

CANADIAN CONTRACT RECORD

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

EVERY WEDNESDAY

This paper reaches every one of 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. 12.

JANUARY 29, 1902

No. 52

THE CANADIAN CONTRACT RECORD, PUBLISHED EVERY WEDNESDAY

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MUNICIPAL DEBENTURES FOR SALE

Tenders will be received by the undersigned up to six o'clock p. m. on MONDAY, FEBRUARY 10TH, 1902, for the sale of \$5,693.33 Local Improvement Debentures of the Town of Walkerton.

Debentures drawing 4 per cent. and to be Walkerton delivery.

No tender necessarily accepted.

W. S. GOULD,
Town Clerk.

Walkerton, January 22nd, 1902.

Debentures For Sale

TOWN OF WATERLOO

Tenders will be received by the undersigned up to six o'clock p. m. on MONDAY, FEBRUARY 3RD, 1902, for the following Debentures of the Town of Waterloo.

1. Cement Sidewalk Debentures, \$1,970, payable in twenty annual instalments, interest 4 per cent.

2. Water Works Debentures, \$4,000, payable in thirty annual instalments, interest 4 per cent

A. B. MCBRIDE, Town Clerk,
Waterloo, Ont.

Southampton Waterworks.

STEEL TANK

AND

MASONRY TOWER.

Tenders will be received by James Howe, Esq., Town Clerk, Southampton, Ontario, up till FRI. DAY, 7TH FEBRUARY, 1902, for supplying all material and doing all work complete.

For Steel Tank—erected.
For building Masonry Tower

Tenders required for each separately. Plans can be seen and full particulars obtained at Southampton or Toronto

JOHN GALT, C.E. and M.E.,
Consulting Chief Engineer,
Toronto, Ont.

WANTED—A FIRST-CLASS ARCHITECTURAL Draughtsman, one with experience required. Apply, stating terms, etc., G. M. BAYLY, Architect, Ottawa.

SAULT STE. MARIE SEWAGE WORKS

SECTION "C"

Sealed tenders, addressed to W. J. Thompson, Esq., Mayor, and endorsed "Tender for Outlets" will be received until 6 p.m. on

Monday, February 17th, 1902,

for Laying Six Cast-Iron Submerged Sewer Outlets, total length, 2,570 feet.

Plans, profiles, specifications, etc., may be seen at the Engineer's office, 101 Bay Street, Toronto, or at the Town Hall, Sault Ste. Marie, Ontario.

No tender necessarily needed.

W. J. THOMPSON, Mayor
WILLIS CHIPMAN, Chief Engineer.

CONTRACTS OPEN.

ST. MARY'S, ONT.—Mrs. Lane purposes building a residence.

EDMONTON, N. W. T.—Norwegian settlers intend erecting a large church.

HARROW, ONT.—Cornelius Ford has purchased property on which to build.

NORTH SYDNEY, N. S.—A company is being formed to build a large hotel here.

GUELPH, ONT.—W. F. Collwil, architect, is taking tenders for store alterations.

MAPLE, CREEK, N. W. T.—Henderson & Downer propose building a new hotel this year.

DIGBY, N. S.—It is expected that the railway will be extended from Middleton to Victoria Beach.

RIVER JOHN, N. S.—John Mitchell has begun the erection of a large sash and door factory.

DARTMOUTH, N. S.—The council will shortly take up the question of remodelling the town hall.

BLLENHEIM, ONT.—It is probable that another dynamo will be added to the municipal electric light plant.

OSHAWA, ONT. Crowhurst Bros., of Port Hope, intend starting work here for the manufacture of bricks.

DRAYTON, ONT.—A. C. Woodman, town clerk, invites tenders up to February 3rd for erection of town hall.

SHEFFIELD, N. S.—A project is on foot to deepen the channel of the lakes in Sheffield so as to accommodate steamers.

LISTOWEL, ONT.—Tenders are invited for the erection of a brick school at Lebanon, from plans by W. E. Binning, architect, of this town

GLACE BAY, N. S.—By a vote of 67 to 4 the ratepayers last week decided in favor of expending \$150,000 for the construction of a waterworks system

WATERLOO, ONT.—Tenders close 6 p. m. February 3rd, for purchase of \$4,000 sewer debentures and \$3,970 cement sidewalk debentures.

BRIDGETOWN, N. S.—Plans are being prepared by Herbert E. Gates, architect, of Halifax, for a new brick academy to be built at this place.

BEETON, ONT.—Bids are asked by Joseph Wright, village clerk, up to Saturday, February 8th, for purchase of \$17,000 4 per cent. debentures.

BRANTFORD, ONT.—The Canadian Order of Foresters have taken over the Henwood building facing Victoria Park, and will make improvements thereto.

BERLIN, ONT.—The Board of Trade will memorialize the Dominion Government to enlarge the post office here on a larger scale than has been decided upon.

DRESDEN, ONT.—Mr. Foster intends building a brick residence.—A new factory for the manufacture of hardware novelties will be built on Sydenham street by Mr. Packham.

WALKERVILLE, ONT.—At the next council meeting steps will be taken to have Sandwich street repaved with brick. The town will also construct considerable granolithic walk.

KENTVILLE, N. S.—Next spring will see the erection here of a court house costing \$18,000, provincial hospital costing \$13,000, and a building suitable for an annual fruit, vegetable and poultry fair

FREDERICTON, N. B.—Tenders close Monday, 3rd February, for repairing Suckney Brook bridge in Carleton county. Plans at Public Works Department, and tenders to be addressed to C. P. LaBillois.

PORTAGE DU FORT, QUE.—Rev. A. Brunet, P. P., of this place, will receive tenders up to February 14th for the building of a new R. C. church, of brick, at St. Edward's Mission, Bristol, county of Pontiac.

WILLIAMSTOWN, ONT.—Bids are invited by G. H. MacGillivray, township clerk, Charlottenburgh, up to Saturday, February 8th, for raising the Williamstown bridge and abutments and making repairs and alterations.

PEMBROKE, ONT.—Public meetings are being held to further the proposal to build a bridge connecting Allumette Island with this town. J. W. Munro states that such a bridge could be built for half a million dollars.

MOOSOMIM, N.W.T.—A new Presbyterian church is proposed, to cost about \$5,000: W. H. Shillinglaw, architect.

AMHERST, N. S.—By a vote of the ratepayers it has been decided to borrow \$10,000 to erect and equip suitable buildings for the Maritime Winter Fair.

FORT WILLIAM, ONT.—The Board of the John McKellar Memorial Hospital have had plans prepared for a new building; F. E. Trautman, secretary.

GLENBORO, MAN.—Improvements will be made to the public school, including new basement and new heating system, from plans by W. H. Shillinglaw, architect, of Brandon.

HARTNEY, MAN.—The A. E. Hill Co. have had plans prepared by W. H. Shillinglaw, architect, of Brandon, for store building, 40x75 ft., 2 stories and basement, cost \$8,000.

LONDON, ONT.—Herbert Mathews, architect, is calling for tenders for a new residence to be built on "The Ridgeway."—Moore & Henry, architects, are preparing plans for a new church at Birr.

MEAFORD, ONT.—George Turner, of Brucefield, is interested in the company that purposes starting a furniture factory in this town and states that building operations will be commenced at once.

OKVILLE, ONT.—Subscriptions are being taken towards building a mission church on the Lorne Park line, about two miles from this place. Plans for same have been prepared by H. G. Paull, architect, Toronto.

NELSON, B. C.—Plans have been prepared for a drill hall to be built here, two storeys, 50x120 feet, cost \$15,000. It is expected that the necessary appropriation will be made at the approaching session of the Dominion Parliament.

RAT PORTAGE, ONT.—William Margach, Crown Lands Agent at this place, has reported to the Provincial Government that he considers it to be practical to construct a dam at the outlet of Lac Seul. He also advises the building of a bridge in Rugby township.

SAULT ST. MARIE, ONT.—Tenders are invited by W. J. Thompson, Mayor, up to Monday, February 17th, for laying six cast-iron submerged sewer outlets, total length 2570 feet.—The town council has been petitioned to take steps to build a new high school.

VICTORIA, B. C.—The city engineer has recommended the use of vitrified pipe almost exclusively for surface water drains. He also recommends that the council immediately take up the question of constructing permanent sidewalks in the residential parts of the city.

CALGARY, Y. W. T.—The Methodist church congregation have selected a site on which to build a new church.—The question of enlarging Knox church is under consideration.—Tenders are being invited for erection of new six roomed school, of stone.

PRINCE ALBERT, N.W.T.—The Prince Albert Elevator Co., of which W. T. Gilmore is president, will ask the town council for a bonus of \$3,000 provided the company will erect a flour mill of 200 barrels capacity daily and an elevator of 25,000 bushels capacity.

ST. JOHN, N. B.—The Bank of New Brunswick has purchased the Rhea building in Carleton and will remodel it for the purposes of a branch.—It is probable that \$7,000 municipal debentures will be issued.—The city council have decided to take immediate steps to enlarge the Silver Falls reservoir.

KINGSTON, ONT.—The Militia Department are considering the installation

of an electric pump in the Royal Military College in this city, to be used for fire protection purposes.—Mr. Oates, who is promoting a company to build a summer hotel here, says he has secured \$150,000 of the necessary capital.

ST. CATHARINES, ONT.—The Public School Board is still considering the erection of a new school building in St. Patrick's ward.—J. E. Barley, representing New York capitalists, has made an offer to the city council for the vacant bicycle works, to be used as a knitting factory. They would install considerable expensive machinery.

SHERBROOKE, QUE.—The directors of the Eastern Townships Bank have decided to make extensive alterations to their building in this city.—It is said that Bodwell & Wright will erect a \$40,000 hotel on the site of the Sherbrooke House.

OWEN SOUND, ONT.—The McQuay Tanning Company, Limited, has been incorporated, the provisional directors being George McQuay, E. Lemmon and W. S. Middlebro. It is the intention to commence the building of a tannery at once and to have the plant in operation by June 1st.

WINNIPEG, MAN.—Ald. Sharpe and Barclay have been appointed a committee on improvements to the water-works building and plant.—C. J. Brown, city clerk, is asking for tenders up to Thursday, Feb. 27th, for the supply of 1,200 tons of asphalt for street paving.—The Canadian Northern Railway have decided to double the capacity of their construction shops in this city.

BRANDON, MAN.—Plans are being prepared for store on Rossar Ave. for Hon. J. A. Kuchoffer; W. H. Shillinglaw, architect.—The city council is preparing to install a meter system for the water-works. Other improvements in connection with the filtration of the water are under contemplation. It is also the intention of the council to lay granolithic walks this year. The work will be in charge of W. H. Shillinglaw, city engineer.

SYDNEY, N. S.—The Dominion Iron & Steel Co. are considering the purchase of additional machinery for the development of their works.—The congregation of Sacred Heart Church will either build a new wing or a new building.—The Cape Breton Railway Co. have advised the council that in addition to building a branch to Sydney, it is proposed to extend the road to North Sydney, the main line terminating at Louisburg.

BRUCE MINES, ONT.—It is probable that a large copper smelting plant of 800 tons daily capacity will shortly be established in this vicinity by J. J. Case, superintendent of the Lake Superior Smelting Company's works at Houghton, Mich., in conjunction with other mining men of Calumet, Mich.—The Bruce Mines & Algoma Railway Co. have applied to the Ontario Government for a subsidy of \$3,000 per mile for a further extension of fifteen miles.

HALIFAX, N. S.—It is expected that the new custom house will be rapidly pushed to completion.—The Board of Trade has recommended the Dominion Government to support the proposition to build a line of railway from Windsor Junction to the Strait of Canso.—The Provincial Government are taking tenders up to February 6th for construction of a wooden bridge and embanked approaches across the Sable river, in Shelburne county Particulars from Arthur Drysdale, Commissioner of Public Works.

VANCOUVER, B. C.—J. Bunizen, manager of the British Columbia Electric Railway Co., has returned from California, where he has inspected various

water powers with a view to getting idea for the development of the power a Coquitlam Falls for the Vancouver Power Co.—The congregation of St Andrews church intend putting up a Sabbath school building.—Several lots have recently changed hands, the intention of the buyers being to erect residences or business houses. Architects are busy getting out plans for new buildings, and it is expected that building operations in this city will be very active during the coming spring and summer.—The Hastings Shingle Mill Co. have decided to build a new mill at Coal Harbor.

QUEBEC, QUE.—Harvey Graham, representing the Nova Scotia Steel & Coal Company, had an interview with the harbor commissioners on Thursday last regarding the establishment of shipping facilities here. If a suitable site can be secured, a rapid discharging labor-saving plant will be established.—J. F. McLaughlin, of Toronto, representing American capitalists, has applied to the harbor commissioners for a site on which to build a large flour mill, to be operated by the aid of electricity.—The Beauce Electric Co. is seeking a provincial charter to develop water powers on the Chaudiere river between the parishes of St. George and St. Martin, and to transmit electric power throughout the counties of Beauce, Compton, Megantic, Dorchester and Levis. Joseph Gagnon and F. X. Hains, of St. George, J. D. Morin, of d'Israeli, and others are interested.

HAMILTON, ONT.—The Sewers Committee have submitted a recommendation to council that the construction of the St. Catharines and Beach Avenue sewers be commenced at once. Separate tenders will be taken for the labor and pipe.—It is understood that the Federal Life Assurance Co. have purchased the property on the south-west corner of James and Main streets and that a handsome office building will be built thereon.—The estimates submitted by the Water-works Department contain the following appropriations for construction account: Reservoir and pipes, \$10,000; necessary extensions, \$8,000; air valves, \$250; renewals necessary for inch pipes, \$5,000; hydrants and valves, \$1,200; building at w. w. yard, \$2,000; lead pipe, \$1,365; brass work, \$400; sundries, including stopcock boxes and castings, \$500. The sum of \$3,000 is asked for an automatic stoker, and \$1,300 for a Green economizer.—The estimates of the Board of Works provide \$5,000 for plank for sidewalk repairs, \$1,500 for new crossings, \$8,000 for roadway repairs other than tar, \$800 for high level bridge approaches, \$5,000 for new macadam and gravel roadways, \$3,756 for repairs on King street east, and \$2,000 for cement and stone curbing.—W. & W. Stewart, architects, have in hand alterations to the factory of the Chipman-Holton Knitting Co.—E. Buscombe, jr., is building a brick cottage on Locke street, north of Barton street, to cost \$900.

MONTREAL, QUE.—E. Marceau, superintendent Quebec canals, has taken tenders for building a syphon culvert at the Chambly canal.—At a meeting of the Canada Paper Co., held on Thursday last, it was decided to rebuild the St. Francis mill and to make other improvements to the company's plant.—The Canadian Pacific Railway Co. has been authorized by the Dominion Government to increase its capital stock by \$20,000,000, to be expended as follows: New rolling stock, \$9,000,000; double tracking and other improvements west of Lake Superior \$6,000,000; elevators, terminals, etc., \$8,000,000; new shops and enlarging present ones in Montreal, \$1,500,000; miscellaneous, \$5,000,000.—At the annual

meeting of the Governors of the Western Hospital, held last week, offers were submitted towards providing funds for a new building. G. B. Burland was in favor of having plans prepared at once for a building to cost about \$100,000.—It is rumored that the old offices of the Grand Trunk Railway at Pointe St. Charles may be converted into head quarters for the Railway Men's Christian Association.—The trustees of Olivet Baptist church have been empowered to act as a building committee to select a site for a new church to be built during the coming summer.

OTTAWA, ONT.—The chief of the fire brigade has recommended the building of a new fire station on York street, at an estimated cost of \$6,000. He also asks for new floors, approaches, etc., at several stations, a hose tower for No. 7 station and several new hose sleighs, at a total cost of \$3,265. It is probable that the French section of the Separate School Board will request the negotiation of a loan for the purpose of building a new school on Murray street.—The congregation of McKay Presbyterian church, New Edinburgh, have appointed a committee to report on the enlargement of the Sunday school building, the remodeling of the church front, and the installation of a pipe organ. Rev. Norman McLeod is pastor.—Plans are being prepared for the new hall which Le Cercle Champlain, a social organization of French Canadians, intend erecting in the spring at the corner of Murray and Dalhousie streets, estimated cost \$15,000.—It is the intention of the Ottawa Forwarding Co. to rebuild the steamer Harry Bate.—The Board of Police Commissioners have pointed out the necessity of increased accommodation and of new stables and a signal service system. The former will probably be provided by the building of a wing to the present station at a cost of \$6,000.—The estimate of the city engineer as to the cost of improving Porter's island is \$15,472.—The Department of Public Works is asking for tenders up to Saturday, February 8th, for a hot water heating system at the armouries, Sussex, N. B.—The following building permits have been granted: Rebecca Higginson, brick dwelling, Preston street, cost \$1,550; W. H. Lester, brick veneer dwelling, Second avenue, cost \$2,000; R. B. Whyte, remodeling store front, Rideau street, cost \$1,000.—Charles Brodeur has prepared plans for new entrance to the Catholic cemetery in the parish of Notre Dame de Grace. There will be a large arch of cut stone, with small gates at either side.—Collingwood Schreiber and Dr. Montizambert are members of a committee appointed to arrange for the erection of a parish hall in connection with Grace church.

TORONTO, ONT.—Plans of sewer outlets to be laid in connection with the Sault Ste. Marie sewage works are on view at the office of Willis Chipman, C. E., 103 Bay street. Tenders close February 17th.—The Georgian Bay Hotel Co. held their annual meeting last week in the office of the manager, J. K. Paisley, 99 King street west, this city. The company decided to make important alterations to the Belvidere Hotel, Parry Sound.—The corporation is asking for tenders up to February 4th for construction of an ambulance for the use of the Medical Health Department. Plans at office of above department.—A Willis, 1 Toronto street, wants tenders by Feb. 3rd for brick and carpenter work of pair of houses to be erected on south-east corner

of Shaw and Harrison streets.—It is said that the Blanche River Pulp Co. have asked the Ontario Government for an extension of their charter on the condition that the work of building the mills shall be commenced at once.—Tenders for brickwork are wanted at 647 Brock avenue.—The Dairy Committee of the Industrial Exhibition Association met on Saturday last and adopted the plans prepared by Gregg & Gregg, architects, for the proposed new dairy building.—Reports of what is being done towards the establishment of a women's hospital were presented at a meeting of the General Women's Hospital Committee last week.—The Board of Control have adopted the recommendation of the City Engineer for an asphalt pavement on Baldwin street, from Spadina to Augusta avenue, a tar macadam roadway on McPherson avenue, from the east side of Avenue road, and for a number of concrete sidewalks.—St. Mary's Literary and Athletic Club, of St. Mary's R. C., parish, will this spring begin the erection of a club house on the south side of Macdonell square, for which plans are now being prepared; estimated cost, \$12,000.—The Separate School Board will consider at its next meeting the question of erecting a new school, to cost \$10,000, at the corner of Close avenue and King street.—The new church and

parochial residence to be built on the corner of Grace and Arthur streets by the Roman Catholics of St. Francis parish will cost \$12,000.—Building permits have been granted as follows: Andrew Nelson, two pair semi-detached brick dwellings, 27-33 Lansdowne avenue, cost \$10,000; Mrs. Hanna Thomas, pair semi-detached brick residences, Lindsay avenue, near Gladstone, cost \$3,500; Permits S. F. Aberdeen, brick dwelling, 330 Gladstone avenue, cost, \$1,600.

FIRES.

Machine shop of McLean Mfg. Co., Charlottetown, P. E. I. damaged to extent of \$10,000.—Hilliard House, Queen's Hotel and Wilson's store at Rat Portage, Ont., burned on 27th inst.; loss \$75,000.—Office of the Sherbrooke Examiner, Sherbrooke, Que., damaged to extent of \$3,000.—Sheds of the Standard Chemical Co. at St. Henri, Que., partially destroyed; loss \$3,000.—The Gould Block at Rat Portage, Ont., occupied by A. C. Pearson's and Kershaw's stores, totally destroyed.—Gilean's horse collar factory at Granby, Que.; loss \$30,000; partially covered by insurance.—The Cecil Hotel on Wellington street, Ottawa, owned by Ald. James Davidson and leased by W. Genslinger; loss \$60,000, partially covered by insurance.—The

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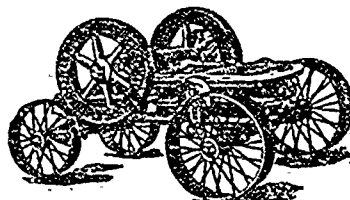
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MUNICIPAL DEBENTURES BOUGHT

EMILIUS JARVIS & CO. (Toronto Stock Exchange) 19-21 King St. West, TORONTO, Ont.

Bourinot residence at Sydney, N. S., burned on January 25th.

CONTRACTS AWARDED.

CORNWALLIS, N. S.—Alfred Potter has secured the contract for building a schooner at Canning.

HALIFAX, N. S.—The Halifax Tramway Co. have purchased a 1,000 horse power generator from the Canadian General Electric Co.

GANANOQUE, ONT.—F. T. Lent has let the contract for an island residence to Mitchell & Wilson, consideration about \$12,000.

HULL, QUE.—Mr. Fauteux, of St. Benoit, is the lowest tenderer for erection of Catholic church in the Little Farm district; price, \$11,000.

ST. JOHN, N. B.—W. A. Steiper has been awarded the contract for galvanized iron work of four storey tenement house to be built by J. Colwell on Metcalfe street.

OTTAWA, ONT.—Ald. J. E. Askwith has secured a large contract for rock cutting in connection with the Capital Power Company's works at Deschenes.

TORONTO, ONT.—The Polson Iron Works, of this city, have secured a contract from W. J. Poupore, of Ottawa, for the construction of a steam dredge to cost about \$62,000.

BROCKVILLE, ONT.—W. H. Thompson & Son, of Alexandria Bay, have been awarded the contract for plumbing and heating of summer residence on Point Royal for R. C. Vilas, of Chicago; price about \$7,000.

WATERFORD, ONT.—For building town hall the contract has been let to Robert Paskins, of Renton, at price of \$5,500. The sub-contract for masonry has been given to George Doughty, of this place, and that for the metal work to John Chambers.

LEVIS, QUE.—The contract for sewerage and waterworks systems has been given to Ross, Power & Co. The contract will amount to \$400,000 and must be completed in two years.—Carrier, Laine & Co. are about to commence the

building of an iron steamer and an iron dredge for which they recently secured the contract.

OWEN SOUND, ONT.—J. C. Forster, architect, has given to Alex. Green the contract for building a large summer hotel for the Owen Sound Park & Summer Resort Co. The building will be 300 feet in length, four storeys high, with tower 108 feet high. There will be about 60 plate glass windows in the front of the building. A steam pumping plant will be installed for fire protection, and fire escapes will also be provided.

S. O'Donoghue, builder, Antigonish, N. S., is offering to compromise at 50 per cent.

REAL ESTATE TRANSFERS.

The following transfers of vacant property in Toronto are reported since last issue:

Margueretta street, e. 2., Mary A. Bloem to Andrew McGlashen, 83.3 x 133, being lot 9C, plan 256, assessed at \$582.

Jones avenue, w. s., David Wagstaff to Charles Wagstaff, 30 x 200, commencing 400 feet north of Queen street, assessed at \$110.

Jones avenue, w. s., David Wag-

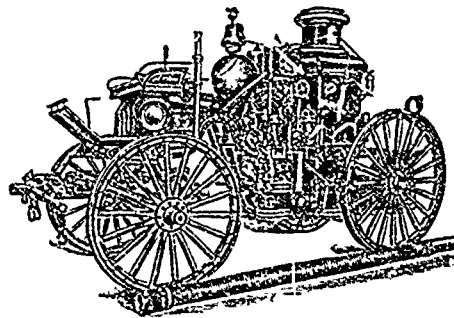
(Continued on page 6.)

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Canadian

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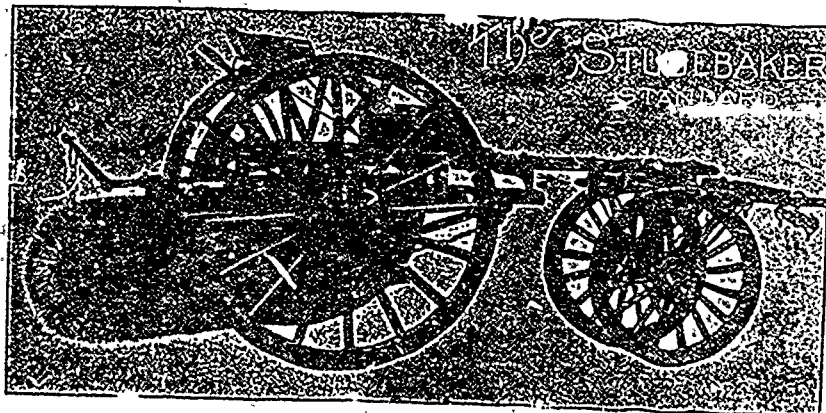
Hand-Book

and Estimator

The third edition of the Canadian Contractor's Hand-Book has been published and is now on sale. The book has been revised and enlarged to upwards of two hundred pages, and the title changed to the Canadian Contractor's Hand-Book and Estimator, considerable matter bearing upon the cost of performing various kinds of work having been added.

The price of the third edition, mailed free, is \$1.00 to subscribers of the CANADIAN ARCHITECT AND BUILDER, and \$1.50 to non-subscribers. Order from the publishers.

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Dovercourt road, w. s., Annie McKinley to James McDonald, 22.6 x 132, being north part lot 44, block G, plan 622, assessed at \$157.

BUSINESS NOTES.

Laird & Ford, contractors, Deloraine, Man., have dissolved partnership.

Consent of assignment has been filed by Gregorie Leveille, plasterer, Montreal.

Labelle & Co. have commenced business as builders at Shawinigan Falls, Que.

Pouliot & Gervais, painters, Quebec, have compromised at fifty cents on the dollar.

A meeting of the creditors of A. Pierre Pigeon, builder, Delorimier, Que., has been called for January 30th.

Denis & Robitaille, sash and door manufacturers, St. Raymond, Que., have dissolved partnership.

The capital stock of the Dominion Wire Mfg. Company, Montreal, has been increased to \$1,000,000.

The Canadian Fire Engine Company, London, Ont., last week selected officers as follows: President, George Taylor; vice-president, J. W. Jones; managing director, John M. Parsons.

Incorporation has been granted to the Hawkins Construction Company of Toronto, capital \$20,000, the directors being E. C. Hawkins, W. White, John Payne, R. Credicott and W. J. Gilchrist.

At a meeting of the directors of the Eastern Townships Brick Company, held at Sherbrooke, Que., last week, W. R. Webster was elected president, S. W. Jenckes vice-president, and W. B. Neil managing director and treasurer.

The Hollywood Paint Company, Hamilton, have elected the following directors: President, Seneca Jones; vice-president, H. P. Coburn; secretary-treasurer, Norman S. Jones; C. T. Grantham and James Thomson.

The Richmond Conduit & Mfg. Company, of Toronto, has been incorporated, with a capital of \$40,000. The provisional directors are: Co. and Delbert Richmond, R. R. Bongard, C. B. Niles, E. W. Niles, and C. W. Bongard.

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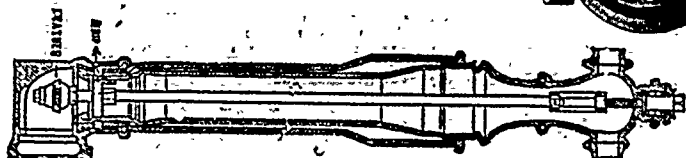
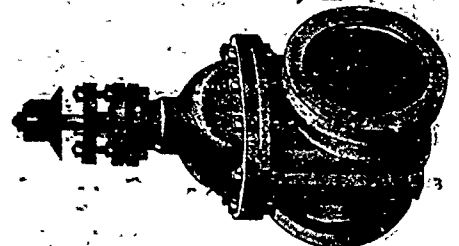
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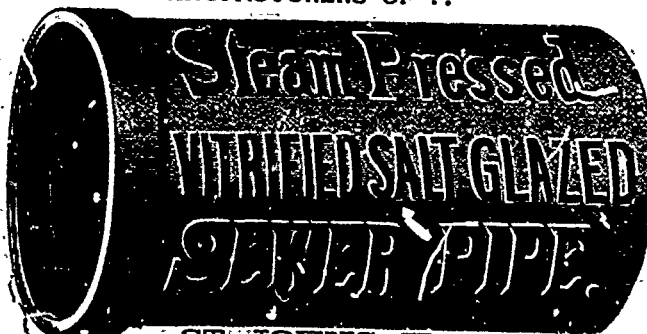
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MUNICIPAL DEPARTMENT

ENGLISH PRACTICE IN THE MANUFACTURE OF CAST-IRON PIPES.*

BY STEPHEN H. TERRY, M.I.C.E.

Great Britain has the reputation amongst certain foreign nations of adhering too closely to existing methods in working, and of being slow to adopt labour-saving appliances in engineering and kindred trades, but although there may be some truth in this, the Author hopes to prove that in pipe-founding, at any rate, we are determined to be in the forefront, and are not going to permit the intelligent and withal industrious foreigner—be he French, German or American—to beat us in cost of production or quality. The art of casting pipes or cannon (for they were formerly very similar) was originally established in Sussex, where the iron ore was found, and coke being at that time unknown, the vast forests supplied the wood for making charcoal. The quality of the Sussex iron was high, the ore being very free from sulphur, silicon and phosphorus, and the charcoal from objectionable ingredients. Sussex iron was much sought after, and maintained its high reputation long after the introduction of coke-smelted iron, against which, however, it could not compete in price. The latest example of this iron was to be found in the railings which a few years ago surrounded St. Paul's Cathedral. In the early days of pipe-founding, when charcoal was used as fuel, difficulties arising from badly-cast pipes were not frequent; the molten iron being free from impurities flowed freely, and the absence of keen competition in the trade, or of rigid specifications (drawn up as it may happen by those having far less knowledge of the requirements than the practical pipe founder), had not induced the practice of casting pipes too thin, and thus creating one of the most fruitful sources of trouble. This tendency to unduly restrict the weight of pipes arises from two causes—first, from the desire to lessen the weight to be paid for, and, secondly, to save freight charges by rail and sea. This desire to economize may, however, be bought too dearly. It was once said of a certain politician "that his extravagances were too economical, and his economies too extravagant." Thus, in pipe-founding, the saving of metal and weight, in order to reduce the freight charges, may lead to increase in the number of wasters during manufacture due to scab, blowholes, cold shut, shifting of cores, and breaking in of runners or gits, as well as from trimming and damage during transport due to insufficient strength, all of which losses have ultimately to be borne by the buyer. Thin pipes cost more per ton to mould and cast, and, as has already been pointed out, produce more wasters, as well as being more liable to fracture during transport, handling and jointing, so that a greater por-

portion of extra pipes have to be provided per mile, for it must be borne in mind that a cast-iron pipe cannot be looked upon as a portion of work until it is laid and jointed; and for any given depth of trench the cost of such laying and jointing (including trenching) is practically the same for a given size pipe whether it be thick or thin, whereas the life of the same pipe when laid would be doubled or trebled in the case of the thicker pipe.

It may therefore be accepted that reduction of weight beyond certain limits is false economy, and there are often occasions when it would be truer economy to put down pipes of greater weight, which being easier to cast, and therefore cheaper per ton, may, especially in the case of small pipes, and considering the few extra tons required per mile, in the end cost no more than the less weight of thinner and weaker pipes which, after being laid, will have a shorter life.

Endurance, tightness of joints, and power to resist shocks are all favoured by the use of the thicker pipe, whilst the longer life will more than repay the extra first cost. With some waters there is also the question of rust, when the thicker the pipe the more material remains available to resist the pressure of the water after either internal or external rusting has taken place, while similarly, in some places wasting from electrolysis has to be provided against. It is therefore evident that in a thick pipe, as compared with a thin one, the endurance is greater from

the less relative loss due to rust, whilst it has less to fear from damage by heavy traffic or steam-rollers, and has greater power to resist the internal shocks produced by pumping, or the too hasty closing of valves. There is therefore every reason against being carried away by a craze for undue lightness.

On the occasion of a recent visit to the Woodside Works of Messrs. Cochrane & Co., of Dudley, the most approved system of pipe founding was in full operation. The pig, which is carefully selected, and for the most part smelted on the premises, is of special selected quality, having a very close grain and high tensile strength; the coke, too, is burned on the premises, and is as free from sulphur as any which can be obtained. Smooth turned and faced cast-iron patterns are wholly used for the standard sizes of pipes. The moulds are long octagonal iron boxes in two parts, jointed longitudinally, and clamped together at frequent intervals; the base is a cast-iron plate, with concentric coded rings turned on it to ensure the pattern being absolutely in the centre, and prevented from being shifted by the sand ramming, which is done whilst the box is in the vertical position by means of long specially shaped rammers fitted with quadrant heads shaped to go around the pipe pattern.

(To be Continued.)

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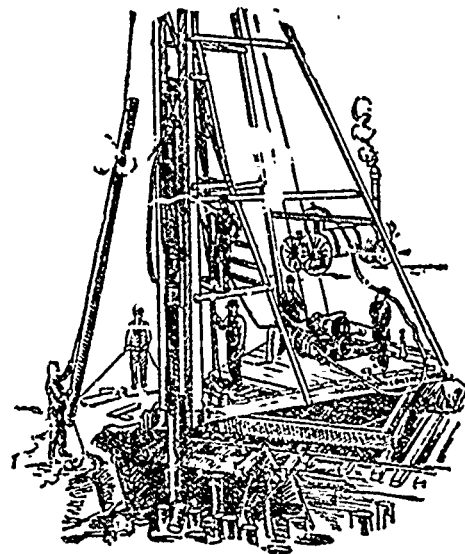
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Table listing various types of stone (Buff Peerless, Roman Red, etc.) and their prices per cubic foot.

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Table listing various types of stone (Dimension stock granite, etc.) and their prices per cubic foot.

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