

CANADIAN CONTRACT RECORD

*A Weekly Journal of Engineering, Public Works,
Tenders, Advance Information and Municipal Progress*

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

Vol. 17.

TORONTO, MONTREAL — FEBRUARY 13, 1907 — WINNIPEG, VANCOUVER

No 50

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE G. H. MORTIMER PUBLISHING COMPANY

of Toronto, Limited,
Subscription Price, \$2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2365.

Branch Offices:

Room B34, Board of Trade Building, Montreal,
Telephone Main 2599.

780-781 Union Bank Building, Winnipeg,
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CONTRACTORS

The undersigned having acquired the Canadian Rights for the use of the Raymond Concrete File, are prepared to lease to responsible contractors the exclusive right to use this form of piling in certain specified territories. Address communications to

THE RAYMOND CONCRETE FILE CO.
of Canada,
Coristine Building, Montreal

To Contractors

Tenders will be received until noon on FRIDAY, FEBRUARY 15TH, for the construction of Reinforced Concrete Abutments and Piers for a Bridge to be built on the River Thames between the Township of Dunwich in the County of Elgin and Township of Elfrid in the County of Middlesex. Plans and specifications can be seen at the office of either of the undersigned. A deposit of \$400.00 must accompany each tender as a guarantee of good faith. This amount will be returned after the successful tenderer has signed a contract. Tenders are to be made out on forms supplied. The committee do not bind themselves to accept the lowest or any tender.

JAS. A. BELL,
County Engineer, Elgin County,
CHARLES TALBOT, St. Thomas Ont.
County Commissioner Middlesex Co. Ont.,
London, Ont.

To Contractors

Tenders will be received until noon on FRIDAY, FEBRUARY 15TH for the erection of Reinforced Concrete Abutments for a Bridge to be built over the Otter Creek in the Township of Bayham for the County of Elgin known as the Cook's Mill Bridge. Plans and specifications can be seen at the office of the undersigned. A deposit of \$200.00 must accompany each tender as a guarantee of good faith. This amount will be returned after the successful tenderer signs a contract. Tenders are to be made out on forms supplied. The committee do not bind themselves to accept the lowest or any tender.

JAS. A. BELL,
County Engineer,
St. Thomas, Ont.

Tenders

will be received up to FEBRUARY 19TH, by JNO. S. FIELDING, C.E., 15 Toronto street, Toronto, for STRUCTURAL STEEL work, Trestle, etc. as per plans on view now.

Tenders

for Factory Building 90 x 108, at Niagara Falls, Ont. All trades will be received by J.O. S. FIELDING, C.E., 15 Toronto street, Toronto, up to Feb. 20th. Plans on view now.

Tenders

for CONCRETE DAM AND POWER HOUSE for Town of Streetsville will be received by JNO. S. FIELDING, C.E., 15 Toronto street, Toronto. Plans on view after 10th instant. Tenders in by Feb. 25th.

For Sale

Two Canadian patents, covering Labor-Saving Device. Information given on application.

Box 512, St. Catharines, Ont.



Temiskaming and Northern Ontario Railway Commission

TENDERS FOR OFFICE BUILDING

Sealed tenders addressed to the undersigned and endorsed "Tender for Office Building" will be received up to 4 p. m. on the 13TH DAY OF MARCH, 1907, for the erection of a General Office Building at North Bay, Ontario.

Plans and specifications may be seen at the offices of the Commission, 25 Toronto Street, Toronto, and at the office of the Chief Engineer, North Bay.

A certified cheque for \$1,500 must accompany each tender. The successful tenderer must enter promptly into a contract and furnish security for the amount of \$10,000 for due completion of same. Cheques of unsuccessful tenders will be returned to them.

The lowest or any tender not necessarily accepted.

A. J. MCGEE,
Secretary-Treasurer.

Toronto, February 9th, 1907.
Papers inserting this advertisement without authority will not be paid for same.

WANTED

Two Stiff Leg Derricks in good repair, mast 35 feet, boom 65 to 70 feet, capable of lifting seven tons, with or without swinging wheel.
THE CADWELL SAND & GRAVEL CO.,
Box 117, Windsor, Ont.

TENDERS

whole or separate will be received for all trades for Stone and Brick School 28 x 48, one storey. Plans at office of
L. C. WIDEMAN, Architect,
Guelph, Ont.

CITY OF BRANDON

TENDERS FOR CEMENT

Sealed tenders addressed to the Chairman of Board of Works and endorsed "Tender for Cement" will be received by the undersigned until 12 o'clock noon of THURSDAY, APRIL 11, 1907, for supplying from 6,000 to 8,000 bbls. of Portland Cement to the City of Brandon.

Specification and form of tender may be obtained on application to W. H. Shillinglaw, City Engineer, Brandon, Man.

The lowest or any tender not necessarily accepted.
HARRY BROWN,
City Clerk.

Brandon, Manitoba, Canada, February 8, 1907.

City of Winnipeg

Point du Bois Hydro-Electric Development.

TENDERS FOR TRAMWAY

Sealed tenders addressed to the Chairman of the Board of Control, and marked on the envelope "Tender for Tramway," will be received at the office of the undersigned up to noon of MONDAY, THE 25TH DAY OF FEBRUARY, 1907, for the construction of twenty-four miles of single track tramway between Lac du Bonnet and Point du Bois.

Copies of the instructions to bidders, specifications and form of tender may be obtained and the plans and profiles may be seen, on and after Friday, February 1st, at the Power Engineer's Office, Carnegie Library Building, Winnipeg.

Each tender must be accompanied by a certified cheque payable to the order of the City Treasurer, for the sum called for in the Instructions to Bidders (\$5,000.00) which cheque will become forfeit to the corporation in the event of the successful contractor refusing or neglecting to sign a satisfactory contract if called upon to do so.

Alternative tenders will be received for the following portions of the work:

(a) Ties delivered (certified cheque \$1,000).
(b) Track-laying and ballasting (certified cheque \$1,500).
(c) Remainder of construction as specified (certified cheque \$2,000).

These tenders will be subject to the same general conditions as those specified for tender for the whole work.

The board reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

M. PETERSON,
Secretary.

Board of Control Office,
Winnipeg, January 23, 1907.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE]

WANTED

Two architectural draughtsmen, capable of handling drawings for buildings from start to finish.

STEWART & WITTON,
Hamilton, Canada.



TENDERS FOR STRUCTURAL STEEL WORK

Tenders addressed to the undersigned will be received by registered post only up to noon on WEDNESDAY, FEBRUARY 20th, 1907, for the supply and installation of structural steel work required in the erection of a new fire hall on Adelaide street west, Toronto.

Plans and specifications may be seen, and forms of tender and all information obtained at the office of the City Architect, City Hall, Toronto.

Envelopes containing tenders must be plainly marked on the outside as to contents. The usual conditions relating to tendering as prescribed by the City By-law must be strictly complied with or tenders will not be entertained. The lowest or any tender not necessarily accepted.

EMERSON COATS WORTH (Mayor),
Chairman Board of Control.
City Hall, February 8th, 1907.

CITY OF SASKATOON
PROVINCE OF SASKATCHEWAN

WATER WORKS AND SEWERAGE

Tenders will be received by the Secretary-Treasurer of the City of Saskatoon until 8 p. m. on

WEDNESDAY, MARCH 20TH, 1907

- for the following works:
- Contract "A".—Labor on Pipelaying for Water Works and Sewerage, comprising about 27,000 feet of trenching.
 - Contract "C".—Concrete Foundation for Water Tower.
 - Housing for Water Tower.
 - Contract "L".—Sedimentation Basin.
- Plans, specifications, etc., may be seen at the office of the Chief Engineer, 103 Bay Street, Toronto, Ont., or at the office of the Resident Engineer, Saskatoon, Sask.
- No tender necessarily accepted.
- JAS. R. WILSON, Esq., Mayor, Saskatoon, Sask.
WILLIS CHIPMAN, Chief Engineer, 103 Bay St., Toronto, Ont.
- ADAM TURNER, Esq., Saskatoon, Sask.
Sec.-Treas.

City of Winnipeg
DEBENTURES

Sealed tenders addressed to the Board of Control, and marked "Tender for Debentures," will be received at the office of the City Comptroller, City Hall, Winnipeg, Manitoba, up to noon on FRIDAY, the 15th MARCH next for the purchase of \$1,594,506.55.

City of Winnipeg debentures having an average term of about 22½ years and bearing interest at the rate of four per cent. per annum, payable half-yearly in London, England; New York, Montreal, Toronto, or Winnipeg, at the holder's option. Principal payable in Winnipeg in gold or its equivalent.

\$ 118,174.07	run 7 years from 1st May, 1906.
57,365.03	" 10 " " " " " "
90,330.02	" 15 " " " " " "
318,218.04	" 20 " " " " " "
980,417.59	" 25 " " " " " "
90,000.00	" 30 " " " 17th Jan., "

\$1,594,506.55

Tenders may be for the whole or part; no tender necessarily accepted. Purchaser to pay accrued interest on current coupons and take delivery and make payment in Winnipeg.

Further information desired will be furnished on application.

D. S. CURRY,
City Comptroller.

Winnipeg, 18th Jan., 1907.

TO CONTRACTORS

Bulk tenders will be received by the undersigned, up to THURSDAY, FEBRUARY 20th INST., for the erection of a Stone Church Building for the Parish of St. Columbkil at Toledo, Ont.

Plans and specifications may be seen at the office of the architect, Kingston, and at the residence of the Rev. John T. Hanley, Toledo, Ont.

HENRY P. SMITH, Architect,
Crown Bank Building, Kingston, Ont.

CONTRACTS OPEN.

- SEDLEY, SASK.—J. Glenn will erect an elevator here.
- DUNDASS, ONT.—J. W. Dickson is about to erect several new houses.
- ACTON, ONT.—It is probable that a new English church will be erected in this town.
- RENFREW, ONT.—Scott & Jamieson will erect a cold storage warehouse in this town.
- BARRIE, ONT.—The Simcoe County Council will appropriate \$35,000 for road improvements.
- FRANKLIN, MAN.—Plans have been completed for a new school house to be built here.

BELGRAVE, ONT.—Work will shortly commence on the erection of a new school building.

CALGARY, ALTA.—The local lodge of Elks intend to erect a club building here to cost \$40,000.

PRIMROSE, ONT.—Considerable damage was recently done to Sheppard's dam, near this village.

BUCKHORN, ONT.—It is probable that a new Presbyterian church will be erected in this village.

MEDICINE HAT, ALTA.—The Medicine Hat Milling Company intend erecting a new elevator.

PICTOU, N. S.—The ratepayers have decided to expend \$11,000, for repairs to school buildings.

WESTON, ONT.—It is reported that the Bullen Brick Co., of Chicago, are about to establish yards here.

WELLAND, ONT.—L. A. Skinner, A. J. Bauhmafer, have purchased lots on which they will erect dwellings.

BROCKVILLE, ONT.—The Fire & Water Committee have recommended the purchase of 250 feet of hose.

REID, ONT.—J. V. Walsh will receive tenders up to March 1st for building of a cement floor and walls.

MORRIS, MAN.—D. M. Ure, Town Secretary-Treasurer, will receive tenders up to February 22nd for grading.

CAMROSE, ALTA.—The ratepayers will shortly vote on a by-law to raise \$10,000 for fire fighting apparatus.

BRANDON, MAN.—Architect Elliott calls tenders by February 23 for college building, Summerland, E. C.

ALLISTON, ONT.—A. Merner has purchased the Alliston foundry, and will make extensive additions to the building.

REGINA, SASK.—It is reported that the Canadian Pacific Railway will construct a branch from this city to Prince Albert.

WALTON, ONT.—T. H. Bolger will receive tenders up to February 23rd for erection of a cement and brick school house.

BERLIN, ONT.—The Town Council have decided to grant a 30 year franchise to the Dominion District Steam Heating Company.

EDMONTON, ALTA.—It is reported that the Canadian Society of Equity, Limited, will erect several elevators and warehouses.

POINT ST. CHARLES, QUE.—

The Dominion Government have definitely decided to erect a new post office building here.

SASKATOON, SASK.—A. McDonald Company, of Winnipeg, are reported to have purchased a site on which to erect a warehouse.

NORTH BAY, ONT.—A. McDonald has purchased the Roman Catholic church property, and will erect a block of buildings thereon.

LINDSAY, ONT.—The Board of Education are inquiring as to the cost of fire escapes with a view to erecting same on the school buildings.

HALIFAX, N. S.—The Public School Board are having plans prepared for the remodeling of the Albro street school also for a new school house.

INNISFAIL, ALTA.—Tenders will shortly be called for 8 room brick school, also school at Pipestone, Man., by architect Horwood, Winnipeg.

ST. JOHN, N. B.—W. D. Baskin is interested in the erection of a large rink.—J. E. Wilson intends erecting an addition to his foundry 40 x 100 feet.

WAPPELLA, SASK.—T. F. Terry, Town Secretary-Treasurer, will receive tenders up to February 18th for purchase of \$4,000 6 per cent. debentures.

HENSALL, ONT.—E. Rannie is taking tenders up to February 20th for carpenter work necessary in erection of a large shed for Methodist church.

FORT FRANCIS, ONT.—A by-law to raise \$24,533.17 by debentures for the extension of the sewerage system will shortly be voted on by the ratepayers.

CARLETON PLACE, ONT.—The by law, authorizing a loan of \$10,000 to Bates & Ennis to establish a knitting mill here, has been carried by the ratepayers.

BELLEVILLE, ONT.—Engineers are now engaged in laying out piers and docks to be constructed for the Lehigh Portland Cement Co., of Allantown, Pa.

PICKERING, ONT.—It is probable that a large building will be erected by the Pickering College to take the place of the one destroyed by fire some months ago.

LETHBRIDGE, ALTA.—A. L. Foster will erect a residence here at a cost of \$4,000.—The Presbyterians are considering the establishment of a ladies college in this town.

GUELPH, ONT.—M. P. Lynch will receive tenders up to February 19th for all trades required in erection of a brick and stone school building. Plans with L. C. Wideman, architect, this city.

STRATFORD, ONT.—Alderman Paul will erect a two-storey brick building on Downey street.—The City Council will shortly take tenders for supply of tile, lumber, castings, cement, stone, etc.

PICTON, ONT.—The Ontario Interurban Railway Co. will shortly apply for incorporation with power to construct an electric railway from Belleville to Pictou with branches to Weller's Bay and the Sand Banks.

REGINA, SASK.—Darling & Pearson, architects, Winnipeg, are calling for tenders for warehouse and office building for Nichols Shepard Company at Regina, also brick Methodist parsonage at Regina.

PETERBORO, ONT.—The City Council have decided to have an expert report on the question of installing a fire alarm system.—The Peterboro Steel Rolling Mills Co. are considering the erection of a new plant.

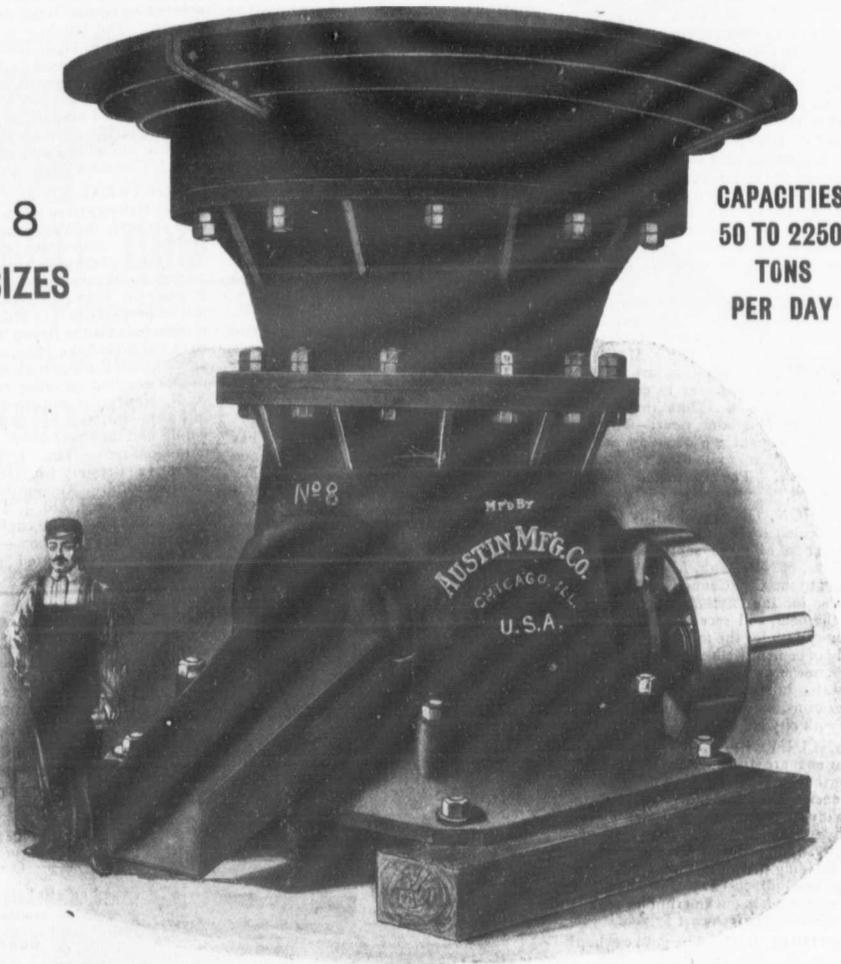
ST. CATHARINES, ONT.—The Niagara, St. Catharines & Toronto Railway have filed plans for the extension of their line from this city to Virgil.—Chairman of Committee of Works is taking

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Portable Plants for Road Building, Contractors' Uses, etc., a specialty.

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Head Office: MONTREAL

tenders up to to-day for construction of sewers.

SELKIRK, MAN.—F. Gelinas, Department of Public Works, Ottawa, will receive Tenders up to February 26th for construction of a public building in this town. Plans at office of above department and with J. Chisholm, architect, Winnipeg.

SIMCOE, ONT.—The Town Council will introduce a by-law to authorize construction of a waterworks system to cost \$70,000.—The Palm & Payne Sprayer Co. are negotiating with the Town Council in reference to establishing a factory here. They are asking for a loan with which they intend erecting a two-storey building.

OSHAWA, ONT.—Willis Chipman, C. E., Toronto, has been instructed to prepare plans and report to the Town Council, on the question of extending the sewerage system.—T. Morris, town clerk, will receive tenders up to February 18th for purchase of \$3,400 1/4 per cent. debentures.

GALT, ONT.—The ratepayers will vote on a by-law on February 21st a loan of \$15,000 to the Canadian Brass Manufacturing Co., who propose to establish their works in this town.—A by-law authorizing the issuance of \$10,000 debentures for extensions to waterworks system will also be voted on the same date.

QUEBEC, QUE.—The Quebec Carriage & Transfer Co. have purchased property on which to erect stables and other buildings.—The Magdalen River Valley Railway Co., are seeking incorporation with power to construct a road from Cap l'Ours through the valley of the Magdalen river.—The Dominion Government are about to erect a new building here to be used as a school for gunnery. The estimated cost is \$50,000.

LONDON, ONT.—The City Council have decided to call for tenders for the construction of three septic tanks.—S. W. Titus, of New York, has submitted a scheme to the City Council for the supply of water for the city.—O. F. Graydon, city engineer, will receive tenders up to February 14th for the following work and supply of cement walks, cement curb and gutter, sewer pipe and cement, lumber, hardware, broken stone, iron castings, corner irons, etc. Plans and specifications with city engineer.

VANCOUVER, B. C.—Extensive alterations are to be made to the Vancouver Opera House.—The City Engineer has recommended that repairs be made to the Cambie street bridge which will cost \$11,000.—The Hastings Shingle Manufacturing Co. have taken out a building permit for the erection of a large saw mill, cost \$25,000.—Baynes & Horrie have taken out a permit for repairs to M. Kinnon block to cost \$7,700.

VICTORIA, B. C.—The public school

board have decided to ask the City Council for \$85,000 with which to erect two new buildings.—The Plimley Automobile Co. have purchased property corner Government and Superior streets, on which they will erect a large building.

—The Bakeries, Limited, are contemplating the erection of a new building.—The City Council have decided to purchase a plant for treating blocks with creosote at a cost of \$10,000.

HAMILTON, ONT.—H. S. Kent, City Hall, will receive tenders up to February 19th, for supply of cast iron pipe, valves, lead pipe and other hardware for the city. Specifications with Secretary of Waterworks Department.—The Sewers Committee will recommend that \$13,615 be appropriated for sewer construction throughout the city.—The City Engineer is again pointing out the need of larger electric pumps at the waterworks.—The Board of Police Commissioners have recommended the erection of a new station to cost \$5,000.—J. H. Mills has received an offer for his property on east King street, on which it is reported a large hotel may be erected.

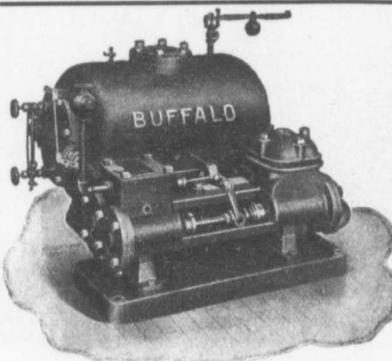
PORT ARTHUR, ONT.—The International Heating & Lighting Company, Cleveland, Ohio, are applying to the City Council for a franchise to operate a gas plant.—Mayor Clavet intends erecting a new building and has sold property adjoining that on which he will build, the purchasers of which, intend to erect a new block thereon.—J. Muirhead is promoting the establishment of a large mill here. Options have been secured on property on which to erect the necessary buildings.—Tennessee Copper Co. will erect a large smelter either in this city or at Kashabowie.

OTTAWA, ONT.—N. J. Ker has purchased property on Clemow avenue on which to erect a building. He has also had plans prepared for a large residence.—The Ottawa Car Co. have decided to erect large factories for the manufacture of railway rolling stock.—W. H. Cluff has purchased property

corner Bank and James streets, and will erect a block of stores thereon.

—The Canada Stove Company propose to extend their premises.—The City Council will apply to the Provincial Government for authority to issue debentures for \$40,000 to cover cost of building additions to the city hall.—Woods, Limited, will erect a five-storey building, 70 x 200, at a cost of \$100,000.—A. F. Lagat has purchased the Ottawa Fruit Exchange Building, and will enlarge same by an addition of three stories. It is probable that he will erect another large warehouse in the western part of the city.—H. K. Egan and associates have decided to erect a new rink building at cost of \$75,000.—The Masonic Temple referred to in our last issue will be erected on corner Bank and Wellington streets. The building will be 66 x 100 feet, five stories high, and will cost \$125,000. E. L. Horwood and L. F. Taylor, this city, are the architects.—F. Gelinas, Department of Public Works, will receive tenders up to February 26th for construction of a public building at Selkirk, Man. Plans at office of above department and with J. Chisholm, architect, Winnipeg.

MONTREAL, QUE.—The Canadian Pacific Railway have purchased considerable property in Westmount with the intention of constructing two spur lines. The same company will erect a new station in Westmount.—The Canadian Rubber Co. have purchased 3,781 square feet of property in St. Mary's ward.—It is reported that the Grand Trunk Railway have purchased the Mechanic's Institute and adjoining properties with the intention of erecting an office building.—The E. N. Heney Co. will erect new factories in Fairmount, at a cost of \$100,000, providing certain concessions are made by municipality.—The Consumers Co-operative Brewery Co. are applying for incorporation. Among those interested are S. N. Parent, Ald. J. T. Gadbois and G. Normandin. The capital of the concern will be \$1,000,000.—H. C. Stone, architect, has prepared plans for an



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WRITER FIRE PUMPS,
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PUMPS, JET CONDENSERS.

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THE CANADIAN STANDARD

THE CANADIAN PORTLAND CEMENT CO., LIMITED

502 TEMPLE BUILDING,
TORONTO

BOARD OF TRADE BUILDING,
MONTREAL

addition to the Coristine Building, cost \$700,000.—Laporte, Martin & Co. have purchased a building corner of William and St. Paul streets and will remodel same.—L. E. Oumiet has purchased Poire Halle and will erect a three-storey building on the property at a cost of \$70,000.—A. A. Ayer & Co. have purchased property on St. Henry street with the intention of erecting a cold storage plant thereon.—Jenkins Bros. expect to build a foundry 100 x 60 feet in the near future.

WINNIPEG, MAN.—Bright & Johnson, whose building was recently destroyed by fire, have decided to erect a new structure on the site.—Glube & Berger have purchased D. McArthur's hotel, and intend remodelling same.—H. B. Rugh, architect, has prepared plans

for a four-storey building to be erected on Ellice avenue for the Young Womens Christian Association.—The Canadian Pacific Railway purpose carrying out the following improvements: Construction of a steel bridge on the line from Lethbridge to Macleod, at an estimated cost of \$1,000,000; the erection of a new station at Port Arthur; erection of lodging buildings at Ignace, Ont.; laying out of a new yard at Coalridge, Alta.; extension of the

Esterhazy branch from Sheho, Sask., to Wetaskiwin, Alta.; grade reductions on the Medicine Hat section and on lines from Lethbridge to Macleod, also the laying of 80 pound steel rails on 330 miles of the road in place of the light rail now used.—Herbert Rugh, architect, wants tenders for Hague Armington warehouse, Winnipeg, by February 22.—

It seems peculiar that the "PRIESTMAN'S" EXCAVATOR AND DREDGER is not used in Canada as it is all over the rest of the world, inasmuch as it will do more work with less labor than any Excavator at present in use and the first cost is less than most. For particulars write G. P. WALLINGTON, Canadian Representative, 11 Front Street East Toronto

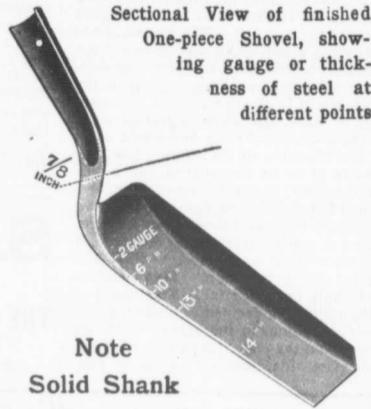
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CANADIAN SHOVEL & TOOL CO. LIMITED
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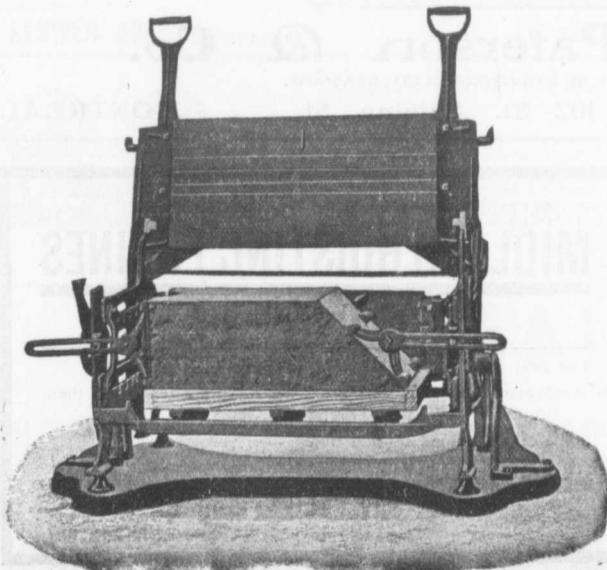
Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

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Water Table, Gable, Circle, Angle, Chimney, Cornice, Pier Blocks, etc.
Catalogues and Information Cheerfully Furnished.



This Machine makes all blocks face down—"the only practical way"—allowing of a richer and finer facing, producing blocks that are perfect in appearance and impervious to moisture.

Let us tell you how the "Miles" will pay for itself over any other machine in three months' operation.

Manufactured and Sold by
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Niagara Falls, - Can.

Manitoba Linseed Oil Mill will build a large plant this spring, having secured a site here.—Most prominent electrical people say they know nothing of rumored electric railway line from Winnipeg to St. Vorbert.—Architect Eade wants tenders by February 19 for ten-roomed brick school.—Deer Lodge, Silver Heights, destroyed by fire, will be rebuilt.—Architect Melville calls tenders for brick residence in Winnipeg, brick business block for National Trusts at Saskatoon and a \$250,000 solid brick apartment block to be erected in Winnipeg.—Architect Clemens will soon call for tenders for store and dwelling corner Victor and Sargent.—Plans have been completed for additions to C.P.R. shops in the city to cost over half a million. Building operations will shortly commence.

TORONTO, ONT.—John S. Fielding, C.E., has extended the time for receiving tenders for factory building at Niagara Falls to the 20th inst.—The Ottawa River Railway Co. will apply next session of the Ontario Government for power to construct a branch line from a point in the township of Digby to a point in the township of Mara, also a branch from a point in the township of Whitchurch to a point in the township of Caledon.—The Star theatre is to be demolished and a new structure will be erected on the site, at a cost of \$125,000.—The Temiskaming and Northern Railway Commission have rejected all tenders received for the erection of office building at North Bay, the figures being too high. New tenders will likely be called for.—The Board of Education have decided to make the following additions to the school buildings throughout the city: Jarvis and Harbord Collegiate Institutes are to have four

extra class rooms each; Leslie street, Pape avenue and Brock avenue schools will be increased by four rooms each; Howard school by two rooms, Perth avenue by five, and Queen Alexandra, Grace street, Essex street, and Withrow avenue each by six rooms. An additional storey will be added to the King Edward school. The building outlay on High schools will be about \$110,000, exclusive of \$300,000 for the Technical school. On public schools the expenditure will amount to \$300,000.—The city architect has issued the following building permits: Mr. Hall, 2-storey brick building, Hewitt avenue, cost \$2,800; D. Corbet, 2½-storey brick dwelling, St. Clarens avenue, cost \$2,500; C. Dickin, pair 2-storey roughcast dwellings, brick fronts, Clinton street, cost \$2,500; H. Lewis, pair semi-detached 2-storey brick fronted dwellings, 18 20 North Markham street, cost \$2,500; R. Watson, brick, stone and cement smoke stack, at 371 Soraraen avenue, cost \$2,600; E. J. Galbraith, pair 2-storey roughcast dwellings, brick fronts, Westmoreland avenue, cost \$3,000; A. M. Stewart, pair semi-detached 2-storey roughcast dwellings, brick fronts, 609 611 Crawford street, cost \$3,200; L. Hess, 2-storey and attic brick dwelling, Manning avenue, cost \$2,500; R. M. Speirs, 2-storey and attic brick dwelling,

Woolfrey avenue, cost \$3,600; Corporation of the City of Toronto, 1-storey brick, steel and concrete grand stand in Exhibition Park, cost \$215,455; 1-storey brick, stone and steel horticultural building in Exhibition Park, cost \$90,000; H. Hutson, 4 attached 2-storey and attic roughcast stores and dwellings, brick fronts, Ossington avenue, cost \$5,000; H. A. Knowles, 2-storey brick dwelling, 598 Church street, cost \$2,500.—F. Cochrane, Minister of Lands, Forests and Mines, will receive tenders up to March 1st for construction of a dock and approach at Rondeau Provincial Park, County of Kent. Plans at office of above department and with superintendent of park.—The Chairman Board of Control will receive tenders up to February 20th for supply and installation of structural steel work required in the erection of new fire hall on Adelaide street west. Plans at City Architect's office.—The Carbon Paper & Ribbon Manufacturing Co. have purchased property on Duchess street, and will erect a factory thereon.—Love Bros. intend erecting a large number of houses in the Riverdale district.

CONTRACTS AWARDED.

WALKERVILLE, ONT.—Construction of large coal sheds for W. Woollett

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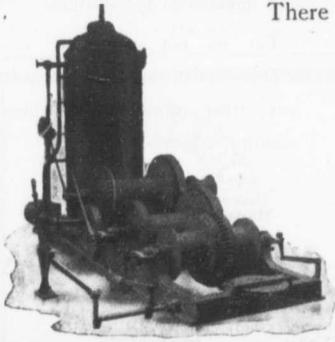
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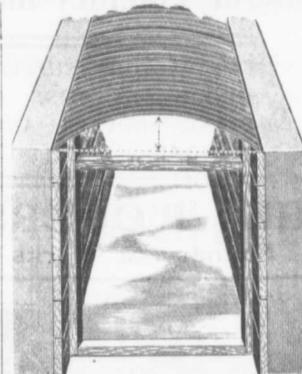
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& Sons, and remodelling of F. S. Archer's store: A. Mapes, this town, contractor.

BRACEBRIDGE, ONT.—Boring of wells for town: James Peat & Sons, Petrolia, Ont.

EUGENIA, ONT.—Construction of dam for the Georgian Bay Power Co.: Amhursen Hydraulic Construction Co., Montreal, Que., contractors.

WINNIPEG, MAN.—Construction of concrete piers and abutments for bridge at Saskatoon for Canadian Pacific Railway: J. McDiarmid Co., this city, contractors.—John Girvin & Co. secured contract to erect Fairchild Co's warehouse Winnipeg for \$92,500.

PICTON, ONT.—Purchase of \$15,000 4 per cent 30 year High School debentures: A. E. Jarvis & Co., Toronto, successful tenderers at \$13,978. Other bidders, W. C. Brent, Toronto, \$13,759; Wood, Gundy & Co., Toronto, \$13,908; Dominion Securities Corporation, Toronto, \$13,531. All bids included acrued interest.

VICTORIA, B. C.—Construction of a wharf for Alaska Steamship Co.: British Columbia General Contract Co., contractors. Cost \$15,200.—Supply of cast iron water pipe for city: R. P. Rithet, this city, successful tenderer at \$4 per ton.—Erection of new buildings and alterations to present premises for Victoria Phoenix Brewing Co.: W. McK. Ross, this city, contractor.

VANCOUVER, B. C.—Laying of wood-block pavements: Pender street, Richard street to C. P. R. track: Ironside, Rainie & Campbell, successful tenderers at \$14,100.51; Seymour street, Pender to Georgia streets: Barber Asphalt Co., successful tenderers, at \$14,228.—Supply of automobile fire engine: International Power Co., Manchester, N. H., successful tenderers, at \$12,668.

WINNIPEG, MAN.—The Board of Control have recommended that the following tenders be accepted: Plumbing in 25 houses: Morton & Arnet, successful tenderers, at \$1,806.50; sewer connection in 25 houses: C. E. Esser at \$1,553.75; supply of waterworks specials, Northern Iron Works, this city, at \$70 per ton; supply of two 250 h. p. water tube boilers with auto chain grate: Babcock & Wilcox Co., Montreal, at \$14,500; supply and erection of one 1,000 k. w. steam turbo-generator: Westinghouse Co., Hamilton, at \$46,000.

ST. THOMAS, ONT.—Hamilton & Scott, this city, have been awarded the following contracts: Hot water heating and plumbing and metal ceiling in new Oak Hall building; plumbing and iron work, Mr. Fallon's house; plumbing and iron work, Mr. Barn's house; metal ceiling in Anderson & Co.'s store; heating and ventilating school on gravel road; plumbing, heating and iron work for H. Lindop's house. This firm are also preparing plans for hot water heating for the two top stories of the Home Bank building.

A. LEOPRED

(Graduate of McGill).

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REINFORCED CONCRETE WATER TOWER.

The water tower at Ober Schone-weide, near Berlin, Germany, is one of the first executed by Messrs. Wayass & Freytag according to the Ministerial Regulations of April 16th, 1904. The cylindrical container is 4.2 meters in diameter and 4.5 inches in height, and holds about 55 cubic meters (72 cubic yards) of water. It rests on a platform which is carried by 6 rec-

of the structure, which was completed in 1906, amounted to M. 150,000 (about £7,500). The annexed diagrams (Figs. 1 to 5) illustrate the general construction of the tower, and the reinforcement of the platform and the container.

TAR MACADAM.

NIAGARA FALLS SOUTH,
February 4th, 1907.

Editor CONTRACT RECORD:
With reference to the article in

this or any other country, and in doing so I wish to point out that there are many reasons why success is not gained, some of which I will mention:

First, often the formation to receive the tar macadam is not sufficiently even to allow of an even bearing for paving, thus causing defects when traffic passes over the surface.

Second, as the finished surface of the paving only requires a small

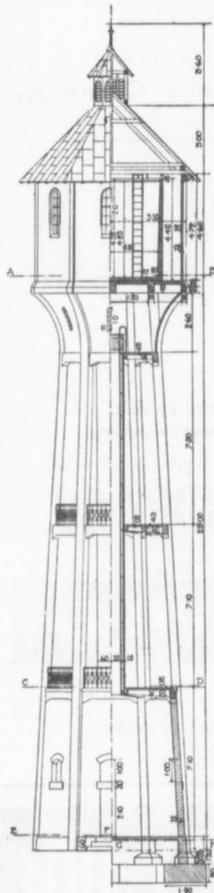
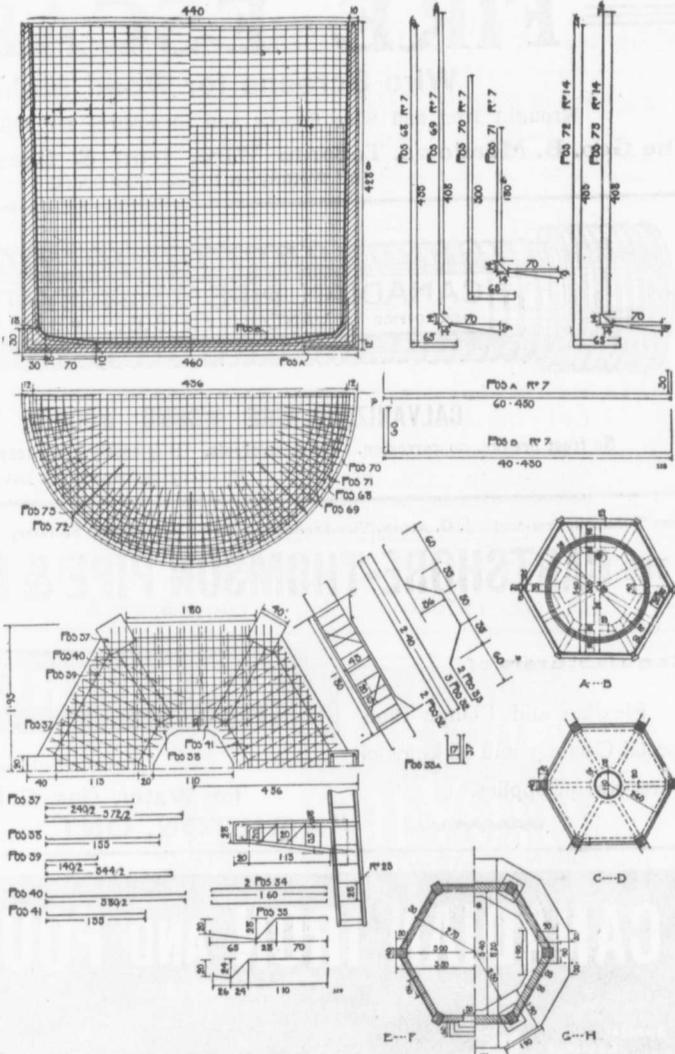


FIG. 1.—NEW REINFORCED CON-
CRETE WATER TOWER AT OBER
SCHONEWEIDE.



FIGS. 2 TO 5.—REINFORCED CONCRETE WATER TOWER AT OBER SCHONEWEIDE:
WORKING DRAWINGS.

tangular columns 24 meters in height and of 60 x 60 cm. cross section. The wall of the container is 10 cm. thick at its upper edge and 20 cm. at its junction with the bottom, which is 12 cm. thick. The stand-pipe is 1.10 metres in diameter, and has sides 5 cm. thick. The wind pressure was calculated as 150 kg./m.2, or about 30 lbs. per square foot, normal to the direction of the wind. The cost

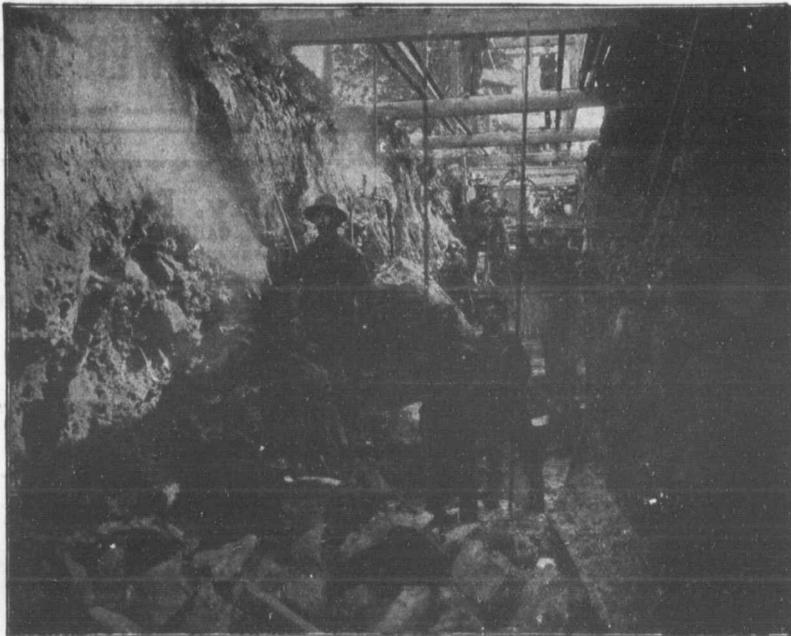
your issue of January 30th on "Tar Macadam," I notice experimental lengths have been tried in London, England, without success.

As I have not only experimented but have supervised the actual preparing and laying of many thousands of yards of tar macadam for various public and private bodies, in England, and with most satisfactory results, I may say that I thoroughly recommend its use in

contour, the same contour should be given to the formation. This in most cases is either left too flat or much too steep and altogether unsuitable for the reception of the macadam.

Last, a great percentage of people who have experimented with this class of pavement, although having shown great care in having the stone, tar, etc., properly prepared and mixed, a very

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small percentage have a knowledge of the proper and suitable ingredients required, to be used to obtain good and useful results.

Good hard furnace slag limestone, or any good hard whinstone is most suitable for the making of tar macadam, but in no cases should granite be used owing to its not having sufficient absorbent qualities.

As to cost, I am well satisfied that tar macadam of excellent wearing qualities and to withstand any change in the Canadian climate, laid in two coats in all from 5 inches to

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6 inches thick when rolled, can be laid at about \$1 per superficial yard within a distance of from 50 to 60 miles of the quarry in which the stone or slag is produced, and is quite suitable for much heavier and faster traffic than is usually found on the Thames embankment.

Yours truly,

HERBERT EDMUND HOLLOWAY.

[Mr. Holloway is prepared to answer any reasonable questions regarding tar macadam.—THE EDITOR.]

NEW COMPANIES.

The Woodstock Cold Storage Company, Limited, Woodstock, N. B., incorporated, capital \$15,000. Incorporators J. F. Tilley, A. Miles, J. A. Hayden, all of Woodstock, and others.

R. G. Haley, H. W. Gross, J. W. Vanwart, all of St. John, N. B., and others are seeking incorporation as the Hillsboro Hardwood Flooring Company, Limited.

A license has been granted the Arbor Oil Company, incorporated under laws of the State of Michigan, to transact business in the Province of Ontario. W. G. Richards, Chatham, Ont., is attorney.

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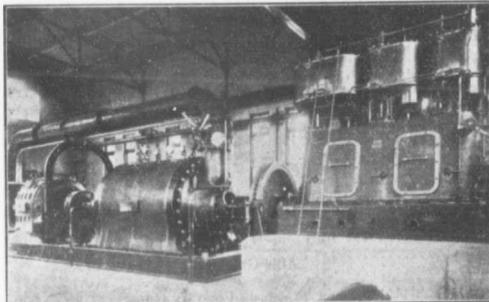


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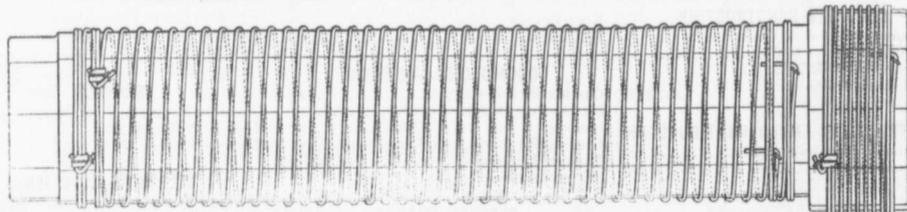
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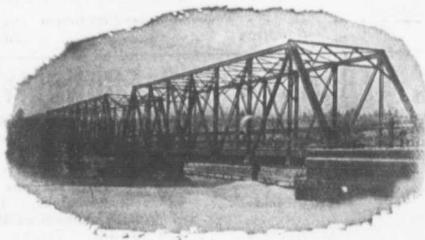
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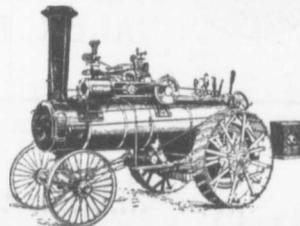
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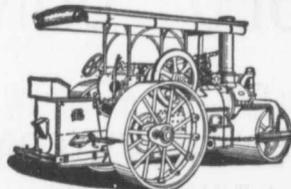
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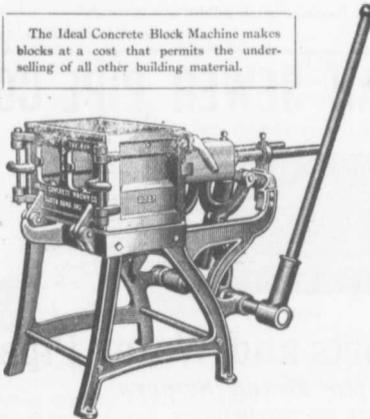
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					Initial	Final	Neat.						3 (Sand) to 1 (Cement)					
							1 dy.	7 d.	28 d.	3 mos.	1 yr.	1 dy.	7 d.	28 d.	3 mos.	1 yr.		
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*		
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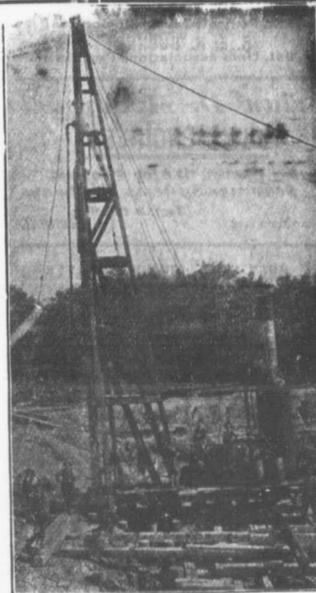
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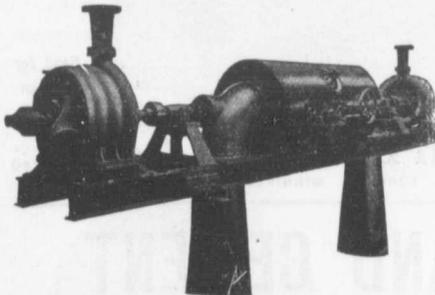
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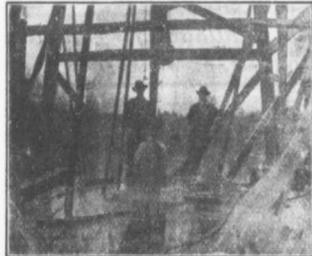
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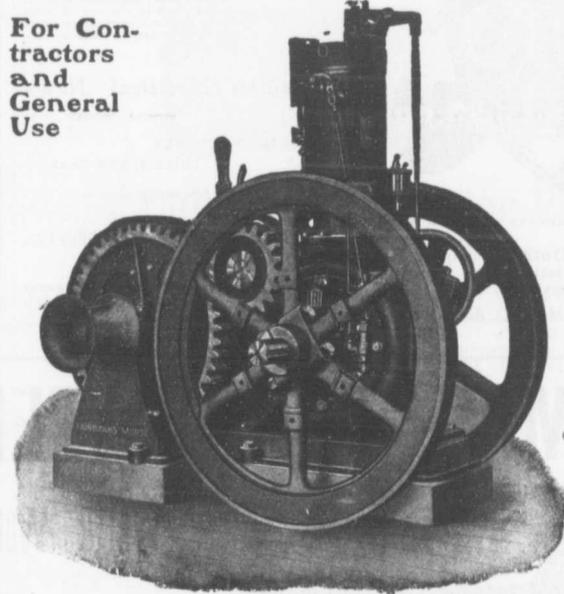
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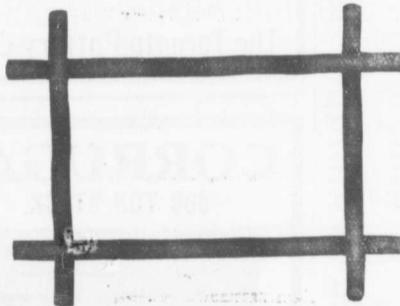
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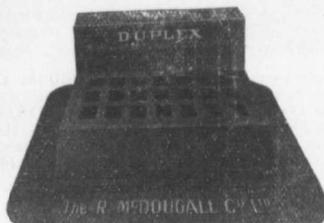
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" buff.....	35 00
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Vitrified Pavin, Brick No. 1.....	15 00
" No. 2.....	8 00
" sewer.....	9 00
Roofing Tile.....	22 00

Sackett Plaster Board, 36" x 36" in size, sold at about ac. per square foot.

LUMBER

CAR OR CARGO LOTS, F.O.B. TORONTO.

	Per M.	Pt.
1 inch No. 1 Pine cuts and better	\$49.00 to \$51.00	
1 1/2 to 2 inch No. 1 cuts and better	54.00	58.00
1 inch No. 3 Pine cuts and better	38.00	42.00
1 1/2 to 2 inch No. 3 cuts and better	41.00	45.00
1 inch Pine Dressing and better shorts.....	24.00	26.00
1 x 4, 6 and 8 Common.....	21.00	22.00
1 x 10 and 12 Common.....	22.00	25.00
1 inch mill run sidings.....	24.00	25.00
1 inch mill run.....	25.00	26.00
1 x 10 and 12 mill cuts.....	18.00	19.00
1 inch dead cut sidings.....	14.00	15.00
1 1/2 inch Flooring.....	30.00	31.00
Hemlock, 1 x 4 to 8 inch.....	17.00	18.00
2 x 4 to 8 inch, 12 to 16 feet.....	18.00	20.00
2 x 4 to 10 inch, 18 feet.....	18.00	22.00
1 1/2 inch No. 1 1/4 ft. Pine Lath.....	5.00	5.75
1 1/2 inch No. 2 1/4 ft. Lath.....	4.50	4.75
1 1/2 inch No. 1 1/4 ft. Hemlock Lath.....		4.25
XXXX Pine Shingles.....	3.25	3.50
XX Cedar Shingles.....	2.30	2.50
B.C. Shingles:		
XXXX 6 butts to 2 inch.....		3.40
XXXX 6 to 2 1/2 inch.....		3.50
XXXXX 5 to 2 inch.....		3.95

HARDWOODS—PER M. FEET CAR LOTS.

Ash, white, 1sts and 2nds, 1 to 2 inch.....	\$33.00 to \$35.00
Ash, black, 1sts and 2nds, 1 to 1 1/2 inch.....	28.00 30.00
Birch, M. R. 1 inch.....	21.00 23.00
" " 1 1/2 inch to 2.....	23.00 25.00
Basewood, Common and better, 1 to 1 1/2 inch.....	21.00 24.00
Basewood, 1 1/2 to 2 inch.....	24.00 26.00
Elm, soft, mill run, 1 to 1 1/2 in.....	22.00 24.00
Elm, rock, mill run, 1 to 1 1/2 in.....	23.00 25.00
Maple, common and better, 1 to 1 1/2 inch.....	22.00 23.00
Oak, red plain, 1sts and 2nds, 2 to 4 inch.....	44.00 46.00
Oak, white, 1sts and 2nds, 1 to 1 1/2 inch.....	42.00 44.00
Oak, quartered, 1sts and 2nds.....	70.00 80.00

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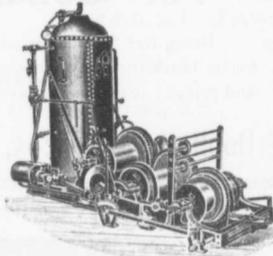
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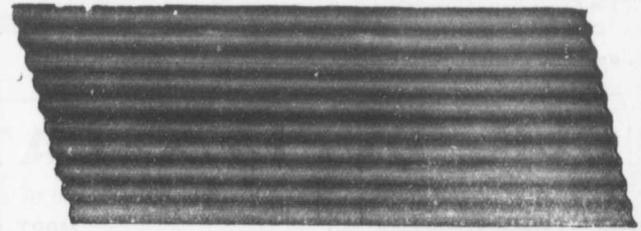
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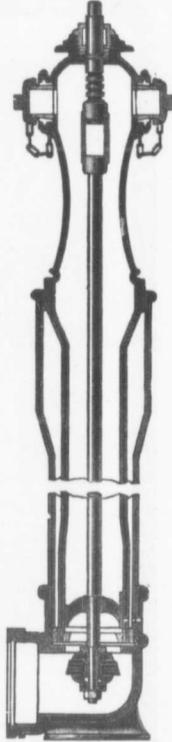
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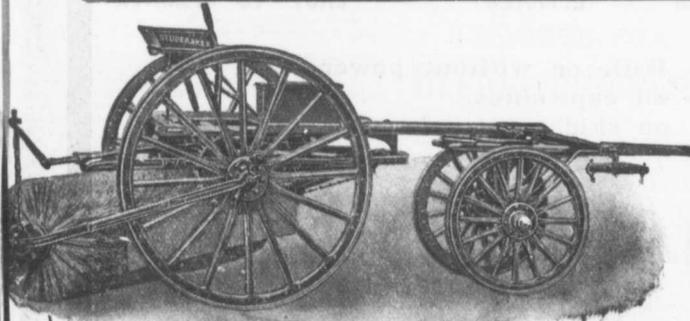
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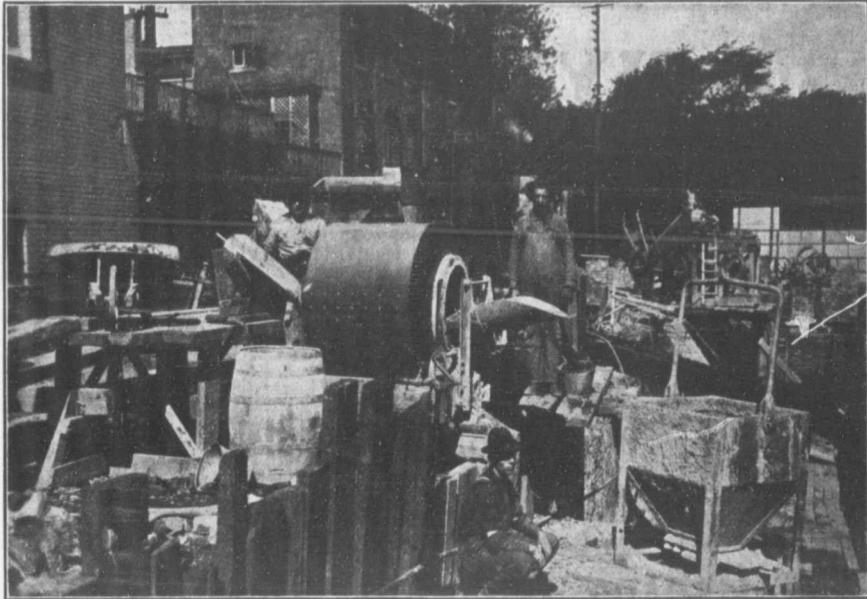
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