strong, in fact, was it that the machine used was not of sufficient power to crush it whole, and it became necessary to cut the brick in two, and use the whole strength of the machine upon the half brick. Even then they only succeeded in crushing it when the maximum power of the machine was employed.

### THE INVESTIGATION OF PUBLIC WATER SUPPLIES.\*

BY FLOYD DAVIS.

One of the most important factors in the prolongation of life and preservation of health in any community is a pure and wholesome water supply. The necessity of measures which enable municipal authorities to secure such water, in quantities to meet all demands, is now fully recognized by every intelligent citizen, who also knows that pure sources of supply can generally be determined only by a thorough and careful investigation. As the population of our country increases,

the sources of contamination likewise multiply; so year after year it becomes more difficult to secure an adequate supply of water for cities and towns that shall be entirely free from dangerous impurity. In mountainous regions, where the conditions for self-purification are most favorable, we generally find the purest waters; in great abundance; yet in the Mississippi valley, where the streams are generally sluggish and frequently heavily laden with organic impurity, and in the eastern States, where the rivers are sewer-polluted, the problem of securing pure water is difficult, and it is sometimes almost impossible with limited means to furnish a supply that is beyond dispute in its quality.

Many of our cities and towns lie adjacent to public water courses, from which the water, polluted or otherwise, is pumped through mains, without proper purification, to be drunk by the people. Under such a disregard for sanitary considerations it is not strange that we are still maintaining in some parts of the country a typhoid fever rate higher than that prevailing in any other civilized country. Our typhoid death rate is too frequently many-fold what it is in some European cities, like London and Berlin, which have expended millions of dollars to secure for their citizens a pure and wholesome supply of filtered water.

The ideal water for manufacturing and domestic purposes is distilled, and the amount of impurities, both inorganic and organic, found in natural water is, therefore, a measure of its purity. It is rare that the mineral constituents have any marked effect on the quality of a water for drinking, since the poisonous compounds of barium, iron, zinc, copper, lead, and arsenic, which may exist in it, are not often found in sources that are available for the supply of cities and towns; and in the sanitary investigations of a water supply we do not usually look for these substances. But the mineral constituents have a bearing upon the use of a water for boiler and manufacturing purposes. Its suitability for the generation of steam is determined mainly by the amount of lime, magnesia, and mineral acids which it may contain, since these bases incrust the boiler and the acids corrode it. Magnesium chlorid is especially objectionable. The mineral salts also characterize a water for manufacturing purposes, since a hard water containing much iron is unsuited for the manufacture of starch; a water having much magnesium in it is not desirable in the manufacture of beer; while water for distilleries should be as pure as possible.

These are considerations of importance only for particular purposes, but every public water supply must be used domestically by large numbers of people, and the substances which vitiate it for such purpose are of greatest importance in its sanitary investigation. They are organic, both vegetable and animal, and exist in different proportions in all natural waters that have any communication with the surface of the soil. The manner in which they gain access to water, and their relations to health and disease, have been discussed in a former number of this magazine.\* Suffice it, therefore, to say here that decaying animal matter is indirectly far more dangerous than decaying vegetation, for it is from animal sources that the infectious bacteria, now considered the real agents of disease, are mainly derived. Upon the danger from these various impurities is based our classification of water supplies.

(To be Continued.)

\* From Engineering Magazine.

**CENTRAL BRIDGE AND  
ENGINEERING COMPANY,  
(LIMITED)**

Peterborough, Ont.

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.

G. N. REYNOLDS, Toronto Agency, North of  
Scotland Chambers, 20 King St. W. Telephone 111.

**Water Works**

**Fire Hydrants**

**Stop Valves**

3" to 36"

BOILERS, TOWERS &C., ENGINES AND GENERAL WORK

**JNO. PERKINS CO'Y**

Toronto Engine Works . . . . . TORONTO

**DRAIN PIPES**

**CEMENT**

**FIRE BRICKS**

AND ALL KINDS OF

**Builders' Supplies**

**F. HYDE & CO.**

31 Wellington Street, - MONTREAL.

**INDEX TO ADVERTISEMENTS**

In the "Canadian Architect and Builder."

<b>Architects.</b>	<b>Cements.</b>	<b>Heating.</b>	<b>Roofers</b>
Ontario Directory . . . . . 111	Bremner, Alex. . . . . IV	Gurney Foundry Co. . . . . iv	Ormsby & Co., A B. . . . . I
Quebec Directory . . . . . ii	Currie & Co., W & F.P. . . . . x	King & Son, Warden. . . . . 111	Douglas Bros. . . . . iv
<b>Architectural Sculptors and Carvers.</b>	Maguire Br. s. . . . . i	Ormsby & Co., A. B. . . . . I	Dunn & Sons, G. . . . . iv
Hollbrook & Mollington. . . . . i	Owen Sound Portland Cement Co. . . . . v	Toronto Radiator Mfg Co. . . . . . . . . . iii	Hutton, W. D. . . . . iv
Lamar & Meigs. . . . . ii	Rathbun Co., The. . . . . II	<b>Lime.</b>	Rennie & Son, R. . . . . iv
<b>Architectural Iron Work.</b>	<b>Cut Stone Contractors.</b>	Currie & Co, W & F.P. . . . . x	Stewart, W. T. . . . . iv
Dominion Bridge Co. . . . . I	Isaac Bros. . . . . 111	Ontario Lime Association. . . . . 111	Tucker & Dillon. . . . . iv
Chanteloup Mfg. Co. . . . . I	Oakley & Holmes. . . . . 111	<b>Legal.</b>	Williams & Co., H. . . . . iv
<b>Art Woodwork</b>	<b>Drawing Tables.</b>	Denton & Dods. . . . . 111	<b>Sanitary Appliances</b>
Southampton Mfg. Co. . . . . iv	Laughlin-Hough Drawing Table Co. . . . . II	<b>Machinery</b>	Toronto Steel Clad Bath & Metal Co. . . . . vii
<b>Bricks (Pressed)</b>	<b>Drain Pipe</b>	Petrie, H. W. . . . . . . . . . ii	<b>Shingle Stains</b>
Beamsville Pressed Brick Co. . . . . . . . . . i	Bremner, Alex. . . . . IV	<b>Mortar Colors and Shingle Stains.</b>	Cabot, Samuel. . . . . IV
Burlington Pres'd Brick & Terra Cotta Co. . . . . vi	Currie & Co., W & F.P. . . . . x	Cabot Samuel, . . . . . IV	<b>Stained and Decorative Glass</b>
Port Credit Pressed Brick & Terra Cotta Co., Limited. . . . . x	Hamilton and Toronto Sewer Pipe Co. . . . . II	Maguire Bros. . . . . . . . . .	Castle & Son. . . . . v
<b>Builders' Supplies.</b>	Maguire Bros. . . . . . . . . . i	Muirhead, Andrew. . . . .	Dominion Glass Co. . . . . v
Bremner, Alex. . . . . IV	<b>Dumb Watters</b>	<b>Ornamental Plasterers.</b>	Elliott & Son. . . . . v
Currie & Co., W & F.P. . . . . x	King & Son, Warden 111	Baker, J. D. . . . . . . . . . vi	Hobbs Mfg. Co. . . . . v
Clatworthy, Geo. . . . . vii	<b>Elevators</b>	Hynes, W J. . . . . . . . . . viii	Horwood & Sons, H. . . . . v
Maguire Bros. . . . . . . . . . i	Fensom, John. . . . . IV	<b>Paints &amp; Varnishes.</b>	McCausland & Son. . . . . v
Ontario Lime Association. . . . . 111	Leitch & Turnbull. . . . . I	Muirhead, Andrew. . . . . i	McKenzie's Stained Glass Works. . . . . v
Rice Lewis & Son. . . . . IV	Miller Bros & Toms. . . . . vi	<b>Painters.</b>	Longhurst, H. . . . . v
<b>Building Stone Dealers.</b>	<b>Electric &amp; Gas Fixtures.</b>	Gilmor & Casey. . . . . 111	Ly, N. T. . . . . . . . . . v
Clark, Wm. . . . . . . . . . viii	Keith & Fitzsimmons . . . . . v	<b>Plasterers</b>	<b>Shingles and Sliding</b>
Fish, C. E. . . . . . . . . . viii	<b>Engravers.</b>	Hynes, W. J. . . . . . . . . . viii	Metallic Roofing Co. . . . . viii
Turner & Brown. . . . . IV	Can. Photo-Eng Bureau. . . . . x	<b>Plate Glass</b>	Pedlar Roofing Co. . . . . vii
<b>Boiler Covering</b>	<b>Fire Brick and Clay</b>	McCausland & Son. . . . . v	Ormsby & Co., A B. . . . . I
Mica Boiler Cov. Co. . . . . vii	Bremner, Alex. . . . . IV	Sanderson, Percy & Co. . . . . . . . . . vi	<b>Terra Cotta</b>
<b>Builders' Hardware.</b>	Currie & Co, W & F.P. . . . . x	The Consolidated Plate Glass Co. . . . . . . . . . ii	Rathbun Co., The. . . . . II
Rice Lewis & Son. . . . . IV	Maguire Bros. . . . . . . . . . i	<b>Parquetry Floors</b>	<b>Wall Paper and Ceiling Decorations</b>
<b>Creosote Stains</b>	<b>Floor Deafener</b>	Elliott, W H. . . . . . . . . . vi	Elliott, W. H. . . . . . . . . . vi
Cabot, Samuel. . . . . . . . . . IV	Lazier & Sons, S. A. . . . . ii	<b>Plumbers</b>	Ormsby & Co., A B. . . . . I
<b>Church and School Furniture.</b>	<b>Galvanized Iron Workers.</b>	Ballantyne, James. . . . . ii	<b>Wall Plaster</b>
Can. Office & School Furniture Co. . . . . v	Tucker & Dillon. . . . . iv	Dourville, E. . . . . . . . . . ii	Alabastine Co., The. . . . . iv
Snider, J. B. . . . . . . . . . v	Douglas Bros. . . . . . . . . . iv	<b>Roofing Materials</b>	Albert Mfg. Co. . . . . ix
<b>Contractors' Plant and Machinery</b>	Ormsby & Co., A. B. . . . . I	Ormsby & Co., A B. . . . . I	Hannafor Bros. Mfg. Co. . . . . . . . . . ix
Rice Lewis & Son. . . . . IV	<b>Grates and Tiles.</b>	Metallic Roofing Co. . . . . viii	Nowell & Co, B. L. . . . . IV
<b>Chimney Topping.</b>	Holbrook & Mollington . . . . . i	Pedlar Roofing Co. . . . . vii	Rathbun Co., The. . . . . II
Bremner, Alex. . . . . IV	Rice Lewis & Son. . . . . IV	<b>Reflectors</b>	<b>Window Blinds</b>
Currie & Co., W & F.P. . . . . x	<b>Granite</b>	Frink, I. P. . . . . . . . . . viii	Clatworthy, Geo . . . . . viii
	Brunet, Jos. . . . . . . . . . ii		Seaman, Kent & Co. . . . . v

**WILLIS CHIPMAN, B. A. Sc.,**

M. Can. Soc. C. E.; M. Am. Soc. C. E.;  
M. Am. W. W. Ass'n.

**CIVIL AND SANITARY ENGINEER**

Water Works - Sewerage  
Sewage Disposal  
103 BAY STREET - TORONTO.

**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.

**JOHN GALT, C.E. & M.E.**

(Member Can. Soc. C. E.)

**Consulting Engineer and Expert**

Specialties:  
Water Supply and Sewerage, etc.  
Electric Power, Lighting, Railways, etc.  
Offices:  
Canada Life Building - TORONTO

**ALAN MACDOUGALL**

M. CAN. SOC. C. E. M. INST. C. E.

**CIVIL AND SANITARY ENGINEER**

ABERDEEN CHAMBERS,  
35 East Adelaide St. - TORONTO  
New Telephone Number, 1252.

**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.

**E. GARL BREITHAUPT**  
CONSULTING

**Electrical Engineer**

ASSOC. MEM. AM. INST. E. E.  
Electric Lighting and Railway Work  
BERLIN, ONT.

FOR ARTIFICIAL STONE PAVEMENTS, ROOFING GRAVEL,  
CONCRETE, ETC.

**USE CRUSHED QUARTZITE**

**SILICA SAND & GRAVEL CO.**  
MONTREAL

Telephone 2444

15 Mill Street.

..... Write for prices delivered in your town. ....

Municipal Officers, Contractors and others are requested to mention the CONTRACT RECORD  
when corresponding with advertisers.

**ARTIFICIAL  
STONE  
PAVEMENTS.**



**SIDEWALKS  
A  
SPECIALTY.**



**CORPORATIONS**

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

**THE SILICA BARYTIC STONE COMPANY OF ONTARIO, LTD.**

**Head Office: Ingersoll, Ont.**

WALTER MILLS, General Manager



Prices of Building Materials.

CONDITION OF THE MARKET.

TORONTO: The holiday season is having its effect upon the market, which has assumed a degree of quietude. The outlook for spring is not the brightest, although hopes are entertained of an improvement in the early part of next year. Plumbers' supplies, lead pipe, galvanized iron and cement are moving steadily at unchanged quotations. Paints and oils are quiet.

MONTREAL: The iron and metal trade continues firm in tone, but few sales are reported. The cement market is quiet, but the recent advance in price has been maintained. The stock on hand is estimated at 20,000 barrels, more than half being Belgian, which will probably be exhausted before the spring. Paints, as in Toronto, are quiet.

LUMBER.

CAR OR CARGO LOTS.

Toronto. Montreal

Table listing lumber prices for various types of wood, including clear picks, dressings, and shingles, with prices for Toronto and Montreal.

VAID QUOTATIONS.

Table listing various building materials and their prices, including mill cull boards, shipping cull boards, and different sizes of scantling.

B. M.

Table listing lumber prices for dressed and undressed wood, including floorings, cherry, white ash, and black ash.

BRICK—M

Table listing prices for different types of bricks, including common walling, good facing, and pressed bricks.

Toronto. Montreal.

Table listing prices for roof tiles, hip tiles, ridge tiles, and various types of red and Roman bricks.

SAND.

Table listing the price for sand per load of 1 1/2 cubic yards.

STONE.

Table listing prices for various types of stone, including common rubble, large flat rubble, foundation blocks, and granite.

OHIO FREESTONE, FROM THE GRAFTON STONE CO.'S QUARRIES.

Table listing prices for Ohio freestone in various dimensions and finishes, including buff promiscuous and blue promiscuous.

SLATE.

Table listing prices for roofing slate in different colors and finishes, including red, purple, and unglazing green.

PAINTS. (In oil, @ lb.

Table listing prices for various types of paint, including white lead, red lead, and yellow ochre.

CEMENT, LIME, etc.

Table listing prices for different types of cement, including German, London, and Newcastle.

Toronto. Montreal.

Table listing prices for Portland cements and hydraulic cements, including Belgian, Canadian, Roman, and Parian.

HARDWARE.

Table listing prices for cut nails and steel nails in various sizes.

CUT NAILS, FENCE AND CUT SPIKES.

Table listing prices for cut nails and spikes in various sizes and finishes, including hot cut and cold cut.

FINE BLUED NAILS.

Table listing prices for fine blued nails in various sizes.

CASING AND BOX, FLOORING, SHOOK AND TOBACCO BOX NAILS.

Table listing prices for casing and box nails in various sizes and finishes.

FINISHING NAILS.

Table listing prices for finishing nails in various sizes and finishes.

SLATING NAILS.

Table listing prices for slating nails in various sizes and finishes.

COMMON BARREL NAILS.

Table listing prices for common barrel nails in various sizes and finishes.

CLINCH NAILS.

Table listing prices for clinch nails in various sizes and finishes.

SHARP AND FLAT PRESSED NAILS.

Table listing prices for sharp and flat pressed nails in various sizes and finishes.

STEEL WIRE NAILS.

Table listing prices for steel wire nails, with a discount from a printed list.

Iron Pipe:

Table listing prices for iron pipe in various diameters and lengths.

Toronto, 65 per cent. discount. Montreal, 60 to 65 per cent. discount.

Lead Pipe:

Table listing prices for lead pipe in various diameters and lengths.

Galvanized Iron:

Table listing prices for galvanized iron in various gauges and finishes.

Structural Iron:

Table listing prices for structural iron, including steel beams, channels, angles, tees, and plates.