

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

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

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

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

Cover title missing/
Le titre de couverture manque

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

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

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

Showthrough/
Transparence

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

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

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

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

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

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.

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

Additional comments:/
Commentaires supplémentaires:

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

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

CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF CONTRACTING

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.

MARCH 21, 1895

No. 7.

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 CONTRACTOR'S 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.



SMOKE-CONSUMING

Down Draught Furnaces

Notice is hereby given that tenders addressed to the undersigned and marked "Tenders, Down-Draught Furnaces," will be received by registered post only, up to the hour of eleven o'clock a. m. on MONDAY, 25TH MARCH INST., for the work of converting the furnaces now in use at the new engine-house of the Water Works Pumping Station on the Esplanade, to down-draught smoke-consuming furnaces. Among other guarantees which competitors will have to give will be the following:

"That the furnaces will consume ninety-five per cent. of the smoke when burning any grade or quality of soft coal, and that the economy effected must be at least thirty-five per cent. over the present method of making steam."

All further information may be obtained and the specifications may be seen at the office of the City Engineer, City Hall, Toronto.

Tenders must be made upon the proper form issued by the City Engineer, and must bear the signatures of two good and sufficient sureties. A deposit (cash or marked cheque) equal to the sum of two and one-half per cent. of the amount of the tender must accompany each tender.

The lowest or any tender not necessarily accepted.

DANIEL LAMB;

Chairman of Committee on Works
City Hall, Toronto, 21st March, 1895.

DRAW LIME KILN FOR SALE

With fine white limestone quarry; shipping facilities unsurpassed. Address Drawer 37, Warton, Ont.

TO CONTRACTORS

Tenders for the construction of a Dam and Flume on the River Moira, on the property owned by the Belleville Gas Company, in the Township of Thurlow, adjoining the City of Belleville, according to plans to be seen at my office, Bridge Street, Belleville, will be received up to noon of SATURDAY, MARCH 30TH. The lowest or any tender not necessarily accepted.

J. LYONS BIGGAR,
Secretary Belleville Gas Co.

TENDERS

Sealed tenders, marked "Tender for School," will be received until April 2nd next, at noon, for the several works required in the erection of a large

BRICK SCHOOL HOUSE

in the Village of Norwich. The mason and carpenter work may be tendered for together or separately. Plans and specifications can be seen at my office. The lowest or any tender not necessarily accepted.

H. S. MOORE,
Secretary Public School Board.
Norwich, Ont., March 11th, 1895.

PROPOSALS

FOR

WATER WORKS

Sealed Proposals will be received by the undersigned until 3 o'clock p. m. on Monday, the 15th day of April, prox. for the construction of a Water System for the Town of Westville, Nova Scotia, including:

- Pumping Station and Draught Stack of brick.
- Boilers, Engines, Pumps, &c.
- 7½ miles of 10in., 8in., 6in., and 4in. pipe line.
- Infiltration Works.
- Reservoir of 1,500,000 gallons capacity, and other usual appurtenances of a town water service.

Plans and detailed specifications may be seen at the town office in Westville, N. S.

Proposals will be received for the whole work or any part thereof, or for the supply of any or all materials. The right is reserved to reject any or all proposals.

GEO. E. MUNRO,
Mayor.

Westville, N. S., 12th March, 1895.

BUSINESS NOTES.

Samuel Hunter, of the firm of Hunter Bros., builders, Vancouver, B. C., is dead.

Auclair & Trudel, painters, Quebec, Que., have dissolved.

Moise Rodrigue and John Henry have been registered proprietors of Rodrigue & Henry, plumbers, St. Henri, Que.

F. Decary and Francis Beaudoin have formed a partnership in Montreal as plasterers, under the style of F. Decary & Fils.

H. Williams and C. B. Jameson, who comprised the firm of H. Williams & Co., roofers, Toronto, have dissolved partnership.

CONTRACTS OPEN.

FAIRVILLE, N. B.—W. F. Barnhill will erect a new residence.

PETROLEA, ONT.—A new central school will be erected this summer.

GALT, ONT.—Hugh Cant proposes to erect a \$13,000 dwelling this spring.

STONE POINT, ONT.—Rev. Father St. Cyr is preparing to build a new parsonage.

BLENHEIM, ONT.—The Presbyterian congregation will erect a new church, to cost \$7,000.

PRINCE ALBERT, N. W. T.—The Hudson's Bay Company will rebuild their flouring mill.

ST. THOMAS, ONT. The council is considering the question of putting in an electric fire alarm system.

ST. JOHN, N. B.—A new school building will be erected on Erin street, for which plans have been prepared.

FORT WILLIAM, ONT.—E. J. Rochon is making arrangements to proceed with the erection of his proposed hotel.

MASSIE, ONT.—Tenders are invited by J. N. Perdue, Secretary, until the 26th inst., for the erection of a brick church here.

BARRIE, ONT.—W. H. Croker, architect, of this town is preparing plans for enlarging the Dominion hotel at Bracebridge.

DERWENI, ONI.—G. Barton, of this place, will receive tenders until the 29th inst. for the rebuilding of Gladstone Baptist church.

NELSON, B. C.—Several lots have been purchased within the past few weeks by business men who intend erecting buildings thereon.

VICTORIA, B. C.—F. M. Rattenbury, architect, has prepared plans for a club house for the Victoria Canoe Club. Tenders will be invited at once.

OTAWA EAST, ONT.—A by-law to raise funds for a new town hall has been carried by the ratepayers, and work will be commenced without delay.

WINNIPEG, MAN.—It is reported that the Clarendon hotel is to be converted into a combined theatre and hotel, and plans are now being prepared.

WESTVILLE, N. S.—Tenders are invited by the corporation until the 10th of April for the purchase of \$60,000 of waterworks debentures. Address Alex. W. Bean, Town Clerk.

DESERONTO, ONI.—Godfrey Colp is preparing to erect a three story block on St. George street.—Messrs. Oliver intend rebuilding their block, corner Main and George streets.

OWEN SOUND, ONT. John McDonald, Garryowen, P. O., will receive tenders until the 1st of April for repairing and kalsomining certain rooms in the court house in this town.

BROCKVILLE, ONT.—At a recent meeting of the Amateur Athletic Association

it was decided to proceed at once with the erection of a club house. About \$2,000 is already on hand for the purpose.

DIGBY, N. S.—A. V. Wade, Town Clerk, invites tenders until the 26th inst. for the purchase of \$35,000 of debentures, issued for the purpose of providing a system of waterworks for the town.

HALIFAX, N. S.—The Provincial Legislature has passed the item in the estimates of \$50,000 for the Museum and Art Design building, and \$10,000 for the new Deaf and Dumb Institute building.

AMHERST, N. S.—Tenders are invited by W. F. Donkin, Town Clerk, until the 25th inst. for the purchase of \$25,000 of debentures, \$10,000 for water, \$3,000 for school and \$2,000 for fire purposes.

PORT HOPE, ONT.—The Building Committee appointed to obtain competitive plans for rebuilding Trinity College school consists of Prof. Jones, J. R. Cartwright, Mr. Worrell, and the Head Master of the school.

WINDSOR, ONT.—Mr. McLean, architect, is preparing plans for a pressed brick residence, two stories, basement and attic, for Dr. Soper, to cost \$18,000 also for John Curry's new office building, which will be 85 x 100 feet in size and will cost \$50,000.

QUEBEC, QUE.—The corporation invites tenders, addressed to W. D. Bailairgé, Asst. City Inspector, until Wednesday, the 27th inst., for the annual supplies required for the fiscal year commencing May 1st next. The supplies include nails, stone paving and kerbing, grey broken stone, stone for retaining walls, deals, scannings, gulley wells and catch basins.

CANNING, N. S.—Tenders for the construction of a line of dyke extending from Kingsport along the Habitant river for a distance of two miles are invited until the 30th inst. The work is to be completed before the 10th of September next. Plans may be seen on application to W. R. Butler, C. E., Windsor or to F. W. Borden, of this place, to whom tenders are to be sent.

VANCOUVER, B. C.—Building operations in this city for the present year promise to be somewhat brisk, and real estate dealers report the sale of several properties on which new buildings will be erected. Among the dealers who report sales of property for building purposes are J. J. Banfield, B. B. Johnston & Co., T. Matthews, C. S. Douglas & Co. and Powis & Whitehead.

PERTH, ONT.—The Town Council are now considering and getting out plans for the purpose of establishing an arc and incandescent system of electric lighting, and are also discussing the advisability of establishing a system of waterworks in connection therewith. The Council are in some doubt as to whether it would be more profitable to establish waterworks as a municipal work, or to lease the franchise to a company for a number of years.

PORTAGE LA PRAIRIE, MAN.—The Town Council have decided on a scheme to turn the water of the Assiniboine river into the slough which is close to the town and thus create a water course three and a half miles long and 800 yards wide, to be used for boating, etc., and also to improve the sanitation of the town. A new bridge across to the island is also embraced in the project, the cost of which will be \$30,000. A dam will be built across one end of the sluice.

OTTAWA, ONT.—The Ottawa Porcelain and Carbon Company are preparing to erect their proposed building, which will cost about \$20,000.—The Fire and Light Committee have decided to ask the City Council to issue debentures amounting to \$45,000 for the purpose of providing improved fire protection, including two new stations, chemical engines, etc.—Competitive plans for the erection of a

new school building in this city are invited by the Public School Board until noon on Tuesday, April 2nd. Particulars may be obtained from the Secretary, Wm. Rea. Improvements will be made to the Home for the Aged, for which plans are now being prepared.

LONDON, ONT.—Geo. Craddock, architect, invites tenders until the 25th inst. for the erection of additions and alterations to P. S. Perrin & Co.'s warehouse on Dundas street.—The City Council will ask the Legislature for power to issue debentures to replace the wooden bridges on the Port Stanley railroad with iron structures.—Tenders are invited by Moore & Henry, architects, until to-morrow (Friday) at noon for the erection of a general operating room at the City Hospital.—The Building Committee of the Queen's avenue Methodist church has accepted the plans of Mr. Edmund Burke, architect, of Toronto, for the reconstruction of their church building. The building will be 81 x 182 feet, with a main tower 136 feet high, and a second tower 80 feet high. The seating capacity will be 1,650. The Sunday school room will be semicircular, 67 feet in depth. The cost will be about \$65,000.

HAMILTON, ONT.—At a meeting of the Gaol and Court House Committee held last week, it was decided to recommend the Council to erect a gaol building. The cost will probably be about \$50,000.—The Board of Education have again taken up the question of erecting a new Collegiate Institute, and at a recent meeting a motion was carried that steps be taken at once to raise the necessary funds for the purpose. The Board will probably sell some of its property to obtain the amount required.—The question of establishing an electric light plant, to be controlled by the city will be considered at the next meeting of the Board of Works.—The sum of \$7,000 will be required for a permanent pavement on Market Square, and the Finance Committee will probably be asked to provide the funds.—Building permits have been granted as follows: James Dufton, two two-story brick dwellings on Murray street, cost \$2,500; C. Clohery, brick dwelling on Grant avenue, cost \$4,000; James Nehain, brick cottage on Young street, cost \$1,000.

MONTREAL, QUE.—Preparations are being made to commence construction on the continuation of the Baie des Chaleurs railway.—Several changes are to be made in the plans of the new office building of the Montreal street railway at the corner of Craig street and Place d'Armes Hill. Mr. Bruce Price, of New York, and Mr. Hammond, of Cleveland, are the joint architects. The interior of the structure will be entirely remodelled. There will be an almost complete new steel structure inside and the building will be made as fireproof as possible. The stairways and the position of the lift will be altered. Work will be commenced as soon as the weather permits.—The Catholic School Commissioners will proceed at once with the erection of a girl's school in the parish of St. Louis.—The Council of the municipality of St. Laurent have granted a thirty years franchise to the Montreal Park and Island Railway Co. for the operation of an electric railway and lighting system.—Edward Maxwell, architect, has prepared plans for a new block to be erected by J. R. Tooke, at the corner of Peel and St. Catharine streets. The building will be three stories and basement, 51 x 103 feet in size and 55 feet high, built of dressed sandstone of a light buff color. The first two floors will be fitted up for offices. Work will be commenced about the 1st of May.

TORONTO, ONT.—The Property Committee are advertising for offers for a site on which to erect the proposed central fire hall, within the area bounded by Yonge, Queen, Simcoe and King streets.—It is

the intention of the proprietors of the Academy of Music, situated on King street, to make extensive alterations to the building during the coming summer. The roof will be raised, a new gallery put in, and the interior rearranged and decorated. The entrance will also be enlarged and improved.—At a conference between members of the Parks and Gardens Committee of the City Council and directors of the Industrial Exhibition Association held last week, the latter submitted a list of required improvements and alterations to Exhibition buildings which include the enlargement of the main building, a new stove building, enlargement of machinery hall, a new building for a bicycle exhibit, an enlarged fire hall, a better building for the police force, a new ambulance building and patrol waggon, enlargement of the ladies parlors, four sheep pens and four hog pens, each 100 x 52 ft., the total cost of the eight pens being fixed at \$15,200, repainting and making tight the roof of the main building, painting the roof of the annex, repairing the roofs of the machinery, natural history, stove, implement and carriage buildings, and putting in a four inch water main to supply the four big engines in machinery hall. It is estimated that the total cost of carrying out the improvements will be \$100,000. A joint committee was appointed to visit the Exhibition buildings and report.—The recommendations of the Committee on Works for brick pavements on Henry, Ross and D'Arcy streets have been passed by the Executive Committee.—The borings now being made to ascertain the nature of the bed through which the proposed tunnel across the bay must pass, have so far been most satisfactory to the City Engineer; from the information already gathered, it is probable that the cost of the proposed tunnel may be reduced by \$100,000 or \$150,000.—Mr. G. W. Gouinlock, architect, is preparing the necessary working drawings for the new office building to be erected by the Independent Order of Foresters on the north west corner of Bay and Richmond streets. The building will be T shaped 40 x 140 feet, with an addition at the rear 67 x 65 feet and will be eight storeys in height, built of brown stone, pressed brick and terra cotta, and will contain the head offices and court rooms of the order, besides a large number of commercial offices. There will be two electric passenger elevators, and iron and slate staircase. The building will be fireproof and is estimated to cost \$175,000.—At a recent meeting of the Collegiate Institute Board it was decided to obtain estimates of the cost of certain proposed additions and improvements to the Jarvis street school.—R. Ogilvie, architect, 10 King street east, is inviting tenders for all works except carpentry for a solid brick house in Parkdale.—The City Council has passed the Property Committee's report recommending improvements to Yonge street wharf, also the Park Committee's recommendation for improving Queen's Park, in front of the Parliament buildings.—The by-law to provide funds for waterworks extensions and for a civic lighting plant will be submitted to a vote of the ratepayers early in April.—Building permits have been granted as follows: S. F. McKinnon, re-building McKinnon building, Melinda st., cost \$45,000; Alex. Mitchell, 13 Grange ave., det. 2 storey bk. dwelling, s. e. cor. Roncesvalle and Harvard avenues, cost \$4,300; Henderson Estate, alterations and additions to stores, 173-5 Yonge st., cost \$4,000; R. H. Gray, repairs to stores, 8-10 Queen st. w., cost \$4,000; John Wanless, repairs to store, 168 Yonge st., cost \$3,000.

The Canadian Locomotive & Engine Co., of Kingston, Ont., have secured the right to manufacture a patent gas engine for Canada.

FIRES.

The Presbyterian church at Windsor, Ont., was entirely destroyed by fire on Saturday last. Loss, \$20,000; insurance, \$12,000.—The residence of Duncan McFarlane, at Woodbridge, Ont., has been burned; insured.—A frame dwelling at Gravenhurst, Ont., owned by Mrs. Anderson, was destroyed by fire on the 13th inst. Loss, \$2,000; insurance, \$1,000.—The Heaps furniture factory at Vancouver, B. C., owned by the Edmunds and Webster estate, was totally destroyed by fire recently. The loss is estimated at \$20,000, with a small insurance.—The frame shoddy factory of Aloyes Bauer & Co. at Waterloo, Ont., was burned last week, together with all the machinery. Loss, \$2,500; no insurance. Mr. Bauer will probably rebuild, and make the new factory all brick and fireproof.—The post-office and a general store at Hilton, Ont., was destroyed by fire recently. The building was owned by A. A. Becker. Small insurance.—Sylvester Bros.' machine and agricultural works at Lindsay, Ont., were damaged by fire on the 14th inst. to the extent of several thousand dollars. The loss is fully covered by insurance.—A house at Newcastle, N. B., owned by Dr. Fish, was burned last week. Insurance, \$2,350.—The Globe Hotel at Yarmouth, N. S., owned by Wm. Jones, was destroyed by fire on the 18th inst. Insurance, \$4,000.—The steamer Spokane, belonging to the Columbia and Kootenay Navigation Co., of Kaslo, B. C., was burned a few days ago. The steamer was valued at \$15,000.—Fire at Barriefield, Ont., on the 19th inst., destroyed the boatbuilding establishment and residence of A. Rickey and the dwelling of Mrs. Grange. The loss is placed at \$10,000, partially covered by insurance.—The iron block at Beaverton, Ont., owned by A. Hamilton, the dwelling house of Duncan McRae, and a building owned by John Cameron, have been destroyed by fire.

CONTRACTS AWARDED.

WROXETER, ONT.—Alex. Munro has let the contract for a new residence to Thos. Ranshaw.

ASHFIELD, ONT.—Wm. Gardner, of this place, has received the contract for building the new stone school house at Paramount, at the price of \$985.

TORONTO, ONT.—The Fire and Light Committee will recommend to Council the acceptance of the tender of the Fire Extinguisher Co., of Chicago, for a Champion water tower, at the price of \$6,800, delivered in Toronto.

ST. JOHN, N. B.—B. Mooney & Sons have been awarded the contract for the erection of the new Patterson building on Princess street. It will be a three story brick building for residential purposes, with two stores on the ground floor.

OTTAWA, ONT.—Sixteen tenders were received by the Finance Committee for the purchase of \$301,800 of debentures, the successful tenderers being as follows: Wm. Mackey, Ottawa, \$150,000 at \$102½; Canadian Bank of Commerce, \$100,000 at \$101.74. The remaining \$51,000 was also offered to the Canadian Bank of Commerce at the same price, and has been accepted by the bank.—A contract has been awarded by the Department of Railways and Canals to the Canada Bridge and Iron Company, of Montreal, for a steel bridge over the Rideau canal at Dufferin, about twenty miles from Ottawa. The contract price is about \$3,000.

WINNIPEG, MAN.—The following tenders were received by the Board of Works for the repaving of Main street from the C. P. R. to Portage avenue: Ferguson & Cathro, Toronto, asphalt, \$2.69 per cubic yard, \$117,015; stone curbing, \$8,440, total, \$125,455; cedar blocks, including curbing, \$54,125; Kelly Bros. & Co.,

Winnipeg, cedar blocks, 84c per cubic yard, \$36,540; curbing, \$7,768, taking up and relaying street railway tracks, etc., \$2,920, total \$47,228, brick, \$2.22 per cubic yard, \$96,570, curbing \$7,768, taking up track, etc., \$2,920, total \$107,258, granite blocks, laid on sand or gravel \$2.12 per cubic yard, \$92,220, curbing \$7,768, taking up track, etc., \$2,920, total \$102,908; Warren-Scharf Paving Company, New York, asphalt, \$2.75 per cubic yard, or \$128,145 for the whole quantity including curbing; Doidge & Co., Winnipeg, cedar blocks, \$56,396.40, with pine curb \$44,027.00, with granite curb \$43,683, with Selkirk stone curb \$41,633.40, with Stonewall Stone curb. The Board has accepted the tender of Doidge & Co., subject to the approval of the Council.

WEATHER VANES.

The invention of the vane, or weather-cock, must have been of very early date. Marcus Vitruvius Pollio, a noted Roman architect and engineer, who was born about 80 B. C., in his works calls a vane a triton, probably from having in his time the form of a triton. The usual form on towers, castles, and secular buildings was that of a banner; but on ecclesiastical buildings it generally was a representation of the male of the barnyard fowl. According to Dufresne, commonly called Duncange, the French historian, who lived from 1610 to 1688, the cock was originally devised as an emblem of clerical vigilance, or what it ought to be. There have been other forms of vane. The one over St. Peter's, Cornhill, is in the shape of a key; that over St. Mildred's Church is a gilt ship under full sail. The grasshopper of the Royal Exchange is the vane that formerly surmounted the former Exchange. The dragon on the spire of Bow Church, Cheapside, is another celebrated vane. One of Mother Shipton's prophecies was, that when the dragon of Bow Church and the grasshopper of the Royal Exchange should meet the streets of London would be deluged with blood. In what way they should meet the old dame did not explain; but it is known that at one time these two vanes were side by side in the yard of a stonemason in Old-street-road, yet there was no shedding of blood. The weather vanes of the present time are too well known to require any description. The reason that the arrow end of the vane always points in the direction the wind blows, and the feather end never does, is because the arrow end is much shorter. The feather end being much longer offers more resistance to the wind, and when it turns until in the current it remains set in position until the next change of current.

F. Mongeon & Fils, contractors and joiners, Quebec, have commenced business.

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.

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.

JOHN D. EVANS, O.L.S.
MEM. CAN. SOC. C. E.
LAND SURVEYOR
Civil Engineer : Architect
and Patent Solicitor.
Special attention given to Consulting and
Municipal Work.
GRASS' BLOCK, FRONT ST., TRENTON, ONT.

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
32 East Adelaide St. - TORONTO

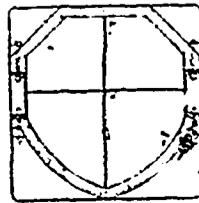
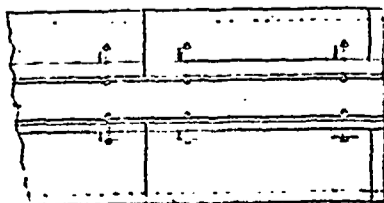
SURVEYS AND ESTIMATES PREPARED for all classes of municipal work, water powers, road improvement. Construction superintended.

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

Municipal officers are requested to mention the CONTRACT RECORD when corresponding with advertisers.

E. D. MORRIS
Direct Importer and Dealer in
Best English and Canadian
PORTLAND CEMENTS
Vitrified, Paving and Fire Bricks,
Fire Clay, &c.
Offices: 75 Cottingham St. TORONTO

HERCULES INDESTRUCTIBLE CULVERT



Made to size and shape of Waterway
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.

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS**THE SIZE OF REGISTER TO USE.**

Regarding the sizes of registers and pipes for different sized rooms, the following is taken from the catalogue of a prominent furnace company. In public halls or buildings where but a single register is required, take the hot air pipes from the top of the furnace and use register without valves. The size of pipes and registers requisite for the successful operation of any furnace is a matter requiring the best judgment, and should be determined by the size, position, and distance from the furnace of the spaces to be heated and cannot be governed by any fixed rule. We usually recommend for rooms of ordinary height as follows

Rooms on first floor, 12 x 14 feet, should have 8-inch pipe with 8 x 12 register.

Rooms on first floor, 12 x 18 feet, should have 9-inch pipe with 9 x 12 register.

Rooms on first floor, 16 x 20 feet, should have 10-inch pipe with 10 x 14 register.

Rooms on second floor, 8 x 12 feet, should have 7-inch pipe with 8 x 10 register.

Rooms on second floor, 10 x 16 feet, should have 8-inch pipe, with 9 and 12 register.

Room on second floor, 12 x 16 feet, should have 9-inch pipe with 10 x 14 register. Medium size halls should have 10-inch pipe with 10 x 14 register. Large size halls should have 12-inch pipe, with 12 x 15 register.

When oval or flat pipes are built in the walls of an ordinary three or four storey city house, the basement room and parlors should have independent pipes; second, third, and fourth storey rooms can be warmed by a single line of pipe reduced in size over each register, viz:

A house 18 or 20 x 45 or 50, should have a separate pipe, 4 x 16, to basement.

A house 18 or 20 x 45 or 50 should have a separate pipe, 4 x 16, to each parlor.

A house 18 or 20 x 45 or 50, should have one line, 4 x 18, to second storey, reduced to 4 x 14 for third storey, reduced to 4 x 9 for fourth storey.

A house, three storeys, 20 x 45 or 50, should have one line, 4 x 16 to second storey, reduced to 4 x 9 for third storey.

The above sizes to be varied according to the size of house and general division of the interior space.

4 x 24 pipe in the wall should have 12-inch pipe connected with furnace.

4 x 20 pipe in the wall should have 10-inch pipe connected with furnace.

RESISTANCE OF STONE AND STEEL UNDER PRESSURE.

An interesting experiment took place recently in the Vienna Technological Museum of Commerce, with a view to ascertain the relative resistance, under pressure, of the hardest steel and the hardest stone. Small cubes, measuring 0.39 inches, of corundum and of the finest steel were subjected to the test. The corundum broke under a weight of 118 cwt., but the steel resisted up to 844 cwt. It was curious to notice how the steel split up. It burst with a noise like the report of a gun, broke into a powder, and sent thousands of sparks in every direction, boring their way into the machine like shot.

DERENTURES PURCHASED

Municipalities issuing debentures, no matter for what purpose, will find a ready purchaser by applying to **G. A. STEINSON, 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
39 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.
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.**

CEMENT

We
Manufacture
the

**THOROLD
HYDRAULIC
CEMENT**

the best
and
cheapest

for all kinds of Masonry work.
Used on all Government and
Municipal works, also on the
Grand Trunk Railway.

Write us for prices
or any other information
required.

ESTATE OF JOHN BATTLE
THOROLD, ONTARIO

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. **ZEMILIUS 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

Paving Granite

Granite Sets for Street Paving.
CURBING cut to any shape ordered.
Quarries, St. Phillippe d'Argenteuil, P. Q.

Address all communications to
JOS. BRUNET - COTE DES NEIGES, MONTREAL

**Artificial
Granite Stone
.. Pavements**

... FOR ...

STREETS, SIDEWALKS, BASEMENT
FLOORS, ETC.

The attention of municipalities and others interested is called to the excellence of this material.

A. GRAHAM
Sole Proprietor and Patentee
226 Piccadilly St., - LONDON, ONT.

Drummond McCall Pipe Foundry Company,

MONTREAL

MANUFACTURERS OF

CAST IRON WATER AND GAS PIPES

WORKS: LACHINE, QUE.

PRICES ON APPLICATION.

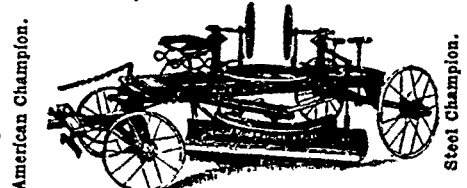
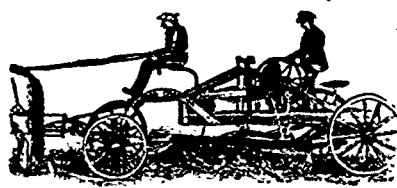
CANADA PIPE AND FOUNDRY CO.

MANUFACTURERS OF

..... Cast Iron Pipes and Special Castings

Works: MONTREAL AND ST. HENRI, QUE.

CORRESPONDENCE SOLICITED.

THE COPP BROS. CO., LTD. Hamilton, Canada, Manufacturers of both these Road Machines.**THE G. & J. BROWN MFG. CO.**

Railway and Contractors' Plant.

BRIDGE BUILDERS

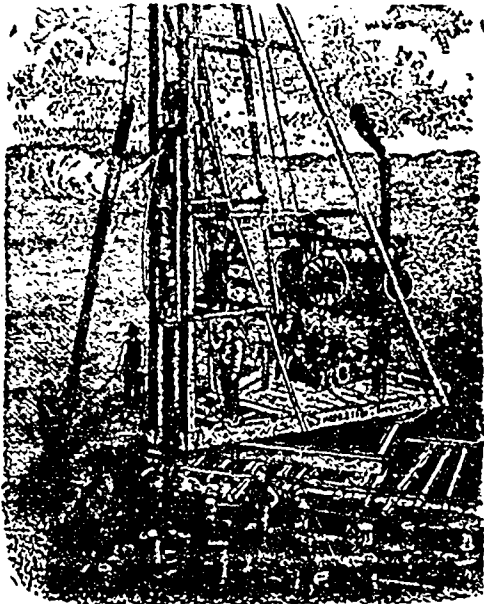
BELLEVILLE, ONT.

MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

WM. HOOD & SON
Contractors

MONTREAL, QUE.

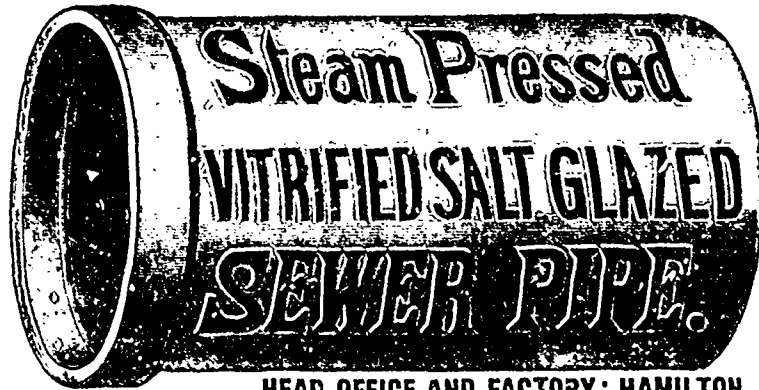
are prepared to do piling on land or water, employing steam pile drivers or drop hammers.



Hoisting Machinery, Portable Boilers and Pumping Machinery to Let.
WM. HOOD & SON - MONTREAL

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

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.

THE STANDARD DRAIN PIPE CO.

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



Manufacturers of
Salt-Glazed
Vitrified
SEWER
PIPES

Double Strength
Railway Culvert Pipes,
Inverts, Vents,

AND ALL KINDS OF FIRE CLAY GOODS.

STEAM AND POWER

FOR ALL DUTIES

Pumps
& HYDRAULIC MACHINERY

NORTHEY Co.
LTD.

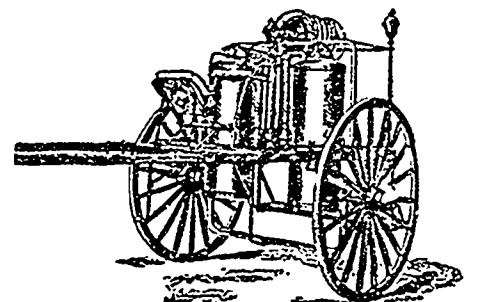
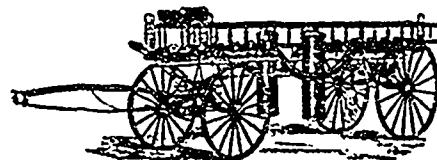
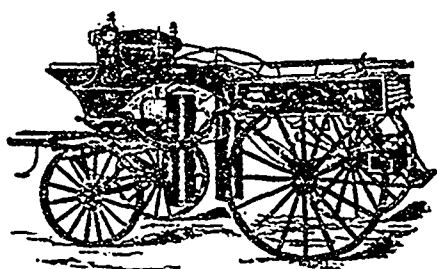
Toronto
Ont.

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 BREDEEN, Sec.-Treas., KINGSTON, ONT.

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

MUNICIPAL DEPARTMENT

LEAD IN WATER.

At the last meeting of the Yorkshire medical officers of health at Huddersfield, papers were read on the subject of lead in potable water. The first paper was read by Dr. Evans (Bradford), who pointed out the chemical action of water upon lead service-pipes, and said that if lead were dropped into carefully-distilled water and left for a time, at the bottom would be found a white precipitate, which, on examination, was found to consist of oxide of lead and hydrate of lead, generally known as oxy-hydrate of lead. The solution of this in the water was a subsequent process. This oxy-hydrate of lead, he believed, was due to the action of the oxygen in the water upon the lead pipe that might be exposed to its influence. But, it might be asked, "Where did the oxygen come from?" because the water was not decomposed. He had come to the conclusion that the oxygen was produced by being actually dissolved in the water itself, while it might also be due to the presence of oxidizing agents in the water itself, however carefully distilled. Dr. Whitelegge (West Riding County Council), who followed, said he had been watching for the last two or three years, experimentally and otherwise, the action of a number of water supplies upon lead, and the results differed in some cases from those that they were entitled to expect from the accounts of early experimenters. In many of the experiments made erosion had been completely lost sight of. He agreed that the water they had most trouble with was the acid or moorland waters, and many peaty pools were the most active of all. The action, however, was by no means limited to acid or soft waters. The power of some waters could be removed by the addition of chalk, and of others, by the addition of carbonate of soda, but these two would not act in all cases, and they had to be careful about dogmatizing on the matter. This question of erosion deserved more attention because there was no doubt that if water was left standing all night in a lead service pipe, there was lead present in poisonous and dangerous quantities in the morning, so that the first flow of water ought to be always allowed to run to waste. He had come to the conclusion that there were many more public water supplies in the West Riding which acted upon lead than was at present suspected, and as medical officers of health they ought not to assume that the water under their charge did not act upon lead, but see by experiments whether there was not lead in solution. He had, he said, mentioned two methods of preventing water acting upon lead; but there was a third, and that was by the treatment of filtration, though to his mind there was a tendency to assume that filtration could

do too much. In conclusion, he urged more co-operation amongst medical officers of health in regard to this important question. Dr. Hunter (Pudsey), who spoke as one who had gone through a lead epidemic, pointed out that the lead deposits through drinking contaminated water were so slow as to cause an endless variety of symptoms. This accounted for mistakes in diagnosis which resulted in cases of plumbism often not being recognised as such. Blindness, weakness of the procreative organs, abortion, brain disorders, liver complaints, and many other complaints of a fatal nature he had known to arise from the presence of lead in water, and at one time in Pudsey he had known the first flow of water in a morning contain as much as from half to a whole grain per gallon, and then plumbism was at its height. Dr. Swann (Batley), in his paper, pointed out that in the case of the lead poisoning in Louis Philippe's family at Claremont, the water was found to contain seven-tenths of a grain per gallon, and thirty-four per cent. of those who drank this water were affected. If this were the case, it was a matter which the public would have to face before long, whether they would go on taking water containing one-hundredth of a grain for years with impunity. He instanced a number of cases of illness which he attributed to the lead in the water, and which disappeared when iron piping was substituted for the lead piping.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

SCHMIDT V. TOWN OF BERLIN.—Judgment on motion by plaintiffs to set aside findings of jury and judgment of Street, J., dismissing action for damages for injuries sustained by female plaintiff owing to the fall of the ceiling in a building in a public park in the Town of Berlin, in which she took refuge from the rain, being present in the park as a spectator of games held by musical societies, who had the leave of the defendants to use the park. The trial Judge held that there could be no liability unless knowledge were shown. Motion dismissed with costs.

CONFEDERATION LIFE ASSOCIATION V. CITY OF TORONTO.—Judgment by Justices Hagarty, MacLennan and Street, Toronto, on appeal by plaintiffs from judgment of Ferguson, J. (24 O. R., 643), dismissing action brought to have it declared that the assessment of the plaintiffs by the defendants in 1892 upon interest arising from investment of reserve fund, which interest was added to that fund and re-invested as part of it, was illegal, and for re-payment of taxes paid under protest upon the footing of such assessment. The County Judge of York, on appeal from the Court of Revision, had decided that the plaintiffs were liable to be assessed under sec. 34 and sec. 2, sub-sec. 10 of 55 Vic. ch. 48. Ferguson, J., held that the plaintiffs were not bound to apply the income in keeping the fund at its proper level, but might make the necessary increase with any money whatever, and the

County Judge had full jurisdiction, and the subject matter of the action was res judicata. The court agreed with the judgment of the trial Judge and dismissed the appeal with costs.

MCVICAR V. TOWN OF PORT ARTHUR.—Judgment of Justices Armour and Falconbridge, in the Court of Queen's Bench at Toronto, on appeal by plaintiff from judgment of Robertson, J., at trial at Port Arthur, dismissing action, which was brought to recover \$1,254, the price of certain land of plaintiff taken for the purposes of a public park in the town of Port Arthur. The action was brought against the municipal corporation of the town, who denied their liability, contending that a Board of Park Management, constituted under R. S. O., ch. 190, were liable, if there was any liability, and that the defendants had not raised money by the sale of debentures for the purpose of paying for the land. The court held that the plaintiff had no remedy against the board, for it had performed its whole duty, had purchased her land, taken the title to defendants, and given plaintiff an order upon defendants for the purchase money; but had a remedy against defendants, notwithstanding that they had not sold their park fund debentures, and plaintiff was not concerned with the method to be adopted by defendants in procuring money to pay for the land. Appeal allowed, and order made directing issue of a peremptory mandamus, returnable the first day of the next Easter sittings, commanding defendants to raise the money necessary for payment of purchase money and interest from date of order given by board, and directing amendment of statement of claim, so as to ask for such mandamus. Defendants to pay costs of litigation.

Fifty-five towns and cities in England are now, it is stated, destroying their garbage and solid refuse by burning, using an average of about 10 furnaces each for that purpose. The combustion of the material is utilised for the generation of steam, by which, amongst other things, the streets are electrically illuminated. The Livet, the latest introduced method, is said to burn on an average 33½ lbs. of rubbish per hour for each square foot of grate surface, with an evaporation of 4.08 lbs. of water for each pound of rubbish consumed.

Night inspections of water services have been made with much success in St. Paul, Minn., according to the annual report of Secretary John Caulfield of the Board of Water Commissioners. This was done by placing the shut-off rod on the stop cock of the service at the curb line, when the flow of water can be easily detected by sound. This work was carried out between midnight and morning, daily reports being made at the office of houses where water was found to be flowing. A day inspector was then sent to the premises to look for leaks. If any were found the occupant of the premises was instructed to have them repaired within a certain time. In this way 790 defective fixtures were found.

**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.

Water Works

Fire Hydrants

Stop Valves

3" to 36"

BOILERS, TOWERS & C, ENGINES AND GENERAL WORK

JNO. PERKINS CO'Y

Toronto Engine Works TORONTO

Fire Bricks and Cement

DRAIN AND WATER PIPES

SANITARY EARTHENWARE

LONDON PORTLAND CEMENT

GUARANTEED GENUINE.

Paving and Scoria Bricks for Stables,
Sidewalks, Yards, etc.

Large quantities on hand and to arrive. We handle
only the best quality. Prices lower than ever.

F. HYDE & CO.

81 Wellington Street, - MONTREAL,

Sole Agents for

THE "GRAHTRYX" SMOKE TEST AND
DISINFECTING MACHINE.

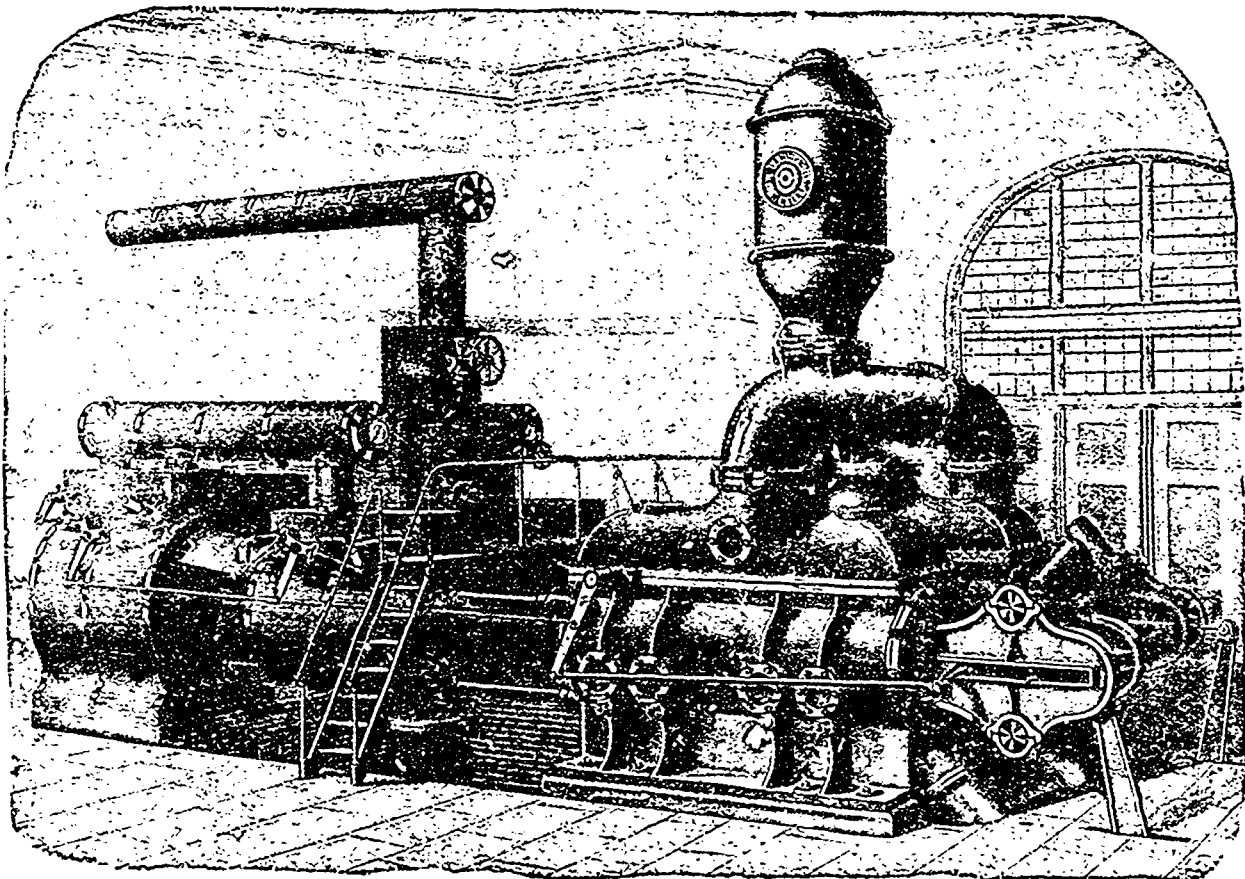
INDEX TO ADVERTISEMENTS

In the "Canadian Architect and Builder."

Architects. Ontario Directory.....III Quebec Directory ... ii	Cements. Bremner, Alex..... IV Currie & Co., W. & F. P. x Dartnell, E. F..... vi Maguire Bros..... i Owen Sound Portland Cement Co..... III	Granite Brunet, Jos.....	Roofers Douglas Bros..... II Duthie & Sons, G..... I Hutson, W. D..... II Rennie & Son, R..... II Stewart, W. T..... II Williams & Co., H..... II
Architectural Sculptors and Carvers. Holbrook & Mollington..... i	Art Woodwork. Knechtel, S..... III	Heating. Gurney Foundry Co. ii King & Son, Wai Jen.. iii Ormsby & Co., A. B. 1 Toronto Radiator Mfg Co..... v Williams, A. R..... x	Roofing Materials Pedlar Roofing Co..... vii
Architectural Iron-Work. Dominion Bridge Co. 1 Lea, Jos..... vi Shipway Mfg Co..... ii Whitfield, John..... III	Bricks (Pressed) Beamsville Pressed Brick Co..... vi Dartnell, E. F..... vi Port Credit Pressed Brick & Terra Cotta Co., Limited..... ix	Limeworks. Currie & Co., W & F P. x Ontario Lime Association..... II	Sanitary Appliances Dominion Sanitary Pottery Co..... ix McRae & Co..... viii Sanitas Mfg. Co..... ix Toronto Steel Clad Bath & Metal Co..... vii
Builders' Supplies. Bremner, Alex..... IV Currie & Co., W & F P. x Clatworthy, Geo..... iii Maguire Bros..... i Ontario Lime Association..... II Rice Lewis & Son..... IV Springer, O T..... viii	Building Stone Dealers. Carroll, Vick & Co... vii Clark, Wm..... vii Dartnell, E. F..... vi Hood & Son, Wm..... x	Legals. Bentley & Co., W. B... ii Denton & Dods..... ii	Shingle Stains Cabot, Samuel..... IV
Builders' Hardware. Rice Lewis & Son..... IV	Crossed Stains Cabot, Samuel..... IV	Mortar Colors and Shingle Stains. Cabot Samuel..... IV Maguire Bros..... i Muirhead, Andrew... 1	Sliding Blinds Clatworthy, Geo..... ii Seaman, Kent & Co.. vii
Church and School Furniture. Can. Office & School Furniture Co..... iv Office Specialty Co.. II Snider, J. B..... iv	Church Reflectors Frank, I. P..... II	Ornamental Plasterers. Baker, J. D..... vi Hynes, W J..... vii	Stained and Decorative Glass Castle & Son..... iv Dominion Glass Co.. iv Elliott & Son..... I Grimsom, G. & J. E.. iv Hobbs Mfg. Co..... iv Horwood & Sons, H.. iv McCausland & Son... iv Longhurst, H..... iv Lyon, N. T..... iv Quessel, Sharpe & Co. iv
Contractors' Plant and Machinery Rice Lewis & Son..... IV	Galvanized Iron Workers. Tucker & Dillon..... II Douglas Bros..... II Ormsby & Co., A. B. 1	Paints & Varnishes. Muirhead, Andrew.... i	Wall Paper and Ceiling Decorations Elliott & Son..... I Elliott, W. H..... vi
	Grates and Tiles. Holbrook & Mollington i Rice Lewis & Son..... IV	Painters. Gilmor & Casey..... III	Wire Manufacturers Shipway Mfg Co..... ii
		Paving. The Guelich Silica Barytic Stone Co... IV	Wall Plaster Albert Mfg. Co..... i Nowell & Co, B. L... vii
		Plasterers Hynes, W. J..... vii	Wall Ties Mac Machine Co.... iv
		Plumbing Supplies Campbell & Purvis. ix Dominion Sanitary Pottery Co..... ix Sanitas Mfg. Co..... ix McRae & Co..... viii	Window Blinds Clatworthy, Geo..... iii Seaman, Kent & Co.. vii
		Plate Glass Hobbs Mfg. Co..... iv McCausland & Son... iv The Consolidated Plate Glass Co..... ii	
		Parquetry Floors Elliott & Son..... I Elliott, W H..... vi	
		Plumbers Ballantyne, James.... ii	

JOHN McDOUGALL

• • Caledonian Iron Works • •



OFFICE:
Corner William and
Seigneurs
Streets,
MONTREAL

**HYDRAULIC
MACHINERY**

CONDENSERS

AND

WATERWORKS
SUPPLIES

WATER METERS

and Meters for all
services

MANUFACTURERS

Machinery for Elec-
trical Work, etc., etc.
Boilers, Engines . . .
Engings, Girders,
Castings, Shafts, Pul-
leys, Gears, Bearings,
etc.

AGENTS IN CANADA FOR THE

Famous Worthington Pumps

Prices of Building Materials.

CONDITION OF THE MARKET.

TORONTO: Trade in builders supplies is improving steadily as the season advances and a fairly good building season is anticipated throughout Ontario. Building operations in Toronto are as yet somewhat dull, although the disastrous fires of the past two months will necessitate the expenditure of a large sum of money in rebuilding, and will have a tendency to brighten the outlook for the season. Hardware is moving freely, the movement being principally in spring specialties. Cement is steady at \$3 per barrel for best grades Portland. Scotch fire bricks are selling at \$3.25 per 100, and fireclay at \$1 per 100 lbs. Lead pipe and galvanized iron are quiet, and discounts remain unchanged.

MONTREAL: Preparations are being made for the season's trade, which it is thought will be of fair proportion. A fair volume of business is being done in hardware, and orders for future delivery are coming in freely. The demand for cement continues low and the market in consequence is dull, prices being nominally unchanged. In firebricks the movement has been fair in small lots at \$15 to \$22 per 1,000 as to brand. An active business is reported in plumbers supplies for both city and country trade.

LUMBER.

CAR OR CARGO LOTS.

Toronto. Montreal.

Table listing lumber prices for various types of wood, including clear picks, pickings, and different grades of shingles and siding.

YARD QUOTATIONS.

Table listing yard quotations for mill cull boards, shipping cull boards, hemlock scantling, and cedar for block paving.

B. M.

Table listing lumber prices for various types of wood, including flooring, dressing, and different grades of shingles and siding.

Toronto. Montreal.

BRICK—M

Table listing brick prices for various types including Common Walling, Good Facing, Sewer, and Pressed Brick.

SAND.

Table listing sand prices per load of 1 1/2 cubic yards.

STONE.

Table listing stone prices for various types including Common Rubble, Large flat Rubble, Foundation Blocks, and various quarry stones.

SLATE.

Table listing slate prices for roofing and ornamental black slate.

PAINTS. (In oil, \$ lb.)

Table listing paint prices for various types including White lead, Red lead, Yellow ochre, Green chrome, and others.

CEMENT, LIME, etc.

Table listing cement and lime prices for various types including Portland, German, and London.

Toronto. Montreal.

Table listing cement and plaster prices for various types including Belrian, Canadian, Roman, and others.

HARDWARE.

Table listing hardware prices for cut nails, steel, and various types of nails.

FINE BLUED NAILS.

Table listing fine blued nails prices for various sizes and quantities.

Table listing casing and box, flooring, shook, and tobacco box prices.

FINISHING NAILS.

Table listing finishing nails prices for various sizes and quantities.

CLINCH NAILS.

Table listing clinch nails prices for various sizes and quantities.

SHARP AND FLAT PRESSED NAILS.

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

STEEL WIRE NAILS.

Steel Wire Nails, 75, 10 and 5 % discount from printed list.

Iron Pipe:

Table listing iron pipe prices for various sizes and quantities.

Lead Pipe:

Table listing lead pipe prices for various sizes and quantities.

Galvanized Iron:

Table listing galvanized iron prices for various types including Adam's-Mar's Best and Queen's Head.

Structural Iron:

Table listing structural iron prices for various types including steel beams, channels, and plates.