### 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. 18.

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No. 6

### THE CANADIAN CONTRACT RECORD

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To ensure publication of the CON-TRACT RECORD on time, advertisers are requested to strictly observe the

following regulations: Copy and cuts for change of adver-Copy and cuts for change of advertisements must reach the publication office in Toronto not later than Saturday preceding the date of publication. The copy should show the size of the cuts, if any, as sometimes there is delay in transmitting the later through the mails.

Transient advertisements for Tenders must reach the publication office.

rransient advertisements for iend-ers must reach the publication office by TEN O'CLOCK A. M. ON TUESDAY, but our patrons will confer a favor by forwarding advertisements earlier whenever possible.

### To Contractors

For Sale-Twenty Slush Scrapers, Ten Wheel crapers, and Three Rooter Ploughs, nearly new

R. A. ROGERS & CO., 49 Yonge Street Arcade, Toronto.

#### TENDERS FOR

## STEEL BRIDGES

Tenders addressed to the undersigned will be received up to neon APRIL 22ND, for the erection of one 90-ft. Span Steel Bridge over the Teeswater river, Concession 6 Greenock, also one 100-ft, span over the Teeswater river, Concession 14 Greenock, bridges to be of sufficient strength to carry concrete floors.

floors.
Also tenders per cubic yard for concrete work for abutments for said bridges.
Parties tendering for steel work to submit plans of same. Specifications for concrete work may be seen. All tenders to be accompanied by an accepted cheque for the amount of to per cent. of tender.

J. J. DONNELLY, Clerk, Township of Greenock, Pinkerton, P.O.

#### WANTED

A competent Architectural Draughtsman. Will pay high salary with permanent position to the right man.

TOWN OF THOROLD PROVINCE OF ONTARIO

WATER WORKS

Sealed tenders will be received by the Town Clerk of Thorold until 8 p. m. on

TUESDAY, APRIL 23, 1907

for the furnishing of all materials for, and constructing a System of Water Works for the Town of Thorold, comprising pipelaying, water pipes, hydraulic pumping machinery, powerhouse, water tower, sedimentation basin, etc.

Plans, specifications, etc., may be seen at the office of the Chief Engineer, tog Bay Street, Toronto, Ont., or at the office of the Town Clerk, Thorold, on and after March 30th, 1907.

No tender necessarily accepted.

D. F. MILLAR, Esc., Mayor, Thorold, Ont.

after March 30th, 1907.

No tender necessarily accepted.

D. E. MILLAR, Esq., Mayor, Thorold, Ont.

D. J. C. MUNRO, Esq., Town Clerk, Thorold, Ont.
WILLIS CHIPMANC, E... Chief Engineer, 103 Bay
Street, Toronto, Ont.

S. E. CURRY. 90 Yonge St., Teronto.

An architect with a good practice desiring to be relieved of office work is prepared to take a young and energetic man into partnership. Apply to Box 106, CONTRACT RECORD, Toronto.

#### WANTED

First-class all round Architectural Draughtsman. Apply, stating salary, ELLIS & CONNERY, 2009 Manning Chambers, Toronto.

#### WANTED

Architectural Draughtsman as assistant in genera office work. State salary desired. Apply Box 107 CONTRACT RECORD, Toronto.

# Tenders Wanted

Scaled tenders will be received up to Six o'clock, TUESDAY, ARRIL 2300, for all the trades re-quired in the erection of a Four Room Separate School Building in the town of Collingwood. Plans and specifications can be seen at the office of the business generated to the second second of the The lowest or any tender not necessarily accepted.

JOHN WILSON, Architect. Collingwood, April 2nd, 1907.

# Tenders Wanted

Tenders addressed to the undersigned will be received up to SATURDAY, APRIL 20711, for the different trades required in the erection of a four storey Bank and Office Building to be built in the town of Fort William for J. Y. & F. M. Griffin. Plans and specifications can be seen at office of N. R. Darrach, Architect, St. Thomas, Ont., also at the office of J. C. Stinson, Architect, Fort William, Ont. The lowest or any tender not necessarily accepted.

any tender not necessarily act.
N. R. DARRACH, Architect,
St. Thomas, Ont.

### CITY OF GUELPH

### Tenders for Cement

The City Clerk will receive Sealed Tenders marked "Tenders for Cement" up to 5 o'clock p.m., on FRIDAY, APRIL 12711, 1907, for the supply of up to 5,000 barrels of cement, more or less. Specification and form of tender can be had on application to the City Engineer.

The lowest or any tender not necessarily accepted.

JAMES G. LINDSAY, RICHARD MITCHELL, City Engineer. City Clerk.

# CITY OF CUELPH TENDERS FOR SEWER PIPE

The City Clerk will receive Scaled Tenders marked "Tenders for Sewer Pipe" on behalf of the Corpor-ation of the City of Guelph, up to and inclusive of THURSDAY, 18711 APRIL, 1907, until 5 c/clock p.m., for the supply of Sewer Pipe and Specials for the season's work. Specification and form of tender may be had on application to the City Engineer. The lowest or any tender not necessarily accepted.

JAMES G. LINDSAY, RICHARD MITCHELL,

Town of Maple Creek, Sask.

# TENDERS FOR

Contract "A"—All labor and materials for constructing the Supply Main, Intake Chamber and Collecting Pipes.

Contract "B"—All labor and materials for constructing and Inbitribution System.

Contract "B"—All labor and materials for constructing an Reinforced Storage and Compensating Reservoir.

Sealed Tenders will be received by the Town Clerk until 5 p. m. on SATURDAY, APRIL 20711, 1997. Tenders will be received for any of the above mentioned contracts for labor alone, or materials alone, for the total labor and material covering the three contracts.

Plans and specifications may be seen and forms of tender obtained at the office of the Chief Engineers.

The town reserves the right to reject any or all tenders.

ARTHUR BURNETT. Ess..

tenders.

ARTHUR BURNETT, Esq.,
W. R. ABBOTT, Esq.,
Mayor.

Town Clerk.

GALT & SMITH. Chief Engineers, 23 Jordan Street, Toronto.

A

### TOWN OF SIMCOE

PROVINCE OF ONTARIO

Sealed tenders will be received by the Town Clerk of Simcoe, unti 8 p. m. on

### FRIDAY, APRIL 19TH, 1907,

for the following works:

- tor the following works:
  (a) Contract "C" Steel Water Tower,
  "D" Cast Iron Pipes and Specials about
  soo tons,
  "E" Fire Hydrants, Gate Valves, etc.
  "G" Two Power Pumps,
  "H" Two Gas Engines, each 50 h. p.
  Tenders will shortly be called for pipe-laying,
  power-house, etc.

Plans, specifications, etc., may be seen at the office of the Chief Engineer, 103 Bay Street, Toronto, Ont., or at the office of the Town Clerk, Simcoe, on and after March 47th, 1997. No tender necessarily accepted.

H. A. CARTER, Esq., Mayor, Simcoe, Ont. W. C. McCALL, Esq., Town Clerk, Simcoe, Ont. WILLIS CHIPMAN, C. E., Chief Engineer, 103 Bay Street, Toronto.

### TOWN OF BRAMPTON

PROVINCE OF ONTARIO

### SEWERACE WORKS

Sealed tenders will be received by the Chairman of the Sewerage Committee until 8 p. m. on

### TUESDAY, APRIL 30TH, 1907,

for the furnishing of all materials and labor for a system of sewers for the Town of Brampton.

Plans, specifications, etc., may be seen at the office of the Chief Engineer, 103 Bay Street, Toronto, Ont., or at the Town Hall, Brampton, on and after March 30th, 1907.

No tender necessarily accepted.

W. E. MILNER, Esq., Mayor of Brampton, T. J. BLAIN, Esq., Town Clerk, Brampton, B. F. JUSTIN, Esq., Chairman Sewerage Com-mittee, Brampton

WILLIS CHIPMAN, Chief Engineer, 103 Bay Street Toronto, Ont.

### CALGARY, ALBERTA

### Architectural Competition for City Hall and Police Headquarters

Competitive plans and specifications are invited for City Hall and Police Head-quarters to be erected for the City of Calgary.

The author of the accepted design will be awarded a premium of \$550.00 and the second \$500.00.

Drawings and plans will be received not later than 12 o clock noon on the 18T DAY OF MAY NEXT, and are to be addressed to S. J. Clerks, Esq., Chairman of Public Works Committee, and endorsed "Plans for City Hall."

This competition is open to Canadian architects only.

only.

Conditions of competition stating requirements of building, and plan showing site, etc., may be had on application at the City Engineer's office, Calgary, Alberta.

R. E. SPEAKMAN, City Engin

City Engineer's Office, Calgary, March 18th, 1907

### **TENDERS**

will be received by the undersigned up to APRIL THE 19TH for the Decoration of a Church at Eden Mills. The lowest or any tender not necessarily ac-cented.

L. C. WIDEMAN, Architect, Guelph, Ont.

### TO CONTRACTORS

Eighteen miles of first-class station work, Mus-keg, and number of sub-contracts from five to ten miles each, for which we will pay the highest prices. The above are on the Tegislsaming & Northern Ontario Railway, between MacDougal Chutes (via Englehart) and the conjunction of the Grand Trunk Pacific Railway. McRae, Chandler & McNeil, MacDougal Chutes, via Englehart, Ont.

### Gity of Stratford

Scaled Tenders, addressed to H. Pauli, Chairman of Board of Works, and endorsed "Tenders for Concrete Walks," will be received up to 12 o'clock noon APRIL 24711, for the construction of approximately 70,000 square feet of concrete walk.

Specifications may be seen at the City Engineer's office, and forms of tender obtained on application. Each tender must be accompanied by a marked cheque payable to the City Treasurer for the amount called for in form of tender.

The lowest or any tender not necessarily accepted.

W. R. W. PARSONS,

City Engineer.

### CITY OF BRANTFORD TENDERS FOR Sewer Pipe, Paving Brick and Lumber

Sealed tenders, addressed to Samuel Suddaby, Esq., Chairman of the Board of Works, in care of the City Clerk, Brantford, Ont., will be received till zo o'clock noon on

THURSDAY, APRIL 18TH, 1907,

for the supply of Sewer Pipe, Paving Brick and Lumber required by the city of Brantford for 1907. Instructions to bidders and Forms of Tender may be obtained on application to the City Engineer. Each tender must be accompanied by a marked cheque payable to the order of the City Treasurer for the amount called for in Form of Tender. The lowest or any tender not necessarily accepted.

T. HARRY JONES, City Engineer. City Hall, Brantford, April 2nd, 1907.

### TOWN OF MAPLE CREEK

### DEBENTURES FOR SALE

Sealed tenders will be received up to 8 p. m. of SATURDAY. THE 2071 APRIL, 1907, for the purchase of the following debentures of the Town of Maple Creek, amounting in all to the sum of Sixty Thousand (\$60,000,000) Dollars, apread over a period of thirty years, dated from the time of issue, bearing interest at 5 per cent., each debenture bond being for the sum of Two Thousand (\$8,000,000) Dollars, and one being redeemable annually with interest, said debentures being issued for the installation of a Water Works System for said Town under By-Law No. 5 of Said Town and being secured, in addition to the liability of the Municipality of Maple Creek, thereunder by the system of waterworks to be installed.

The highest or any tender not necessarily accepted.

1. C. DEXON.

I. C. DIXON, Chairman Finance Committee, Town of Maple Creek.

### **TENDERS** FOR THE CONSTRUCTION OF A SEWER SYSTEM

Scaled tenders will be received by the undersigned up to 4 p.m. on APRIL 2071, 1907, for the construction of a Sewer System in the City of Fernie according to planns and appelications on flie in the office of the City of City

Fernie, B.C., March 15th, 1907.

#### STONE CRUSHER WANTED

Capacity about one hundred yards per day; m be in first-class order. ALEX. HARVEY, London.

### CITY OF BRANTFORD GEMENT CONGRETE SIDEWALKS

Sealed tenders, addressed to Samuel Suddaby, Esq., Chairman of the Board of Works, in care of the City Clerk, Brantford, Ont., will be received till 12 o'clock noon on

### THURSDAY, APRIL 18th.

for the construction of about 90,000 square feet of Cement Concrete Sidewalks.

Plans and specifications may be seen at the office of the City Engineer, from whom Instruction to Bidders and Forms of Tender may be received.

No tender necessarily accepted.

T. HARRY JONES,
City Hell Beautiful April at the City Engineer.

City Hall, Brantford, April 9th, 1907.

### **BRANDON WATERWORKS**

# Tenders for G. I. Pipe

Sealed tenders addressed to Mr. G. R. Coldwell, Chairman of Water Works Committee and endorsed "Tender for Pipe," will be received by the undersigned until 4 o'clock p.m. of MONDAY, MAY, 67tl, 1907, 10r supplying about 18 tons of 6 and 8 inch C.1. Pipe and Specials. Specification and torm of tender may be obtained on application to W. H. Shillinglaw, City Engineer, Brandon, Man.

Man.
The Council does not bind itself to accept the lowest or any tender.
HARRY BROWN.
City Clerk.

Brandon, Man., April 4th, 1907.

### Town of Oakville

### GONGRETE GEMENT SIDEWALKS

The Town Clerk will receive tenders, marked "Tenders for Sidewalks," up to 3 o'clock p.m. of MONDAY, APRIL 22ND, 1007, for the construction of Concrete Cement Sidewalks, with facings of 6 to 12 inches as required, all within the Town of Oakville. Tenders to state price per square foot of Sidewalk.

ations may be seen at the office of the Town Clerk. EDGAR BRAY, Town Clerk.

CONTRACTS OPEN. PUGWASH, N.S.-D. D. Woodlock w li erect a brick hotel here,

HAGUE, SASK.—G. Clark will erect a two-storey frame block 26 x 110 ft.

KEMPTVILLE, ONT .- The congregation of St. James church will erect a

new church to cost \$4,000. COBALT, ONT.—The Town Council are considering the erection of a hospital building.

ALAMEDA, SASK. - The Prairie Milling Co. will erect a grist mill here to cost \$50,000.

BROCKVILLE, ONT .- The Town Council are considering the erection of a new fire hall.

HOLDEN, ALTA.-Mr. Shipley, of Vegreville, will erect an hotel here at a cost of \$5,000.

PARIS, ONT.—The Board of Edu-cation will have plans prepared for a new school building.

SEBRINGVILLE, ONT .- The Downie Township Council have decided to purchase a stone crusher.

SIMCOE, ONT.—The Dominion Government will shortly call for tenders for erection of a public building in this town.

FERGUS, ONT.—The Town Council will probably retain a civil engineer in connection wi h their waterworks system.

HALIFAX, N. S .- The City Council are preparing a by-law to borrow \$100. with which to improve the city water

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BEAVERTON, ONT.—The Vi lage of Beaverton and Township of Thorah will jointly erect a town hall here to cost

LETHBRIDGE, ALTA.—The Rector of Knox church has left for Winnipeg to have plans prepared for a new church to cost \$20,000

STRATHCLAIR, MAN.—Barton & Holman, architects, Winnipeg, are calling for tenders for a brick veneer hotel to be erected here.

SELKIRK, MAN.—The Winniper Selkirk & Lake Winniper Railway wi shortly commence the erection of power house here.

WALKERVILLE, ONT. -The Standard Chain Co., of Pittsburg, are negotiating for the purchase of a site on which to erect a factory.

FREDERICTON, N.B.-It is understood that the Provincial Government will construct a new bridge at the mouth of the St. John river.

TILLSONBURG, ONT .- The W. H. Wilson Co. are having plans prepared for the rebuilding of their factory, which was recently damaged by fire.

WESTON, ONT .- E. R. Babington, architect, Toronto, is preparing plans for a brick and stone factory for the Sanitary Packing Co., cost \$18,000.

NEEPAWA, MAN .- A new fire hall is to be erected in this village.—The Village Council will endeavor to obtain a supply of water from Park Lake.

BRUSSELS, ONT.—The ratepayers have carried a by law authorizing the erection of a Carnegie library building. -A new fire hall is also to be erected.

KENORA, ONT .- It is probable that the ratepayers wi'l shortly vote on a law providing for the erection of a new High school building to cost \$26,000.

COLLINGWOOD, ONT .- J. Wilson, architect, will receive tenders up to April 23rd for erection of four roomed school Plans at office of architect. building.

ST. MARY'S, ONT. —By laws providing for a loan of \$6,000 to Wier & Wier and bonus of \$5,000 to Straus & Roos have been defeated by the ratepayers.

WALKERTON, ONT. - J. P. Klempp will receive tenders up to April 20th for erection of an addition to the Lutheran church. Plans at Royal Hotel.

RATHWELL, MAN .- A deputation from this town recently waited on the Provincial Parliament with reference to the construction of a waterworks system.

BATH, N.B. — A deputation will shortly wait on the New B unswick Government agitating the construction of a bridge over the St. John river at this point

PORTAGE LA PRAIRIE, MAN F. W. Clayton, City Clerk, wants tenders up to April 30th for laying of house sewer connections. Plans at City Engineer's

PORT ARTHUR, ONT .- The Ci y

Counci' are about to consider the ques tion of erecting a new police station.— Mr. McKinnon will erect a three storey block 30 x 125 feet.

ST. THOMAS, ONT .- N. R. Dararchitect, wants tenders up to April 20th for erection of brick school house in Yarmou h Township. Plans at architect's office.

PAISLEY, ONT .- It is reported that the Bruce County Council will replace the bridge on the Saugeen river at Denny's dam with a new structure to cost \$15,000.

EAST TORONTO, ONT. - The Arcadia Ledge are considering the erection of a building.—The Town Council are considering the lowering of a number of water mains

REGINA, SASK.—L. L. Kramer, secretary Catholic Separate School, District No. 13, will receive tenders up to April 17th for purchase of \$35,000 5 per cent. 30 year school debentures.

CAMPBELLFORD, ONT. - The congregation of the Methodist church have rejected the tenders received for erection of new building, and for the present will not take any steps in the matter.

ROSTHERN, SASK. - The ratepayers will shortly vote on a by-law to erect a new town hall at a cost of \$15,000.

The Union Supply Co. intend erecting a two storey brick block to cost \$18,000.

THREE RIVERS, QUE .- A by-law will shortly be submitted to the ratepayers providing for the granting of a bonus of \$75,000 to the Wabasso Cotton Co. who will establish a large plant in this

NIAGARA FALLS, ONT .- G. E. Will will erect a residence on Ryerson street.-J. Logan will erect a three storey brick block 27 x 90 feet.—W. L. Doran will erect a three storey brick factory 40

GLAMIS, ONT. - The Greenoch Township Council have decided to construct two steel bridges with concrete abutments over the Teeswater. Tenders for superstructures will be received up to April 22nd.

QUEBEC, QUE .-- W. D. Baillairge, City Engineer, wants tenders up to April 17th for supply of broken stone, macadam, stone curbing and other municipal supplies, also for construction of stone and pavements.

GUELPH, ONT. - The Dominion Government have decided to erect an add timal storey to the Guelph Armoury.

—L. C. Wideman, architect, is asking for tenders for erection of an addition to the Guelph Axle Works.

BRANTFORD, ONT.—S. Suddaby, Chairman Board of Works, will receive tenders up to April 18th for supply of sewer pipe, paving brick, special castings and lumber for the city. Information at office of City Engineer.

ORILLIA, ONT .- The Town Council have instructed the Board of Works to engage a consulting engineer to pre-pare plans for a sewerage system.—The Town Council have decided to enlarge the capacity of the reservoir.

BERLIN, ONT.—The by-law pro-viding for the purchase of the Berlin & Waterloo street railway system by the city has been carried by the ratepayers. The purchase price is \$75,200 and debentures for this amount will be issued shortly.

BELLEVILLE, ONT.-F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to April 24th for erection of drill hall in this city. Plans at office of W. R. Aylesworth, C.E., this city, and Department of Publ c Works,

ST. ANDREWS, N.B.-Application has been made to the Provincial Govern-ment by the Town Council for permission to issue debentures as follows for an electric lighting system, \$5,000 for sewers and \$20,000 for improvements to the harbor

FORT WILLIAM, ONT. Canadian Pacific Railway have intimated that they will construct a bridge over the Kaministiquia river at a cost of \$200,000. -The same company are considering the erection of a large hotel, car shops and other buildings.

TRACADIE, B. C. -Secretary Department of Public Works, Ottawa, wants tenders up to April 21st for construction of laundry bu lding and septic tank. Plans with Dr. A. C. Smith, this village, and Department of Public Works, Ottawa.

# GET

Those requiring sewer pipe should see that they get the best. It is the che pest in the end.

We manufacture the best and cheapest. It is steam pre-sed, salt glazed, vitrified, absolutely non absorbant and once laid will last forever.

THE CANADIAN SEWER PIPE CO.

TORONTO, ONT.



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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.

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Niagara Falls, - Can.

Sales Agent for Quebec: T. A. CHADBURN, 242 St. James Street, MONTREAL.

April 1

BRANDON, MAN.—The City Council are considering the issuing debentures as follows: \$4,500, fire alarm service; \$4,500, new ladder; \$2,500, chemical wagon.

VICTORIA, B. C.—W. Oliphant, of Regina, has had plans prepared for four residences to cost \$20,000.—The City Council are considering the purchase of a rock crusher and concrete mixer — Work will shortly commence on the erection of the factory at Anacortes for the Puget Sound Wood Products Co.

MACLEOD, ALTA.—Hodgson & Bates, architects, Calgary, have completed plans for the Struthers Block to be erected here. The building will be constructed with concrete blocks, 66 x 99 feet, and is estimated to cost \$30,000.—Reach & Co., who were recently burnt out, will erect a large brick and stone block on Main street.

STRATFORD, ONT.—T. J. Hepburn, architect, has prepared plans for a two-storey concrete factory 100 x 50 feet for the Anchor Wire Fence Co. The same architect, has prepared plans for an additional storey to be erected to the factory of the Avon Hosiery Co.—Merritt & Co. will erect a stave mill 44 x 70 feet and other buildings.

TORONTO JUNCTION, ONT.—
Dr. Perfect will erect a residence corner of High Park avenue and Annette street.
—The Grand Trunk Railway will erect a new station.—Building permits have been issued to F. Bemrose for four two and a half storey dwellings, to cost \$5,600, and Mr. McDonald for a two and a half storey dwelling, to cost \$2,700.

ST. JOHN, N. B.—L. P. D. Tilley will receive tenders up to April 16th for erection of new Y.M.C.A. building. Plans at office of architect, G. E. Fairweather.—It is understood that McKenzie & Mann will accept the terms offered by the New Brunswick Government to construct a railway in the St. John Valley.

GODERICH, ONT. — J. G. MacGregor, C.E., has been instructed by the Town Council to prepare plans for extension of the waterworks intake pipe. —The Town Council will call for tenders for supply of one ton of lead pipe. —The Citizens' Committee will shortly report on a plan for the construction of a waterworks system.

STRATHCONA, ALTA.—The City Engineer has recommended the purchase of a concette mixer, road roller and street sprinkler.—It is understood that the plans for the new C. P. R. station have been altered to provide for the erection of a much larger building to cost \$60,000. The roundhouse and other buildings will also be enlarged.

VANCOUVER, B. C.—The Oriental Pulp & Power Company are applying to the Provincial Government for authority to carry out the following works: Construction of a dam on Yale Lake: construction of canals, ditches, flumes and pipelines for conveyance of water; construction of several buildings; construction of wharves.—It is probable that the Canadian Pacific Railway will construct a 250 foot masonry pier.

PARRY SOUND, ONT.—It is anderstood that the Canadian Northern Railway wil erect a blacksmith shop 40 x 60 feet and car shop 40 x 120 feet, both buildings to be of reinforced concrete.—W. F. Thomson will erect a large residence on Belvidere Hill.—E. E. Armstrong, Town Clerk, wants tenders up to April 16th for excavating and filling waterworks trenches. Particulars may be had from the Waterworks Superintendent.

MONTREAL, QUE .- It is reported

that M. P. & J. T. Davis, who are to construct 150 miles of the Grand Tronk Pacific Railway from Quebec bridge eastward, will shortly let a sub contract for the construction of 70 miles of this road.—The following building permits have been issued: Montreal General Hospital, a building on East Lagauchetiere street, cost \$35,000; Emery Choquette, tenement house, City Hall avenue, cost \$6,000; S. Boucher, three houses, Visitation street, cost \$10,000.—Additions are to be made to the Hotel Dieu hospital to cost \$50,000—L. Clenent, two houses, Christopher Colombe street, cost \$6,000; alterationsto building at 472 East St. Catharine street, for Estate L. P. Belair, 20 St. James street, cost \$4,000; J. O. H. Perres, tenement house, Seigneurs street, cost \$4,000; Seminary of St. Sulpice, house, West Notre Dame street, cost \$4,000; F. Dinsereau, two houses, East Sherbrooke street, cost \$7,000; tenement house, Amherst street, cost \$2,000.—The Castle Biend Tea Co. hwe purchased property on James street on which it is understood they will erect a new building.

HAMILTON, ONT. - The Central Presbyterian church congregation are endeavoring to raise \$10,000 to cover any extras in the erection of their church any extras in the erection of their courch building.—Stewart & Witton, architects, are preparing plans for a new church building for the Herkimer street B spist church congregation.—S. H. Kent, City Clerk, will receive tenders up to April 12th for supply of sewer ripe and 1 me; pdmps and motors for proposed new sewage disposal works, and constructon of pipe sewer on Cannon street. Specifiat office of City Engineer. Munro & Mead, architects, will receive tenders up to April 13th for alterations and additions to the Hamilton Club House.—The following building permits have been issued: Thwai es & Sprage, eight frame houses, Arthur street, cost eight frame houses, Arthur street, cost \$7,200; J. P. Shepard, three brick houses, corner Maia and Park streets, cost \$4,000; Stewart & Witton, brick re idence for Dr. J. H. Mullin, corner James street and Forest avenue, cost \$4,500; brick residence for O. G. Cars-54,500; brick residence for O. G. Cars-callen, James street, cost \$4,500; brick addition to E. T. Wright & Company's factory, cost \$5,000; D. McBride, six houses, corner Catharine and Simcoe streets, cost \$11,000; S. McPhie, ten brick houses for E. D. Cahill, Emerald street, cost \$20,000; two brick stores, Main street, for Mrs. J. H. Kerner, cost \$10,000.—D. Brown has purchased property on Fairmount avenue and will erect a number of dwell ngs thereon.—The City Council have instructed Stewart & Witton, architects, to call for tenders for erection of proposed Home for Incurables to cost \$30,000.

WINNIPEG, MAN. — The City Council have necided to defer construction of the bridge over the C. P. R. tracks between Brown and Brant streets for a year. — Tenders for the purchase of \$200,000 Put lic School Board debentures has been rejected on account of the low offers submitted. — The Chairman Board of Control wants tenders up to April 30th for supply of a quantity of steel pipe and junctions. Specifications at City Engineer's office. — It is probable that the old firehall, corner of Smith street and York avenue, will be demolished and a new building erected on the site to cost \$18,000. — The City Water Commission have appointed J. H. Fuertes and A. Hazen of New York, R. S. Lee of Montreal and J. E. Schwitzer of this city, a commission to report on the following sources of obtaining a water supply for the city: the present system of artesian wells, utilization of Red River and gravity

system from Shoal Lake.—The Manitoba Raidal Railway Co. has been formed with power to construct a railway from Winnipeg to Sundar, Man., and also a branch to Lake Francis.—Barton & Holman, architects, have completed plans for residence at Fort Rouge for E. H. Harrison.—J. Woodman, architect, is calling for tenders for erection of a brick addition to the Crescent Creamtory Co.'s cold storage warehouse on Lombard street.—J. D. Atchison, architect, is preparing plans for a \$25,000 brick and stone residence for D. R. Dingwall to be erected on Rostlin road. The same architect has completed plans for a two and a half storey rough cast residence for M. F. Christie to be erected on Betourney street, Fort Rouge, to cost \$10,000.

OTTAWA, ONT. - C. G. Pepper, Chairman of Waterworks Committee, will receive tenders up to April 23rd for furnishing of street sprinkling waggons. furnishing of street sprinkling waggons. Specifications at City Engineer's office.

—The following building permits have been issued: A. L. Forbes, six brick veneered dwellings, Elgin street south, cost \$12,000; P. Lennon, three brick veneered dwellings, Percy street, cost. \$3,800; Alexander and Campbell, brick veneered dwylle house, Rochester street. veneered double house, Rochester street, cost \$4,000; J. D. Denny, brick veneered cost \$4,000 ;). D. Denny, blick venered dwelling, McLeod street, cost \$2,800; John F. Maunder, brick dwelling, Glad-stone avenue, cost \$6,000; T. D. Mc-Farlane, add.tion to factory, Sluter street, cost \$8,000; H. H. Brennan, five brick shops, Bank street, cost \$10,000; F. Wilson, five brick veneered dwellings, Preiton street, cost \$5,000; T. Deane, three brick veneered tenements, Rochester street, cost \$4,500-A large addition is t4 be made to the Collegiate Institute to cost \$100,000.—The suplementary estimates of the Dominion Government include the following appropriations: Beaverton, harbor improvements, \$3,800; \$47,100; Hamilton, harbor improvements, \$3,000; Little Current, improvements to northern channel, \$94,600; Midland, harbor improvements, \$20,000; Penetanguishene, harbor improvements, \$6,500; Port Dover, harbor improvents, revote of lapsed balance, \$4,088; dredging and blast ng at Halifax harbor, \$15,000; Intercolonial Railway ice houses, \$11,000; heating apparatus at St. John quarantine station, \$1,650; dredging in St. John harbor, \$13,000; repairing dredging vessels, \$20,000

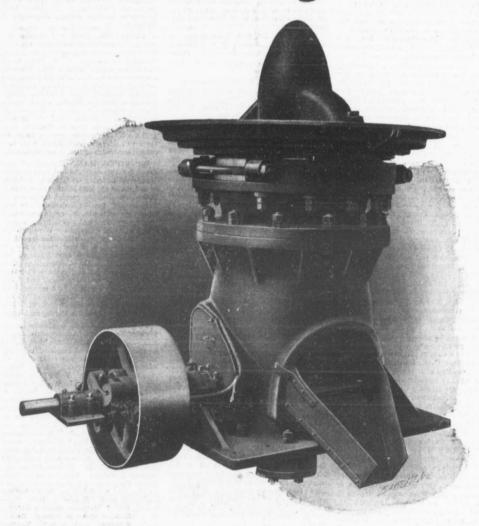
TORONTO, ON I .- W. J. Edwards, architect, is preparing plans for a residence to be erected on Crawford street for J. Harkins, cost \$5,000.—E. R. Babington, architect, is this week taking tenders for erection of brick and stone residence on Manning agence for W. residence on Manning avenue for W. Hall.—D. Richards, architect, is this week taking tenders for extensive alterations and additions to dwelling corner Grange avenue and Larch street to cost Straip, real estate agent, has negotiated the following sales: Queen street, opposite McCaul street on which the McKinnon Cloak Co. will erect a warehouse; corner of Nelson and Duncan streets, on which "Smith Bros. will erect a building; dwelling II Nelson street which McCausland Glass Co. will remodel into a warehouse; dwellings 108 to 110 Pearl street which McGregor & McIntyre will convert into a warehouse; corner Simcoe and Pearl streets on which the Minister & Miles Shoe Co. will erect a factory. The same firm have sold the following dwellings which will be remodelled: 1078 Queen street west to Mr. McPherson; Adelaide street west to Hugh Johnston 145 Simcoe street to Mr. Whitely; 184 Adelaide street west to H. B. Donovan

—The Home Bank have purchased
building corner Bloor and Bathurst

A

Di:

# Rock Crushing Plants



The demand for crushed rock is increasing rapidly for railroad ballast, Portland cement, fluxing purposes in smelting plants, "Good Roads," etc. Bulletin 1411 describes the machinery and appliances, including the Gates "K" gyratory breaker shown above, used in MODERN ROCK CRUSHING Plants. Included also are sectional plans of a large number of plants in active operation, from which intending purchasers may get valuable hints in preparing data for plans and specifications.

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TORONTO: Traders Bank Bldg. NELSON: Josephine St. VANCOUVER: 416 Seymour St.

streets which they will remodel.—The Grand Trunk Railway Co. are having plans prepared for a number of new stations to cost \$80,000.—The Canadian Central Fig. 150. General Electric Co. are about to erect a five-storey reinforced concrete office bulding corner King and Simcoe streets to cost \$400,000.—The Ci y Engineer has been instructed to proceed with the construction of an asphalt pavement on Lake street.—The Mutual Life Insurance Co. are said to have in view the erection of a large office building to cost \$1,500,-000.-H. Simpson, architect, is preparing plans for extensive additions to the Northern Hotel to cost \$10,000. The same architect is preparing plans for two stares to be erected at 769 and 771 Yonge street. A. F. Wagner, architect, is pre-paring plans for a three-storey office building to be erected on Adelaide street west for the Kennel Gazette and Poultry west for the Kennel Gazette and routry Review, to cost \$7,000. The same archi-tect will erect two dwellings on Hambley avenue.—The following building permits have been issued by the City Architect: D. McDonald, pair two and a half storey semi-detached brick dwellings, Marguerite street, cost \$4,400; Arent & Co., five pair one storey and mansard semi-detached brick veneer dwellings, cost \$15,000; W. R. Brock Co, two storey brick addition to warehouse, cost \$8,000; J. D. Wilson, two and a half storey brick dwelling, St. Clarens avenue, cost \$3,000; G. Ecles, two and a half storey brick dw lling, Montrose avenue, cost \$5,000; dw lling, Montrose avenue, cost \$5,000; J. H. Bowman, three pair two storey semi-detached brick dwelling, 43-53 Himburg avenue, cost \$12,000; K ng Bros., two storey and at ic brick dwelling, Palmerston avenue, cost \$5,000; J. Wooleer, two storey biik veneer store, corner Bartlett avenue and Hallam street, cost \$4,400; D. B. Bowerman, pair two storey and attic semi-detached brick dwell ngs, 46 48 Vermont avenue, cost \$4,600; D. B. Bowerman, two pair two storey and attic semi-detached brick 54,600; D. B. Bowerman, two pair two storey and attic semi-detached brick two storey and attic semi-detached brick dwellings, 42-44 and 50 and 52 Vermont avenue, cost \$9,200; Confederation Life Association, addition to effice building, cost \$200,000; A. G. Peacey, four storry brick fac ory, corner College and Bathurst streets, cost \$44,000; J. S. Van Camp & Son, frur detached two storey cast dwellings, Dagmar avenue, \$6,000; J. H. McKnight, five rough cost \$6,000; J. H. McKnight, five s. Aberdeen avenue, cost \$13,000; K Pickles, two storey brick laundry, W. K. Pickies, two storey of John Kay & 45 Elm street, co t \$4500; John Kay & Son, five storey blick warehouse, 36-38 Fing street west, cost \$20,000; C. Powell, three storey brick dwelling and st ble, 212 George street, cost \$14,000.

- Langley & Langley, architects, want tenders up to April 16th for erection of linge ipartment house.

### CONTRACTS AWARDED.

HALIFAX, N.S.—Erection of concrete engine house for the city: G. B. Lowe, this city, contractor.

TRURO, N.S.-Erection of an addition to Stanfield Limited's building: F. Wilson & Co., this town, contractors.

VICTORIA. B. C.—Erection of new building for Plimley Automobile Co.: Moore & Whittington, this city, con-

GODERICH, ONT.—Construction of a foot foot retaining wall for Canadian Pacific Railway: M. A. Pigott, this town, contractor.

SUDBURY, ONT.—Erection of addition to St. Joseph's hospital to cost \$35,000: O'Boyle Construction Co., Sault Ste. Marie, contractors.

VANCOUVER, B. C.—Construction of masonry wharf for Canadian Pacific Rail-way: Macdonald, Gzowski & Co., this city, contractors.

SEBRINGVILLE, ONT .- Erection of parsonage for Evangelical Association to cost \$3,000: Masonry, A. Rudolph; carpenter work, L. Krusp; stone work, D. A.

MONTREAL, QUE.—Double tracking Grand Trunk line between St. Lambert and Ste. Rosalie, a distance of 33 mi.es: McRee, Chandler & McNeil, this city, contractors.

LONDON, ONT. — Construction of sewer on Dundas street: Blight & Fielder, successful tenderers at \$6,131. Other bidders, F. Harding, \$6,475 and C. Leathorne, \$6,245

STREETSVILLE, ONT .- Erection of power house and construction of concrete dam for village: J. Winger, Carrville, Ont., contractor. J. S. Fielding, C. E., Toronto, engineer in charge.

REGINA, SASK .- Erection of the new live stock amphitheatre: Snyder Bros., this city, contractors. —Erection of the Wascana Hotel to cost \$85,000: Smith Bros. & Wilson, contractors.

MITCHELL, ONT.—A. Hill & Company have recently been awarded contracts for construction of three steel and concrete bridges, two in Township of Hullet and one in Howick Township.

TILBURY, ONT.—Erection of hotel building for G. Chalmers: Masonry, C. Clifford; carpenter work, H. Lewis; plastering. J. Wilson.—Erection of two storey brick block for T. Cox: H. Lewis, this village, contractor, this village, contractor,

GUELPH, ONT.—Erection of building for A. P. Melrose: Masonry, Johnson & Williams; carpenter work, J. A. Marshall. —Erection of building for Standard Fitting & Valve Co.: Masonry T. Matthews; carpenter work, J. Marshall; painting, H. A. Pass; tinsmithing, E. E. Rudd.

KINGSTON, ONT .- Erection of bio-KINGSTON, ONT.—Erection of biological building in connection with Queen's Medical College: Masonry, W. McCartney; carpentering, Hunter & Harold; plumbing, Elliott Bros.; painting, A. McMahon; electric wiring and fixtures, J. Halliday. The total contracts awarded amounted to \$35,756.—Supply of electric meters for city: Canadian General Electric Co, Toronto, successful tenderers.

NIAGARA FALLS, ONT. - Erection NIAGARA FALLS, ONT. — Erection of residence on Tuskip avenue for F. Burton: Henry & Lamb, this city, contractors.—Contracts for erection of residence for D. M. Walker have been let to J. Lockhart, W. Hanover, Clark & Crawford and Trelford & Pickard, all of this city.—W. S. Holman has been awarded contracts for erection of following dwellings: two, Bender street, for J. Zybach; one, St. Clair avenue, for Mrs. McGarr; one, St. Clair avenue, for Mrs. Clark; two at Welland and Morrison for O. E. Dores.

PETERBORO, ONT .- Construction of branch line from this city to Victoria Harbor for Canadian Pacific Railway; Toronto Construction Co., Toronto, con-Estimated cost \$2,000,000.

Erection of Collegiate Institute building: Erection of Collegiate Institute building: Masonry, Langford & Sheehy, \$51,318.00; plumbing, C. J. Duranceau, \$2,216.00; electric wiring, F. R. J. MacPherson, \$226.50. Erection of additions to North Ward School: Masonry, W. J. Johnston, \$16,050.00; heating, C. J. Duranceau, \$2,235.07; plumbing, C. J. Duranceau, \$1,425.00; electric wiring, Alexander & Milne, \$80.00. Miller, \$38.00.

HAMILTON, ONT. Contracts erection of new church building for Central Presbyterian congregation have been awarded as follows: G. E. Mills, brick awarded as follows: G. E. Mills, brick and mason work; Scott & Co., Toronto, carpenter work; A. Clark, plumbing and heating; Goodale & Laidlaw, painting; Brooks Sanford Co., Toronto, tiling; Hamilton Bridge Works, steel work; Electric Supply Co., electric fixtures; A. Hannaford, plastering; T. Irwin & Son, roofing; Canada Iron & Foundry Co., grill work.—Furnishing paving brick for the city: Metropolitan Brick Co., successful tenderers at \$26.25 per thousand. cessful tenderers at \$26.25 per thousand.

WINNIPEG, MAN. - Erection of resi-WINNIPEG, MAN.—Erection of residence for Alderman Pulford, cost \$20,000:
Masonry, Loveday & Darling.—Supply of 60 tons of pig lead for the city: James Robertson Co., successful tenderers at \$116.20 per ton.—Furnishing 200 arc lamps, 200 cut-outs, 2 regulating transformers, switchboard and lighting arresters for the city: Canadian Westinghouse ers for the city: Canadian Westinghouse Co., Hamilton, successful tenderers, at \$8,095.—Erection of new church for St. \$8,095.—Erection of new church for St. Giles congregation to cost \$35,000: Imperial Plumbing & Construction Co., Metallic Roofing Co., Northern Plumbing Co., J. M. Taylor, electrician, and J. A. Morley, painter, successful tenderers. C. McBean, architect —Erection of Whytewold Beach Club House: A. G. Akin, contractors. Lewett & Tuttle, architects. contractors. Jewett & Tuttle, architects.

TORONTO, ONT. - Chadwick & Beckett, architects, have recently awarded the following contracts: Erection of an addition to Sons of England building, an addition to Sons of England building, 58 Richmond street east: Masonry, G. Aldrich; carpenter work, Scholey Bros.; plumbing and heating, T. A. Riley; painting and glazing, W. M. Weeks; roofing and galvanized iron work, G. Duthie & Son; plastering, W. Webster; electric wiring, McDonald & Wilson.—Eréction of a residence on Indian Road for A. Hutchinson: Masonry, Waghorn & Walker; carpenter work, T. McKerracher; plumbing and heating. L. E. Gray. electric Walker; carpenter work, I. McKarracher; plumbing and heating, J. E. Grav; electric wiring, A. W. Kirvin; painting and glazing, E. J. Linington; roofing and galvanized iron work, W. E. Dillon; plastering, Hannah & Nelson.—Erection of an addi-Hannah & Nelson.—Erection of an addition to Rose avenue firehall: painting and glazing, J. R. Robinson, \$206; roofing and metal work, Wheeler & Bain, \$416; heating, W. J. McGuire, \$650; plumbing, W. J. McGuire, \$700; plastering, Beaver & Co., \$460; tile work, Brookes-Sanford Hardware Company, \$142.80.—Laving of bitulithic pavement, Clinton street, Mansfield to College streets: Warren Bituminous Paving Co., this city, successful'tend. ous Paving Co., this city, successful tenderers at \$3,918.



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Du strike numb the t wage Th incre ly 30

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#### THE OUTLOOK.

During the past week several strikes have been declared and a number of new demands made by the trades unions for increased wages, etc.

The carpenters are demanding increases ranging from 10% to nearly 30% over their present wage, and painters are also seeking material increases over the present scales.

In Hamilton the employers are said to have granted increases to several of the trades, while in Toronto the question is still in abeyance.

Building material continues generally active. Iron and steel are unusually active for this time of year, and the eastern mills are unable to cope with the present heavy demand.

The cement plants are operating to their full capacity, with every indication for a busy season. The demand is heavy and prices good.

The building statistics for the first three months of the year show wonderful increases in the value of permits issued. Probably the only city in Canada where the figures are below those of last year is Winni-

peg, where for the first quarter of 1906 the permits totalled \$1,150, 300, while for the same period this year the amount is \$952,504. In Vancouver the figures for the past three months are \$993,025 and those of 1906, \$773,980; Toronto figures are: 1906, \$1,918,238; 1907, \$3,071,840.

#### NOTES.

A. A. Maurice & Co., and Dagenais & Frere, contractors and builders, Montreal, have registered.

The MacLeod Builders' Supply Company has recently been established at MacLeod, Alta. The new concern will manufacture concrete blocks and bricks as well as deal in builders' supplies.

The Canadian Pacific Railway Company's offer to give the city of Winnipeg \$200,000 toward cost of obtaining an adequate supply of water for the city has been accepted by the City Council.

It seems peculiar that the 
"PRIESTMAN'S" EXCAVATOR AND DREDGER

not used in Canada as it is all over the rest of the tords, inasmuch as it will do more work with less thorr than any Excavator at Presentio use and the rst cost is less than most. For particulars write G. P. WALLINGTON,
Canadian Representative,
11 Front Street East Toront

The city of Winnipeg will in future operate the city wells by electricity. In the past the electric current available has been of insufficient voltage and therefor useless, but the city have purchased a voltage booster which will remedy this defect, and incidentally save a considerable amount of money.

A bill has been offered in the Minnesota legislature to provide buildings and machinery for crushing rock for road purposes, the intention being to utilize prison labor for the work. It will doubtless meet with opposition from some sources, as does every suggestion to make prison labor a source of profit to the state, but for the general good, the idea should be developed. The plan is that the crushed rock should be delivered free on board cars at the works, to be sent to such boards of county commissioners as shall apply for the material, to be used in the construction of permanent roads.



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#### THE AMHERSTBURG OUARRY.

The stone quarry at Amherstburg, Ont., owned and operated by the Amherstburg Quarry Company, and under the management of Mr. T. W. Bellhouse, is now the scene of increased activity. The Dominion Government sometime ago specified stone from this quarry for use at the Soo locks, and the contractors who took the stone out left the quarry in bad condition. The present company took possession about seven years ago, and have since devoted most of their efforts to clearing up. As a consequence they have sold nothing but crushed stone and building stone. They will be in a position very shortly to supply block stone, in which they expect to do a large business.

bunch of grapes surrounded by rope work, which illustrates the facility with which this stone can be worked.

The quarry is very complete and operated by the tool check system. They have a No. 6 Gates and a No. 3 McCulloch crusher, a Rand drill and Fairbanks-Morse pumps.

#### LONG-SPAN ARCHES.

The longest concrete arch yet undertaken anywhere is that of the main span of the Walnut Lane bridge in Philadelphia. Not only is it the largest of its class, but it has the third place in the list of long-span arches of all classes of masonry, so that the structure must be regarded as one of the most

John bridge near Washington has now dropped back to fifth place. It is not at all improbable, however, that this list will see some important additions before many years have elapsed, for the construction of long-span reinforced concrete arches, has not yet begun. The 230 ft. of the Gruenwald bridge, the longest concrete structure with metal reinforcement, is of insignificant length when measured by the possibilities afforded by new methods of design.

Bryant & Co., contractors, of Sherbrroke, Que., have registered their business.

Roughcast construction is becoming very popular among the



THE WATERWORKS, ATLIN, B. C.

Samples of this stone, ranging up to 10 ft. 6 in. x 3 ft. 6 in. x 2 ft. 6 in., were sent to Robertson & Company, contractors, Detroit, who reported that they planed, smoothed, and otherwise experimented with it. No difficulty was found in planing the stone, and it took a nice smooth surface. It would seem that this stone ought to be in a position to compete with the imported Indiana product.

When our representative was at the quarry he saw a large block of this stone, which had been exposed for six years to the weather, with pockets made in it to catch the water. There was no evidence of any deterioration whatever. On one side of this block is carved a

interesting engineering undertakings of to-day. The longest masonry bridge in the world is the structure Plauen, Saxony, by Mr. Carl L. Palen, who assisted in its design; it has a clear span of 295.2 ft. and its soffit is a five-centered curve with radii of 344.5, 191.9 and 98.7 ft. The second place is held by the bridge over the Petrusse River in Luxemburg, it has a span of 275.5 ft. and a rise of 101.8 ft., and is a circular curve. The third place is held by the Walnut Lane span of 233 ft. The fourth place is occupied by the Gruenwald bridge over the Isar River at Munich, which has a reinforced concrete span of 230 ft. and a rise of 42 feet. The famous Cabin smaller residences being put up in

the Winnipeg suburbs this year.

Mr J. W. Pattison, who for the past twelve years has been Town Clerk of Neepawa, Man., has resigned that position owing to illhealth.

Mr. E. Jennings has taken over the Western Canada Agency for the Warden King Co., of Montreal, and has his offices at 304 King Street, Winnipeg.

The new Winnipeg Post Office is nearing completion. The interior measuring 130 x 50 is being lined throughout with 8 ft. 5 in. slabs of Carrara marble imported direct from Italy. This work is being carried out by the Hooper Marble & Granite Company, Limited, Winnipeg.

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OUEBEC AND MONTREAL

#### BUILDING CONTRACTS.

We are informed that the year 1906 was the best for the volume of business in the history of A. B. Ormsby, Limited. The company, with factories at Toronto and Winnipeg, did a large amount of fireproof window, door and skylight work, of which they make a specialty, having plants second to none for the production of their different lines. Among the new buildings on which these goods have been installed during the past year by the Toronto factory were the Gunns, Limited, abbatoir, Toronto Junc-tion; C. R. Somerville, London; Sherwin Williams Company, Montreal; Brinton Carpet Company, Peterboro; Canada Cycle and Motor Works, Toronto Junction; and new C.P.R. shops, Toronto Junction. On the general iron work might be mentioned the Traders' Bank building, the Continental Life building, the Exhibition Process & Press Building, St. Patrick's church, a'l in Toronto, and St. Monica's church, Eglinton. The Toronto factory have in hand at the present time the new Dominion Radiator works, Ogilvie building, National Club, Carnegie Library, in Toronto, and the T. H. & B. Railway shops, Hamilton. In fireproof windows they have the contracts for the Southam building, Montreal, and Merchants' Rubber Company, Berlin, and in doors the building of the Geo. Matthews Company, Limited, Brantford.

In Winnipeg they have completed and under way the following contracts for fireproof windows, doors and skylights: Bemis Bros. Bag Co., the Aiken's block, Hudson Bay power house, McIntyre block, Cockshutt Plow Co., Dominion Radiator works, and Commercial Travellers' building. They have done a considerable trade throughout the West, the large contracts including the Telephone building, Vancouver; Revillion Bros., Edmonton, and Virtue & Company, Lethbridge.

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### INJURY TO CONCRETE BY WATER.

An unusul instance of the injury of limestone concrete by soft water was described before the Institution of Civil Engineers by M. R. Bar-The soft Thirlmere water of the Manchester supply was found to have acted on the limestone of a three-mile length of concrete aqueduct so severely that a total leakage of 1,250,000 imperial gallons per per day was taking place, although the workmanship on the conduit had been of an excellent character. In order to examine the interior aqueduct short lengths were successively shut off by timber bulk-heads, and the investigation thus made showed, in some places, holes in the invert through which the water was escaping, and all the small individual pieces of limestone Physical were much water-worn. and chemical tests showed that from 7 to 18 per cent. wastage per year occured in limestone blocks while mortar blocks gained somewhat in weight. The mortar was mixed 1: 1, using Portland cement, and its weight increased during three months' immersion in Thirlmere water at the rate of 3.57 per cent. annually, while blocks of neat cement showed an increase at the rate of 5.47 per cent. It was decided that the best way of stopping the leakage was to resurface the whole surface of the concrete in which limestone had been used with 1:1 Portland cement mortar not less than 1 in. in thickness. To do this some special devices were employed to remove the necessary surface thickness from the old concrete and to apply the new mortar facing, which were described in detail by Mr. Barnett in his paper. The mortar was put in between timber framework fixed so as to give the cement thickness and maintain the original dimensions of the culvert, which it was very de-The surface of sirable to retain. the invert was hacked off and replastered after the side walls had been done. The handling of the outside ground water became quite a problem; in all cases free vent was given to the water by the insertion of pipes of suitable platforms for the riveting gangs, a purpose which they conveniently very served.

#### ONTARIO PUBLIC WORKS ESTIMATES.

Following is a list of the more important works and amounts appropriated therefore which the Provincial Government sanctioned at the recent session: Bala bridge (to complete), \$2,000; extension to wharf at Port Carling, \$2,000; Sauble River bridge, \$4,300; Mississippi, Grant, McKenzie and Egan bridges, \$2,400; bridges on Round Lake Road, \$2,400; Goulais river bridge, \$2,800; White river bridge and approaches, Marter



# 8 TO 10



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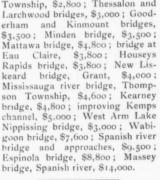
S. C. Nutter Brewery, Limited, Cornwall, Ont., incorporated, capital \$500,000. Incorporators, H. W. Prendergast, L. Gosselin, F. W. Hibbard, H. G. Temple and A. W. Powell, all of Montreal.

Lacoste Ship-Brake Company, Limited, Montreal, Que., incorporated, capital, \$45,000. Incorporators, G. M. Ducharme, S. D. Vallieres, W. C. Strachan, S. E. Stewart and P. Lacoste, all of Montreal.

Canadian Smokeless Powder Company, Limited, Sherkston, Ont., incorporated, capital \$150,-000. Directors, J. C. Hurley, J. P. Fritz and W. Wilhelm.

Goderich Wheel Rigs, Limited, Goderich, Ont., incorporated, capital \$250,000. Directors, C. S. Lloyd, G. C. Thompson and F. C. Brandt.

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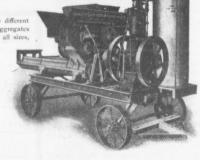


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Harricana Lumber Company, Limited, Hull, Que., incorporated, capital \$250,000. Incorporators, F. A. Gendron and H. A. Goyette of Hull, A. E. Hitchcock, of Ottawa, M. Joannis, of Maniwaki, and N. Drouin, of Quebec.

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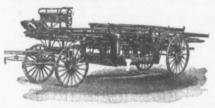
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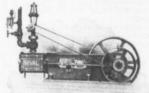


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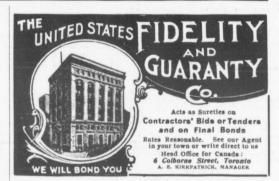
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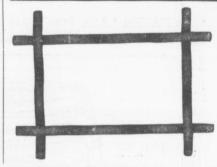
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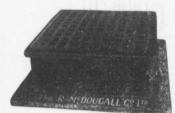
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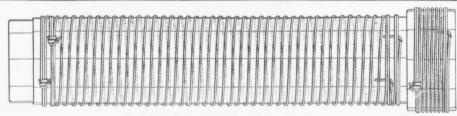
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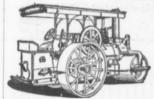
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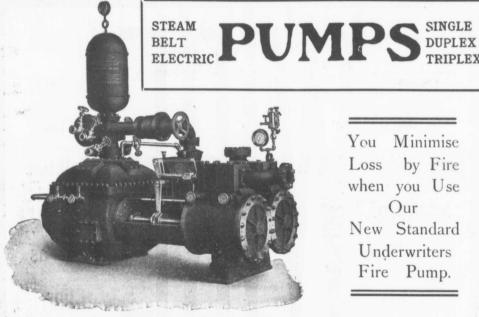
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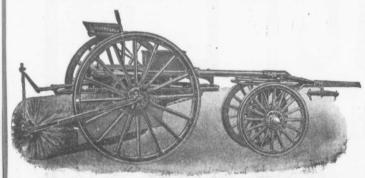
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