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.

TORONTO, MONTREAL - OCTOBER 17, 1906 - WINNIPEG, VANCOUVER

VOL. 17.

THE CANADIAN CONTRACT RECORD PUBLISHED EVERY WEDNESDAY

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Sealed Tenders Wanted

For Dunnville Water Works Debentures

Tenders will be received by the undersigned up to the save DAX OF OCTOBER, 1906, for the purchase of thirty debentures aggregating \$0,000,00 drawing 4% per cent, from the date this by-law shall take effect, viz., solt day of June, 1906, in accordance with By-law Number 6, A D 1906, of the Toward D humaville, Ont, A D 1906, of the Toward D humaville, Ont, to reject any or all tenders.

I. W. HOLMES. Clerk

Proposals For Bridge Superstructure

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of ateel superstructure for Highway Bridge over the Red River at Redwood avenue, Winnipge, will be received at the office of the undersigned up to 3,30 p. m. on

TUESDAY, NOVEMBER 20, 1906.

TUESDAY, NOVEMBER 20, 1900. Plans, specifications and forms of proposal may be obtained at the office of Col. H. N. Rut-tan, City Ragineer, Winninge, Canada. Rach bid must be accompanied by an accepted cheque or draft payable to the order of the City Tressurer, or cash deposit for a sum equal to g per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved surelies if called upon to do as.

Contract, with approximately a set of the se

City Clerk's Office, Winnipeg, September 12th,

TENDERS

will be received until TUESDAY, OCTOBER SHED, 1906, at the office of 8. H. Townsend, Architect, 15 Gerrard Street East, for the vari-ous works in the erection of two houses in Rose-dale. The lowest or any tender not necessarily accepted.

Auction Sale of Dredge

The undersigned will offer for sale at their boms, No. 69 St. James Street, Montreal, on SATURDAY 3rd NOVEMBER, 1906.

at II o'clock a.m. Dipper Dredge No. 5 belonging to the Harbour Commissioners of Montreal as she now lies damaged in the Commissioners Ship Yard alongside the Mackay Pier, in the Harbour of Montreal. The dredge may be examined upon applica-tion at the Harbour Commissioners' office, No. 57 Common Street.

MARCOTTE BROS.,

TOWN OF ARCOLA, SASKATCHEWAN **Debentures** for Sale

Scaled tenders addressed to the undersigned and marked "Tenders for Debentures," will be received up to 6 o'clock in the afternoon on the 18T DAY OF DECEMBER, 1906, for the pur-

Int Dat Or Dechamment, poor to the particulate of the chase of: . A thirty thousand dollar (§30,000) water-works debenture of the town of Arcola, repay-able in twenty (ao) equal annual instaiments and bearing interest at five and one-half (54) per cent. per assum. . A five thousand dollar debenture for the completing and equipping of town hall of the completing and equipping of town hall of the annual instaiments and bearing interest at Bw and one-half (54) per cent. per annum. Ten-ders will be received for amounts separately or complointy: No

inity, tender necessarily accepted. Further culars may be had from the secretary. J. S. BUSH, Secretary Town of Arcola, Sask

Town of Arcola, Sask.

Contractors for water towers and tanks are invited to submit tenders, plans and specifica-tions for the supplying and erecting complete at the town of Arcola, Sask.

(A) An elevated Steel Water Tank having a copacity of 60,000 imperial gallons erected on a Steel Substructure 40 feet high.
 (B) An elevated Wood Water Tank having a capacity of 60,000 gallons erected on a Steel Substructure 40 feet high.

Tenders will be received by the Secretary-Treasurer at Arcola up to MONDAY, OCTOBER 20, 1906, at 5 o'clock p.m. The lowest or any tender not necessarily ac-

Further particulars may be obtained at the office of John Galt, C. R. & M. E., Toronto.

J. S. BUSH, Secry.-Treas., Arcola. JOHN GALT. Consulting Engineer, Toronto. Church pulpit, pews and schoolroom chairs in good condition to seat 350. Apply Box 88, Con-TRACT RECORD. TOWN OF PRESTON

PEWS WANTED

No. 32

WATER WORKS PUMPING MACHINERY

Tenders will be received by the undersigned up to 6 p. m., MONDAY, NOVEMBER 37m NEXT, for the supply of Pamping Machinery for the Freston Water Works. specifications may be seen at the office of Davis & Johnson, Kugineers, Berlin and Galt. The lowest tender not necessarily accepted.

C. R. HANNING, Town Clerk

TOWN OF FORT FRANCES

PROVINCE OF ONTARIO

TENDERS FOR

WATER WORKS AND ELECTRIC LICHTING

Contract "H"-The supply F. O. B. Cars For Frances of a 1,000 gallon Under

Frances of a Loop and the for writer Fire Funny. Contract "I"--The supply, erection and build-ing in of one ro' x y" Return Tubular Boiler. "I"-The supply and erection of a xy K. W., A. C. Generator with engine direct connected, also all materials and labor necessary for the construction of the Blee-tric Light Distribution System. Sealed tenders will be received by the A

tric Light Distribution System. Sealed tenders will be received by the Town Clerk, until 8 p. m. on THURSDAY, NOVEM-BER 187, 1906. Flans aud specifications may be seen and forms of tender obtained at the office of the Town Clerk, or at the head office of the Chief Hngineer. J.C. BARR, Esq., W. H. ELLIOTT, Esq., Mayor. Town Clerk. JOHN GALT, C. E. & M. E. Chief Angineer, Toronto.

CONTRACTS OPEN.

STRATHCONA, ALTA. - Davison & Co., will erect a two-story planing mill here.

BATTLEFORD, SASK.—The Board of Works will have plans prepared for a new town hall.

LETHBRIDGE, ALTA.-It is pro-osed to erect a modern curling and skating rink here.

HULL, QUE. — The International Portland Cement Co. purpose doubling their plant in this city.

REGINA, SASK.-Chas. Hyman & Co., London, Ont., have purchased a site here for a warehouse.

ST. ANDREWS, N. B.-It is proposed to widen and extend the channel to make it more convenient for steamers.

FERGUS, ONT.—A by-law has been carried to loan the G. T. K. \$716,490 to build a spur line to quarries of J. Gow.

ELMIRA, ONT.—The Council will have an engineer report on the cost of establishing a waterworks system here.

WIARTON, ONT.—The Domino Government have decided to have the new fish hatchery constructed here, cost \$12,-000.

PONOKA, ALTA. — The Christian Mission congregation have purchased a site on Donald avenue for a new church building.

HASTINGS, ONT.—A site has been purchased and plans are being prepared for the new radiator factory being established here.

BRAMPTON, ONT.—Two by-laws have been carried to raise money for sewage system, cost \$26,000 "and for music hall ,cost \$15,000.

SAULT ST. MARIE, ONT.—The Lake Superior Corporation will build an addition of 500 feet to their ore dock at the steel plant.

SUMMERLAND, B. C.-W. A. Elliott, architect, Brandon, Man., is preparing plans for the new Baptist College to be erected here.

CAMPBELLTON, N. B.-L. T. Joudry has taken tenders for roofing, etc., of the Council Chamber building. J. A. P. Bulman, architect.

STRATFORD, ONT.—The time for receiving tenders for erection of the Normal school building has been extended until the 20th inst.

NORTH BAY, ONT.—The date for receiving tenders for erection of the Normal school building here has been extended to October 20th.

LILLYFIELD, MAN.-G.A. Mantle, c/o National Trust Co., Winnipeg, will receive tenders up to October 20th for erection of a church here.

BRANDON, MAN.—The Clty Council have decided to have plans and estimates prepared of the proposed alterations in the city hall building.

HESPELER, ONT.—A by-law will be voted on October 22nd to guarantee a loan to the Hespeler Machine & Tool Co. to establish a foundry here.

HALIFAX, N. S.—The City Council have adopted the plans for the new engine house on Morris street and tenders for its construction will soon be called.

BOISSEVAIN, MAN.—The Tortle Mountain Milling Co. are calling for tenders for the erection of a galvanized warehouse. Plans at the Union Bank.

KENORA, ONT.-C. C. Delbridge has purchased a lot, corner Main and Second streets on which he intends erecting a four-story hotel, cost \$80.000.

PORTAGE LA PRAIRIE, MAN.— The Hart-Parr Co., of Charles City, Iowa, have decided to build a factory here for the manufacture of gasoline engines.

LACHINE, QUE. — The Hussey Construction Co. have had plans prepared by Marchand & Haskell, architects, Montreal, for a new building on 21st street.

WOODSTOCK, ONT.—City Engineer Ure has reported on storm sewer system tocost \$6.500.— Subscriptions are being solicited for the proposed Y.M.C.A. building. NELSON, B. C.—The Methodist

NELSON, B. C. — The Methodist General Confederence have adopted the recommendation of the Education Committee regarding theestablishment of a college here. GRAVENHURST, ONT.—A by-law will be voted on November 9th to raise \$45,000 for establishing an hydro-electric power plant at South Falls and transmission to the town.

SYDNEY, N.S.-N. H. Morrison will receive tenders up to October 17th for erection of a church on Victoria road for St. James congregation. R. B. Whitten, architect, Ross Block.

HAVELOCK, ONT. — The School Board have decided to make an addition to the present school building, cost $\$_1$, oco.—T. Curtis intends erecting a residence on Alexander street.

SASKATOON, SASK.—An American company are negotiating for privileges for establishing a large mill here.—The Roman Catholic Church are contemplating the erection of a new hospital here.

NEW WESTMINSTER, B. C.-Eastern capitalists are considering establoshing a soap factory here.-A slite has been purchased and plans prepared for buildings for the New Westminster Pipe Co.

MOOSE JAW, SASK.—It is expected that the erection of the new C.P.R. hotel will begin in the near future.—The work of building the factory for the Saskatchewan Canning & Packing Co. will soon begin.

AMHERSTBURG, ONT.-J. H. C. Leggat, Town Clerk, has taken tenders for construction of silex walks on Maple avenue.-The Kent Canning Co. are considering the establishment of a factory here.

RAPID CITY, MAN.-W. C. Kent will receive tenders up to October 18th for erection of a public hall and lodge room for the I.O.O.F. Plans with above named and with W. A. Elliott, architect, Brandon.

OTTAWA, ONT.-F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 25th for the supply of 10,000 barrels of Portland cement (in barrels or bags) at St. Andrews, Man.

PRINCE ALBERT, SASK. — The School Board have secured a site for new Collegiate Institute building.—A bylaw is to be voted on October 26th to grant \$25,000 towards the C. N. R. right of way and station site.

EDMONTON, ALTA. — The Provncial Government have selected the site occupied by the Hudson Bay fort for the new Parliament Buildings.—A by-law has been carried to raise \$75,000 to purchasa the G. T. P. R. right of way to the city.

ARCOLA, SASK.-J. S. Bush will receive tenders up to October 22nd for erection of an elevated steel water tank, 60,000 gal. capacity on a steel superstructure, also for an elevated wood water tank on a steel superstructure. John Gait, Toronto, engineer.

MONTREAL, QUE.-Marchand & Haskell, architects, have completed plans for building for Hussey Construction Co. at Lachine, brick building too x 125 feet. - The Westmount Town Council are considering plans for construction of a new intake pipe in the St. Lawrence.-The C. P. R. carbuilding sheds at the Montreal works are to be enlarged.

WELLAND, ONT. — The Streets and Sidewalks Committee have reported on the cost of severs as follows: On Hellams avenue, from Lincoln street to Welland river, cost \$13,500; Burgar street, \$10,600; on Hellams avenue, from Lincoln street to the Government drain, \$12,000. — A by-law has been carried to grant \$5,200 for sites, sewage, etc., for the Supreme Heating Co., and the Canada Forge Co. PETERBORO. ONT.— The School Board are considering enlargement of the north ward school, cost \$20,000.— The time for receiving tenders for construction of Normal school has been extended to October 2cth.— The American Cereal Co.. purpose erecting a large four mill on the completion of the Trent canal.—A new boat for the Department of Railways and Canals will be built here next season, cost \$5,000.

QUEBEC, QUE. — The Transcontinental Railway Commission are conferring with other railway companies regarding the erection of a new union station.—New York capitalists are considering the building of a railroad in the district north of Lake St. John.—Building permits have been issued as follows: L. D. Freve, building, corner St. Oliver and Augustin streets, cost, \$2,000; C. Vezina, building, corner King and Dupont streets, cost \$1,000. HAMILTON, ONT.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 26th for additions and alterationer the red Office

HAMILTON, ONT. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 26th for additions and alterations to Post Office building, Plans at the Department and with caretaker of Post Office. — S. Kent, City Clerk, will receive tenders up to October 19th for the interior carpentry, heating, pumbing, plastering and electric wiring of new patrol station, Mary street. Plans with Stewart & Witton, architects. — The works committee has been authorized to spend 23246 on macadamizing Wellington street.

WINNIPEG, MAN.-J. H. G. Russell, architect, has taken tenders for plastering and elecric wiring for a store and apartment house for J. J. Vopni.--D. Murray is calling for tenders for radepartment of Public Works, Ottawa, Ont., will receive tenders for ra-ooo barrells of Portland cement, in bags and barrells for St. Andrew's Rapids.-The Home Bank are opening offices in the McIntyre block, which will be remodelled. --The Bank of Nova Scotia have purchased a site, corner Portage and Garry streets on which they will erect an office building to cost 5200,000.

VANCOUVER. B. C. — Plans for the extension of the Bank of Montreal building are being prepared and work will soon begin. — H. Bell Irving and Co. will receive tenders up to October 17th for grading lot and building retaining wall on Harwood street. — W. T. Whiteway, architect, has prepared plans for a large hotel, corner Abbott and [Water streets, cost \$45,000, — Building permits have been issued as follows: British Columbia Market Co., business block, Alexander street, cost \$25,000; A. St. George Hamersley, business block, Water street, cost \$45,000; John Coville, dwelling Ontario street, \$1700; Mrs. E. Sharo, dwelling, McLean drive, \$1000; W. W. Brehaut, Robinson street, three houses, \$1500 each; J. E. Wright, dwelling, Seventh avenue, \$2500; J. E. Dody son, dwelling Quebec street, 1200; E. F. Odlum, dwelling Grant street, \$1600.

Odlum, dwelling Grant street, \$1000. TORONTO, ONT.-J. P. Hynes, architect, will receive tenders up to Oc tober 31st for erection of an eight-story street frame fire-proof hotel on Yonge street for F. W. Mossop, -Tenders have been taken by the Board of Control for the laying and joining of pipes, valves, hydrants and special castings for the high pressure fire service. -The Toronto Rowing Club have applied for a site for a club house on the lagoon at Hanlan's Point.-The C. N. R. are looking for a site in the vicinity of Asbbridge's bay for four houses.-An appropriation of \$40, ooo for decorating walls, etc., of the City

October 17, 1906

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HOISTING ENGINES

We supply all types of hoists for any purpose such as

GENERAL BUILDING PILE DRIVING QUARRY WORK MINE SHAFTS LOADING AND UN-LOADING OF SHIPS, ETC., ETC.

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Hall has been applied for .- Tenders are invited for carpentry for store and dwell-ing. Plans at 64 Queen street east.—The Bank of Commerce intend building on the north-west corner King and Jarvis street. — The Dominion Bank intend erecting a building, south-east corner Sumach and King streets.—The Sover-Sumach and King streets.—The Sover-eign Bank have purchased the site, north-west corner King and George streets, for a new bank building.—The following asphalt pavements have been recommend-ed by the City Engineer: Mutual street, from Gould to Gerrard, \$3,905; McGill street, from Yonge to Mutual, \$7,265; Mutual street, from Queen to Wilton avenue, \$8,814; Christie street, from Bloor to C.P.R., \$22,156; vitrified block pavement on Frederick street, from Front to King, cost \$2,707; macadam roadway on Dupont street, from Christie 700 feet west, to cost \$3,343.—Building roadway on Dupont street, from Christie 700 feet west, to cost \$3,343.-Building permits have been issued as follows: H. Pennock, 2-story and attic brick veneer dwelling, Bellwoods avenue, near Robin-son street, cost \$2,000; F. Norfolk, 2-story brick dwelling, Rudcliffe street,cost \$2,500; W. J. Clokey, 2½-story brick dwelling, 66 Beatty avenue, cost \$4,000; W. Roberts, pair 2-story brick dwellings, Shaw street, near Bloor, cost \$4,500; Shaw street, near Bloor, cost \$4,500 Shaw street, near Bloor, cost \$4,500; Elder Carriage Co., 3:story brick and stone factory, corner Soho and Phoebe streets, cost \$0,000; Alexander Theatre Co., brick theatre, King street, near Duncan, cost \$150,000; C. Turp, 1-story iron and glass green houses, 1549 Bloo street, cost \$2,000; W. J. Cook, altera-tions to hotel, corner Queen and Esther street, cost \$4,000; L. Walch pair 2/4. streets, cost \$4,500; J.J. Walsh, pair 21/2-story stone and brick dwellings, Dowling story stone and brick dwellings, Dowling avenue, near Queen street, cost \$7,000; Mrs. M. Williams, 2½-story brick dwell-ing, 176 Gladstone avenue, cost \$2,500; Canadian Northern Railway Co., 1-story corrugated iron freight house, corner Cherry and Front streets, cost \$5,000; Sharples Separator Co, 1-story brick factory, corner Vincent and Dundas factory, corner Vincent and streets, cost \$15,000; J. J. Wa streets, cost \$15,000; J. J. Walsh, pair 2½-story brick dwellings, 1373-5 Klng street west, cost \$8,000; T. Holmes, 7 pair 2-story brick dwellings, corner How-land avenue, and Walings, hand avenue, and Wellis street, cost \$17,-land avenue, and Wellis street, cost \$17,-ooo; J. J. Walsh, 2½-story brick dwell-ing, 1377 King street west, cost \$4,000; S. B. Coon, 2½-story brick dwelling, Roxborough street, near Molson, cost \$7,000; M. Kellow, 2-story and attic brick dwelling, 181 Albay avenue, cost \$3,500; M. Leslie, 2-story brick store and dwelling, corner Bloor street and Emerdwelling, corner Bloor street and Emer-son avenue, cost \$3,500; Deeth & Sons, six 2-story brick dwellings, 2-12 Mont-rose avenue, cost \$12,000; Aura Lee Athletic Club, 2-story brick club house, corner Avenue road and Roxborough avenue, cost \$2,200; W. G. Chisholm, pair 2-story and attic brick dwellings, 2 and 4 Concord avenue, cost \$5,500; W. W.Hiltz, two pair 2-story brick dwellings, Woolfrey avenue, near Bowden street, cost \$8,000; I. Pierce, pair 2-story and cost \$8,000; J. Pierce, pair 2-story and attic brick dwellings, Havelock street, cost \$6,000; Trustees of Knox church, 1story brick church, Spadina avenue, near Harbord street, cost \$110,000; R. C. Evans, 1-story brick church, 21 Soho street, cost \$10,000; Geo. Martin, pair 2-

story brick dwellings, Dovercourt road, near Bloor street, cost \$4,000; J. W. De Laney, 2-story brick veneer dwelling, 287 Jones avenue, cost \$2,500; A. Horton, three 2-story and attic brick dwellings, 06-100 Howard street, cost \$8,500; Fred three 2-story and attic brick dwellings, 96-100 Howard street, cost \$\$,500; Fred S. Duff, pair 2¹/₂-story brick dwellings, 104-106 Beatrice street, cost \$5,500; Con-sumers' Gas Co., 1-story brick and steel coke shed, Booth avenue, cost \$50,000; T. L. Holmes, 2¹/₂-story brick dwelling, Manttene unerus cost \$50,000 Mo T. L. Holmes, 2½-story brick dwelling, Montrose avenue, cost \$2,800; D. Mc-Conkey, 2-story brick dwelling, 182 Arthur street, cost \$2,600; H. Hutson, pair 2-story and attic brick dwellings, Palmerston avenue, cost \$8,000; James Falconer, 2-story roughcast dwelling, brick front, St. Clarens avenue, near Bloor street cost \$2,000; Wrst W. H. Knox street, cost \$2,000; Mrs. W. H. Knox, three 2-story and attic frame dwellings, dwellings, Waverley road, cost \$6,000; W. O. Mc-Taggart, three pair 2-story roughcast dwellings, brick fronts, 157-159 West-moreland avenue, cost \$9,000; William Neilson, 2-story brick factory and stable, Gladstone avenue near College street, cost \$15,000; H. Hutson, 2-story detached brick store, College street, near Dela-ware avenue, cost \$3,000, T. G. Crown, 2-story brick dwelling,1208 Yonge street, cost \$3,000; O. G. Niemier, 2-story brick store and dwelling, corner Franklin and Royce avenues, cost \$3,500; George Irwin 2-story and attic brick dwelling, 48 Con-cord avenue,cost \$3,000; John H. Young, three pair 2-story brick dwellings, corner St. Albans and St. Vincent streets, cost \$9,000; A. Mackie, Sr., 2-story brick veneerdwelling, Jones avenue, cost \$1,500; Fred S. Duff, pair 2½-story brick dwell-ings, 42-44 Beatrice street, cost \$5,500.

CONTRACTS AWARDED.

WINNIPEG, MAN. - Enlarging St. ohn's Methodist Church : Joseph Nixon, contractor.

SOURIS, MAN. - Erection of new Methodist church: Souris Construction Co., \$16,400.

ST. BONIFACE, MAN .- Construction of creosote pavement : John T. Smith, Minneapolis, contractor.

BERLIN, ONT. – Passenger elevator in the building of Smyth Bros.: Parkin Elevator Co., contractors.

GUELPH, ONT.—Construction of new stand pipe at the O. A. College : Walker-ville Bridge Co., cost \$5,000,

NANAIMO, B. C .- Erection of a coragated iron warchouse for Pe o. : Chester Young, contractor. for Pearson

BEDFORD, QUE.—Kelsey system of heating in the R. C. school : James Smart Mfg. Co., Brockville, contractors.

BRANTFORD, ONT.-Freight elevat-or and building of Ham & Nott: Parkin Elevator Co., Hamilton, contractors.

SYDNEY, N.S.-Store and residence, Victoria road and Ferris street for G. Buffett: A Cameron, contractor.

TOTTENHAM, ONT.—Kelsey system of heating in the Episcopal church ; James Smart Mfg. Co., Brockville, contractors. COBOURG, ONT .- Two freight ele-

vators in the tactory of John Dick & Son, Parkin Elevator Co., Hamilton, contracts.

LONDON, ONT.—Additions to Ches-ley avenue public school: R. G. Wilson, contractor, cost \$7,475. G. Craddock, architect

METZ, ONT.—Kelsey system of warm-ing and ventilating in Presbyterian church: James Smart Mfg. Go., Brockville, contractors.

OTTAWA, ONT.-One passenger and one freight elevator for Thornton & Truman : Parkin Elevator Co., Hamilton, contractor

SOUTHAMPTON, ONT.-One pass-seer and one freiget elevator in the southAmPion, ONT.-One pass-enger and one freiget elevator in the building of S. M. Knetchel: Parkin Ele-vator Co., contractors. PORT ELGIN, ONT.- Two freight elevators in the building of Stephens, Hepner & Co.; Parkin Elevator Co., Hamilton, contractors

Hamilton, contractors.

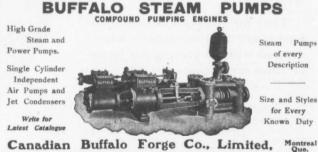
BROCKVILLE, ONT.—Kelsey system of heating in the Manual Training and Domestic Science school : James Smart Mfg. Co., Brockville, contractors.

NORTH TORONTO, ONT.-Con-struction of concrete sidewalks: Royal Artificial Stone Paving Co., contractors, 69 cents for running foot of 5 foot width.

DARTMOUTH, N.S.-150 h.p. Fair-banks Morse suction gas producer plant and 10 k.w. alternator for the lighting plant: Canadiau Fairbanks Co., Montreal, ntractor

HAMILTON, ONT -- Construction of foot bridge over G. T. R. at Emerald street : Hamilton Bridge Works Co., cost \$2,275.— Freight elevator for Canadian Axminster Carpet Co.: Parkin Elevator Co., contractors

EDMONTON, ALTA.-Erection of a theatre on Jasper avenue for A. W. Cam-



The Northern Electric and Manufacturing Co., Limited **TELEPHONE AND ELECTRICAL SUPPLIES** LINE MATERIAL . . FIRE ALARM APPARATUS

PRINCIPAL OFFICE AND FACTORY

Aqueduct Street, MONTREAL

October 17, 1906

eron: Killip & Co., contractors.—Erection of G.T.R. bridge here: May, Sharpe Construction Co., Winnipeg, contractors, cost about \$250,000.

PORT ARTHUR, ONT.—Supply of 400 tons of asphalt block for paving : Ontario Asphalt Block Co., Windsor, contractors.— Construction of extension to breakwater, (2,000 feet,) : M. J. Hogan, Montreal, contractor, cost about \$375,000.

Montreal, contractor, cost about \$37,000. ST. JOHN, N. B.-For improvements to the east end ferry house, the following tenders were recommended: Plumbing and heating, R. E. Fitzgerald, \$1,215; masonry, B. Mooney & Sons, \$1,148; painting and glazing, A. G. Staples, \$120; carpenter work, Andrew Myles, \$250. DALHOUSTE N. B. Construction of

DALHOUSIE, N. B.-Construction of waterworks : Mann, & Baxter, Campbellton, N. B., \$37,500. Other tenders were John F. Counolly, Toronto, \$43,800; Chater Bros., Monkton, \$48,400. W. E. Douglass, resident engineer; Willis Chipman, Toronto, consulting engineer.

WALKERVILLE, ONT.-Erection of business block corner Wyandotte street and Devonshire road, for Walkerville Land & Building Co.: Victor Williamson, contractor. Albert Kahn, Detroit, architect.-Erection of store on Wyandotte street for A. D. Bowlby: Victor Williamson contractor.

son contractor. WELLAND, ONT.—Erection of residence on Jane street for J. Phelps: carpenter work, Mr. Baumhaufer; masonry, Mr. Vanderburgh; plumbing, Griffiths & Grass,—Erection of fifty houses for the employees of the steel works: Welland Construction Co., contractors, cost about \$100,000.

5

MONTRFAL, QUE. — Erection of cement works at Longue Pointe for the Lakefield Portland Cement Co.; J. J. Wilson, contractor.—Erection of a threestory apartment on St. Mark street for



Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

forged from one piece of High Carbon Bar Steel without weld or rivet, solid neck and blade, tempered in oil, straight chucked handle can be replaced when broken.

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Makes 40 Different Sizes of Stone in Any Design, as well as the Specials, viz.: Water Table, Gable, Circle, Angle, Chimney, Cornice, Pier Blocks, etc.

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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 month's operation.

Manufactured and Sold by VINING BROS. M'f'g. Co. Niagara Falls, - Can.

Mrs. H. S. Phillips: woodwork, Beckham & Scott; masonry, De la Durantaye & Son; plumbing, E. Lesperance; painting, etc., C. Soane. – 55 Richmond compound consolidation engines: Locomotive & Machine Co., contractors. – Erection of new theatre for C. B. Bennett, corner St. Catherine and City Councillor streets: E. E. Horn, Architect, New York, and Lacroix & Piche. Montreal, structural engineers.

TORONTO, ONT. — One passenger and one freight elevator in the Cohen hotel: Parking Elevator Co., Hamilton, contractors...—The Property Committee of the Board of Education awarded contracts for work on schools as follows — Riverdale high school—Mason work, H. Lucas & Son, \$39,045; carpentry, Frank Armstrong, Si:1,325; plastering, Dancy Bros., \$2,100; painting, T. Barrett, \$1,140; plumbing, Fred Armstrong, \$1,000; tinsmithing and roofing, A. B. Ormsby Company, \$1,693; heat regulators, Johnston Heat Regulating Company, \$570; Rosedale school enlargement —J. Berridge, all trades, \$18,572; Pembroke street clurch, building reconstruction for manual training — Carpentering, Frank Armstrong, \$932; painting, T. Barrett, \$115; heating and ventilating, Pease Foundoy Company, \$92; plumbing, Fred Armstrong, \$92.

NOTES.

Howard Stapleford, builder, St. Catharines, Ont., has assigned to Robert Fowlie.

The Harvard and Leach Paving Company, of Toronto, have assigned to Mr. E. R. C. Clarkson.

Mr. John Galt, C. E., Toronto, left the city on the 4th inst., for an extended tour through the North West and British Columbia.

The Ideal Concrete Machinery Company, ot South Bend, Ind., have received an order from an eastern concern for concrete machinery to the value of \$250.000.

PORTABLE GRAVITY

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E. F. Dartnell

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Weight about 500

High Grade Concrete at very low

> Large capacity. Extremely simple. No power used

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cost for labor. Portable.

THE

Catalogues.

The Waterloo Knitting Mills Waterloo, Que., begun the erection of a large new mill in that town. The main building will be 210 by 70 feet, four stories high. There will be besides boiler and engine house, and chimney 110 feet high. Eric Mann, Montreal, is the architect. Proprietor, A. F. Sararia.

Mr. C. B. Smith, chairman of the Temiskaming & Northern Ontario Railway Commission, has retired in order to take charge of Winnipeg's municipal hydraulic power scheme. Mr. Smith will retain his connection with the Railway Commission as consulting engineer, and will continue a member of the Hydro-Electric Power Commission.

Macdonnell & Gzowski, a new contracting firm, have located in

the Bank of British North America Building, Vancouver B. C. The firm starts immediately on the large undertaking outlined by the Guggenheim syndicate in Cariboo consisting of the construction of a complete system of canals to provide water at all seasons for the mining properties being developed in the district.

W. Kitchen, of Kingsclear H. Kitchen and I. E. Burden, of Montague Beach, P. E. Island, W. Kitchen and J. H. Barry, K. C., of Fredericton, N. B., have given notice in the Royal Gazette that they will apply for incorporation as the Willard Kitchen Company, Limited. The object is to acquire the plant and continue the contracting business of Willard Kitchen. The amount of the capital stock is to be \$150,000,

New, Re-built and Second-hand TRACTION and PORTABLE ENGINES (Simple and Compound For drawing and driving Rock Crushers, Road Graders, Coment Mixers, Grinders, Threshers, Plows, Saw Mills and miscellaneous uses. Quality the Best All Powers Correspondence Solicited Sawyer & Massey Co., Ltd. Road Machinery Department Hamilton Canada AND CEMENT SEWER PIPES FIRE BRICKS FIRE CLAY ALEX. BREMNER 50 Bleury Street, MONTREAL NOTICE TO CONTRACTORS R 2 We carry in stock large quantities of well matured **Reinforced Concrete Pipe** In 6, 8, 10, 12, 15, 18, 21, 24, 27, 30 and 36 inch; also an Egg shape Sewer Pipe 2 ft. x 3 ft. This pipe is Frost Proof and practically indistructible. THE DOMINION CONCRETE CO., LIMITED, KEMPTVILLE, ONT. **KERR'S** WATERWORKS VALVES Are tested to 300 pounds hydraulic pressure before being stocked. They are' of good substantial weight and design, and can be relied upon. Write for catalogue, and we will tell you more about them. THE KERR ENGINE CO., LIMITED

October 17, 1906

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8	ANADIAN CONTRACT RECORD	October 17, 1906
JOHN S. FIELDIX Mem. Soc. C. E. West Penn. '87 Mem. Rugineer's Club, Toronto CONSULTING ENGINEER		IENT
DAMS Room 2, 15 Toronto Street, TORONTO, (THE OWEN SOUND PORTLAND CEMENT	COMPANY, LIMITED
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CLASSIFIED INDEX OF ADVERTISERS

	ACCIDEN	IT INSUR/	ANCE	Pa	ige
Ontario	Accident	Insurance	Co		19

BLUE PRINTS

Electric Blue Print Co..... ... 7

BLOWERS

Buffalo Førge Co.....

BRIDCES (CONCRETE)

Steel Concrete Co..... 15

BRIDCES (STEEL)

Canadian Bridge Co	1
Canada Foundry Co	2
Dominion Bridge Co	1
Jenks & Dresser	1
Phoenix Bridge and Iron Works	1

CEMENT

Alsen Portland Cement Co	9
Bremner, Alex	6
Currie & Co., W. & F. P	13
DeSala C. I	7
Gray & Bruce Portland Cement Co	21
Hyde & Co., F	22
Hanover Portland Cement Co	10
Lakefield Portland Cement Co	14
McNally & Co., W	1
Morrison & Co., T. A	12
Morgan, T. M	15
National Portland Cement Co	20
Owen Sound Portland Cement Co	- 1
Ontario Portland Cement Co	16
Raven Lake Portland Cement Co	13
Stinson-Reeb Builders' Supply Co	17
Toronto Pottery Co	22
Thorn Cement Co	14

CONCRETE MIXERS AND MACHINERY

Dartnell, E. F	. 1
Hopkins & Co., F. H	. 2
Ideal Concrete Machinery Co	. 1
Mussen & Co., W. H. C	
Morrison & Co., T. A	. 1
Toronto Pressed Steel Co	•
Vining Bros. Mfg. Co	

CONTRACTORS' PLANT

				•				*				1	•	*	22
						ł	*	,	*	•	•	*	•	*	
			*				,			•	•	•	÷		24
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1	C	0	•	•		•		•				•			7
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CONCRETE CONSTRUCTION

Ambursen Hyd	Iraulic	Co	ons	11	r u	1C	u	0	n	1	v	0	۴.
Loignon, A. &	E					*							*
Steel Concrete	Co				x							•	*

CONTRACTORS' EMPLOYMENT BUREAUS

15

Bryans	& Co.,	E.	E	 	7
Zarossi,	Banco			 	15

CORRUCATED IRON

Metallic Roofing Co..... 5 Pedlar People... 22

CRUSHERS (STONE AND ROCK)

Allis-Chalmers-H	Bull	och	ς.			 					11
Beatty & Sons, 1	М.,								•		22
Dartnell, E. F.											6
Hopkins & Co.,	F.	Η.								÷	24
Mussen & Co.,	W.	H.		C							3
Morrison & Co.,	Т.	A.									13

DEBENTURES

DRILLING CONTRACTORS Page

Harvey, J..... 13 Peat & Sons, James..... 14

ENCINEERS AND CONTRACTORS British Columbia General Contract Co. 23 Canadian White Co..... 20

ENCINEERS (CIYIL) Archibald, George H.

Archibald, George H I
Chipman, Willis I
Connor, Clarke & Monds 1
Davidson, Shirley 2
Davis, Johnston 1
Fielding, John S
Galt, John :
Jackson, John H I
Lea & Coffin 1
Leofred, A 2
McConnell, Brian D I
McDougall & McRae
Parke, Roderick J 1
Scott, Wm. Fry 2
Simpson, T. T 2

ENGINEERS (MECHANICAL)

Farmer, John T..... 21 Galt, John 7

ENCINES

Cameron & Co., Hugh 16 Sawyer & Massey Co...... 6

ELECTRICAL APPARATUS AND SUPPLIES

Allis-Chalmers-Bullock 11 Drummond, McCall & Co 14 Northern Electric & Mfg. Co..... 4

FIRE APPARATUS

HOISTING MACHINERY

 HUISTING
 HUISTING

 Allis-Chalmers-Bullock
 11

 Beatty & Sons, M.
 22

 Hood & Sons, Wm
 19

 Hopkins & Co., F. H.
 24

 Mussen & Co., V. H. C.
 3

HYDRANTS

Co. 9 Kerr Engine Co. 8 Montreal Pipe Foundry Co. 9 McDougall Co., R. 21

LOCOMOTIVES AND RAILS

Gartshore, John J..... 19 Locomotive & Machine Co...... 15 Sessenwein Bros..... 7

PILE DRIVING

PAVING AND PAVING MATERIALS

PIPE (WOODEN)

PIPE (CONCRETE) Page Dominion Concrete Co...

PUMPS AND PUMPING MACHINERY

Allis-Chalmers-Bullock
Canadian Buffalo Forge Co
Canadian Fairbanks Co
Canada Foundry Co
Drummond, McCall & Co
McDougall Caledonian Iron Works
Co., John

PIPE (CAST IRON)

Canada Gartsho															
Co															
Gaudry	82	Co	., I		H.										
Montrea	1 P	ipe	Fo	un	dr	y	6	20	١.						

ROAD MACHINERY

Cameron & Co., Hugh	16
Climax Road Machine Co	7
Heaman, George	
Morrison & Co., T. A	13
Sawyer & Massey Co	6

ROPE

Allan, Wh	yte &	Co.					,			21
Greening	Wire	Co.,	В.				•			21

SECURITY BONDS

United States Fidelity & Guaranty Co. 21

STEEL BARS (CORRUCATED)

Corrugated Steel Bar Co. of Canada. 16

STRUCTURAL IRON AND STEEL

Canada Foundry	Co.												*	23
Dominion Bridge	Co.													15
Jenks & Dresser														16
Locomotive & Ma	chi	n	e	1	C	0.								15
McGregor & Mc	Inty	1	e											16
Phoenix Bridge 8	k Ire	31	n	V	V	01	-1	\$1	8,	.,	 .,	 		15

STONE

SHOVELS (STEAM)

SEWER PIPE

Bremner, Alex	6
Canadian Sewer Pipe Co	17
	6
Dominion Sewer Pipe Co	14
Toronto Pottery Co	22

SHOVELS

Canadian Shovel & Tool Co...

TELEPHONE SUPPLIES Northern Electric & Mfg. Co......

TANKS AND STAND PIPES

Canada Foundry Co..... 23 Ontario Wind Engine & Pump Co.... 17

VALVES



ge 6

23 14

16

October 17, 1906

PAVEMENT CONSTRUCTION IN TORONTO*

ASPHALT PAVEMENTS.

During the year 1905 five heavy asphalt pavements and twenty-five light asphalt pavements were constructed. The pavements laid aggregate 17,000 square yards of heavy asphalt, and 54,200 square yards of light asphalt, and a total length of 5.404 miles. The total length of asphalt pavements in the City is now 56.20 miles, or 20.36 per cent. of the total length of paved and unpaved streets in the City.

Last year a table was compiled showing the maximum, minimum asphalt when compared with the prices prevailing in 1904.

The repairing of asphalt pavements, upon which the terms of guarantee have expired, was let by tender, the prices for the year being 89 cents and 82 cents for the heavy and light asphalt surfaces respectively, and \$5.34 per cubic yard for concrete foundation. There was expended during the year the sum of \$22,600 for asphalt repairs.

Concrete curbing has entirely superseded stone curbing in the construction of asphalt pavements, 41,- allowance aggregated 2.118 miles, as compared with 1.474 miles constructed in 1904. Compared as to area, 41,656 square yards of brick pavement of all kinds was constructed in 1905, and 27,946 square yards in 1904. Of this total area, 10,415 square yards was laid with Canadian vitrified brick, and 31,241 square yards with American vitrified block. In last year's Annual Report I anticipated this preponderance of the American product, and submit that the result is quite justifiable, when the price and quality are



PAVMENT ON WITHROW AVENUE, TORONTO.

and average price of asphalt pavements, from 1901 to 1904 inclusive. Below is found this table brought to date by the addition of the prices that prevailed during 1905:

	Maxi- mum.	Mini- mum,	Aver- age.
1901	Heavy . \$2.70	\$2.30	\$2.546/10
6.5	Light 2.23	1,82	2.04 1/2
	Heavy. 2.60	2.45	2.54
4.6	Light 2.15	1.66	2.01 1/4
	Heavy. 2.50	2.14	2.21 3/5
4.6	Light 1.88	1.60	1.70
*904	Heavy. 2.30	2.15	2.226/10
**	Light., 1.83	1.53	1.65 .
1905	Heavy. 2.19	1.99	2.05
54	Light 1.66	1.36	1.51
This	s shows a dr	op of 8	B per cent.

in the contract cost of heavy asphalt, and 8½ per cent. in that of light *Prom the Annual Report of the City Engineer for 1985. 253 lineal feet of combined concrete curb and gutter, and 7,500 lineal feet of concrete gutter only having been laid during the year 1905. The 5-in. concrete curb is found to be too light a construction to give the necessary stability to the pavement, and it is proposed in future to favor more largely the use of 6-in.curbing. This will add very little to the cost, and much to the appearance and character of the work.

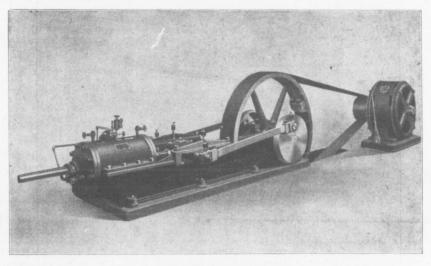
BRIC PAVEMENTS.

In 1905 brick pavements on streets aggregate 1.633 miles, as compared with 1.402 miles constructed in 1904, and the construction and reconstruction of track compared. At the lowest ruling prices, the Canadian brick required to lay one square yard of pavement cost 94¼ "cents, and the American blocks required to lay a similar area cost 97 cents, while the quality of the product, as determined by the product, as determined by the standard abrasion test after 1,000 revolutions and 2,000 revolutions, is represented by the ratio :

To obtain these results, 110 samples of Canadian brick were tested, and 160 samples of American block.

October 17, 1906

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One of our $12\frac{14}{3} \times 18$ "Ingersoll" Air Compressors driven by one of our 50 h.p. Induction Motors and supplying power for a western quarry. Catalogue No. 75 describes and illustrates the different classes of our Air Compressors and the uses to which they are best adapted.

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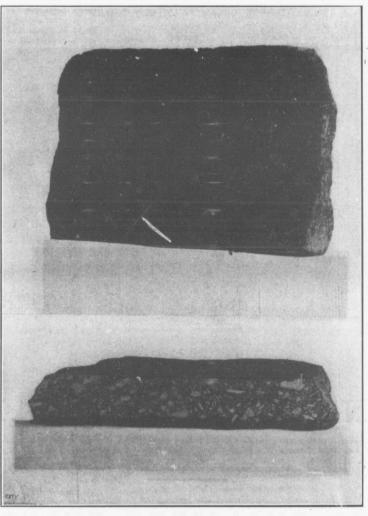
The track allowance construction during the year shows .924 miles of new vitrified block construction, 1.194 miles of vitrified block reconstruction, and .600 miles of scoria block reconstruction, or a total of 2.718 miles of all kinds, as compared with 2.485 miles constructed in 1904.

12

In constructing brick pavements during the year 13,690 lineal feet of blocks in one case being blinded with gravel, and the other case with heated gravel saturated with a mixture of one part of coal tar to two parts of pitch, added at a temperature of 275 degrees Fahrenheit. Half a mile of this class of pavement was constructed.

In connection with cedar block paving, 2,216 lineal feet of concrete curb, 5,513 lineal feet of stone curb

teed was extended from one year to three years, and it was predicted that the changes made would result in a pavement on which this period could be extended to five years. In the light of last year's experience, it is now considered safe to give this prediction effect, and accordingly specifications governing the construction of tar macadam pavements will hereafter provide



concrete curb, and 1,788 lineal feet of stone curb was placed.

CEDAR BLOCK PAVEMENTS. It is gratifying to be able to note that the increase in the mileage of cedar block pavements on sand is very small ; .630 miles, as compared with .511 miles laid in 1904, while in 1900, 7.842 miles of this class of pavement was laid. On sections of two streets, cedar blocks on a concrete foundation was the class of pavement constructed, the

TAR MACADAM.

and 3,361 lineal feet of wooden for a f curb was constructed.

Last year certain changes were proposed, and during the past year carried into effect, whereby it was hoped that the life of tar macadam pavements might be prolonged. It was sought to select such sizes of broken stone for the wearing surface as would contain the least possible percentage of voids and yet permit ot reasonable cheap construction. The period of maintenance guaran-

for a five-year guarantee.

Great difficulty was experienced in obtaining tar and pitch of a uniform consistency. It was found to vary greatly, even in small shipments, so much so as to require constant watchfulness, and frequent changes in the proportions used. To obviate this difficulty, manufacturers of refined tar were approached with a view to the production of a product that had the required consistency without the necessity of

October 17, 1906



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mixing tar and pitch to obtain such, with its attendant complicated laboratory tests, during the construction of the work. Two manufactur-ers have assured us that this is quite possible, and are prepared to supply all our requirements at an advance in cost on semi-refined tar of only the cost of package. The length of tar macadam pave-

14

ments constructed during 1905 was 1.257, as compared with .920 miles constructed during 1904.

Included in the above mileage is a pavement which was called bituminous macadam. This is merely a more expensive tar macadam, carrying a ten-year guarantee for maintenance. Its construction was in all respects similar to that of tar macadam, except that the found-ation course was blinded with finely broken stone and sprinkled with a mixture of tar and pitch similar to that used in the wearing surface, and greater care was taken in the selection and proportions of the various sizes of stone. For the wearing surface, of the mineral aggregate :

30 per cent. was such as would pass a No. 40 sieve.

(2) 12 per cent. was such as would be held on a No. 40 sieve, and pass a No. 8 sieve.

10 per cent. was such as (3) would be held on a No. 8 sieve, and pass a No. 4 sieve.

18 per cent. was such as (4)would be held on a No. 4 sieve, and pass a 1/2-in. sieve.

(5) 30 per cent. was such as would be held on a $\frac{1}{2}$ -inch sieve, and pass a 3/4-sieve. Combined concrete curb

and gutter, similar to that used in the construction of asphalt pavements, was tried for the first time last year in connection with tar macadam pavements, and was found satis-factory. This form of gutter will hereafter largely replace brick which has heretofore been used. While the extremely low prices prevail for asphalt pavement, which carries a ten-year guarantee, the construction of tar macadam will be discouraged as much as possible. In connection with tar macadam

pavement, there was constructed during the year 1905, 6,048 lineal feet of combined concrete curb and gutter, 910 lineal feet of stone curb, and 1,785 lineal feet of concrete curb only.

NEW COMPANIES.

St. John Pulp & Paper Company, Limited, St. John, N. B., incorporated, captital \$275,000. Directors, G. McAvity and H. N. Stetson, St. John, N. B.; G. C. Cutler, and F. B. Cutler, Boston, Mass., and J. L. Cutler, New York.

Imperial Realty Company, Limited, Ottawa, Ont., incorporated, capital \$1,000,000, to develop water power, erect buildings, etc. Pro-moters, D. M. Finnie, J. W. Woods and G. Osler, Ottawa; B. Rosa-





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Prompt shipments from mill or stock at Fort William and Port Arthur.

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Works : KIRKFIELD, ONT.

mond, Almonte, Ont., and S. Ogilvie, Montreal.

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Western Estates, Limited, Toronto, incorporated, capital \$140,000. Promoters, F. H. Richardson, W. H. Moore, H. C. Moore, C. Wilson and J. McArthur.

Manson Manufacturing Company, Limited, Thorold, Ont., incorporated, capital \$100,000, to manufacture steam engines, boilers, etc. Direct-ors, G. J. Manson, St. Catharines ; S. E. Craig, Snelgrove; R. L. Murray, Paris, and A. G. Gunn, Durham.

Welland Electric Light Company, Limited, Welland, Ont., incorporated, capital \$175,000. Directors, W. E. Phin, M. McAuliff, W. M. German, R. Cooper, J. H. Crow and C. Henderson.

International Cobalt & Silver Mining Company, Limited, Sault St. Marie, Ont., incorporated, capital \$500,000. Directors, G. Kemp, D. H. Jacobi, C. Frank, S. Frank, Niebuhr, Sault Ste. Marie, Mich.

Pittsburgh Coal Company, Limited, Port Arthur, Ont., incorporated, capital \$100,000. Directors, J. S. Lovell, R. Gowans, E. W. McNeill, W. F. Ralph and W. Gow, all of Toronto.

Coats Manufacturing Company of Canada, Limited, Toronto, Ont., incorporated, capital \$1,000,000. Directors, J. S. Lovell, W. Bain, R. Gowans, E. W. McNeill and others.

Canada Steam Pump & Machine Company, Limited, Toronto, incorporated, capital \$40,000. Directors, A. H. Eby, T. O. Bard, and A. A. Eby.

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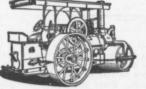
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October 17, 1906



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Canada Forge Company, Limited, Welland, Ont., incorporated, capital \$100,000. Directors, T. J. Dillon, C. Burgess and J. L. Emerson, all of Titusville, Pa.

Lehigh Portland Cement Company, Limited, Thurlow township, incorporated, capital \$1,000,000. Directors, H. C. Trexler, E. M. Young, C. A. Matcham and G. G. Sykes, Allantown, Pa., and A. W. Thorn, Buffalo.

Canadian Gas Powder & Launches, Limited, Toronto, incorporated, capital \$500,000. Directors, J. Laishley, S. F. McKinnon, D. J. McKinnon, L. C. Laishley, R. Hunter and others.

Detroit & Algoma Silver Mining Company, Limited, Windsor, Ont., incorporated, capital \$100,000. Directors, A. W. Wright, W. H. Morris, and L. J. Wohnlick all of Detroit.

Temiskaming Hematite Iron Company, Limited, Toronto, incorporated, capital \$42,000. Directors, C. G. Knott, G. H. Smith, O. M. Hodson, G. Stevenson, Toronto, and W. H. Hodson, Lockport, N. Y., and J. E. Clark, Orillia, Ont. Ideal Cylinder Snow Plow Com-

Ideal Cylinder Snow Plow Company, Toronto, incorporated, capital \$100,000. Directors, E. D. Webber, and H. H. Hough, Wiarton, Ont.; G. Currie, and M. M. Heiles, Atwood, Ont., and A. G. Mackay, Owen Sound.

Ideal Concrete Machinery Company, Limited, London, Ont., incorporated, capital\$75,000. Directors, F.A. Borst, C.B. Pulfer, and M. Wetzstein, South Bend, Ind.; J. M. McEvoy, and F. M. Letch, London

LAYING A SUBMERGED WATER MAIN.

A 15 in. water main was recently laid under the Ouse river at York, England, from a heavy cableway strung across the stream. A series of locks downstream from the pipe crossing maintains a somewhat uniform depth of water at low flows in the river, the low water depth being 9 feet at the crossing. As the river was to be lowered somewhat for a week by opening the locks, the work was planned to carry on the most difficult portions of it while the water was low. trench was first dug across the river, as cofferdams could not be built. Mr. W. H. Humphreys, water engineer of York, in describing the work before the British Association of Water Engineers, said it would have been desirable to have secured a greater depth in this trench, but the nature of the river bottom and the difficulty of maintaining the dredge on the line of the pipe trench owing to floods prevented the completion of the additional excavation prior to the time for lowering the river.

Hub and spigot cast-iron pipe in 12 foot 1 inch lengths, with a wrought iron hoop shrunk on at the sockets, was used. The pipe weighed 1,850 lbs. per length, and was double coated with Angus Smith solution. Five ball-andsocket joints, made perfectly tight at an angle under a pressure of 300 lbs., were required to permit the main to assume the profile of the river bed when laid.

The cableway was anchored to two piles on each bank of the stream, with a third pile at each anchorage to guide it. At the time the laying was done the width of the river had been reduced to 100 feet, so that eight 12 foot lengths of pipe with the ball-and-socket joints were enough to cross it. The alternate joints were made with ball and socket. A lead joint between two lengths of pipe was first made and half of a ball-and-socket joint attached to each end of this two-length section. This section was then swung in chains rove in blocks on the cableway and hauled across the river. It was then lowered



18



Two Worthington 3-Stage Turbine and McCormack Water Wheels, built for Port Arthur, Ont., Water Works, 1440 gal. per minute against 350 ft. head.

Boilers, (Return Tube and Water Tube,) Tanks, Penstocks, Mill Machinery.

Builders in Canada of "WORTHINGTON" TURBINE PUMPS

The John McDougall Caledonian Iron Works Co., Astimates Cheerfully Furnished Montreal.

nearly to position on the bottom of the river between two barges held 8 feet apart, one upstream and one downstream from the trench, and its weight transferred to these A second two-length barges. barges. A second two-length section was then made, and its weight also transferred to the barges after the ball-and-socket joint between the two sections had A third two-length been made. section after being run out and lowered was suspended on the cableway while the fourth and last two-length section was held by a derrick on the bank. When the joints had been inspected, the trench was cleaned out and the eight joined lengths lowered simultaneously with chains in the blocks from which they were supported. One of the eightlength sections was held above the water by a cable and the other by a derrick until connections could be made with the pipe line on each side The ball and socket of the river. joints had to be lowered about 9 in. afterward by a diver.

BUILDING IN GUELPH.

Building activities in Guelph this year are far in advance of any period in the history of the city. The aggregate value of public buildings, factories, etc., amounts to \$249,000, and of residences, etc., \$245,700, making a total of \$494,-700. There has been a great improvement in the character of the houses erected. The estimated cost ranges from \$1,500 to \$5,000. Very few frame or plastered buildings have been erected. Pressed brick has been much used, displacing ordinary brick and even stone. Cement and artificial stone have rivalled Guelph stone for finishing buildings.

In connection with the Ontario Agricultural College a Mechanical building has been erected. It is a two story and basement brick structure 60 by 160 feet, costing \$40,000. A two story white brick addition has been built to the Chemical building at a cost of \$12,-000. A new series of green houses has been erected, costing \$5,000.

The Crowe Iron Works have erected a modern factory building, including moulding shop, power building and finishing room, the cost of which is estimated at \$28,ooo. W. A. Mahoney was the architect of this work. The same architect also designed the alterations of the Toyell block for the Royal Bank offices, the cost being \$5,000. Mr. Mahoney planned the additions to the Massey-Harris Co. building on West Market square for H. N. Norrish, the estimated cost being \$9,000. The new Homewood Sanitarium

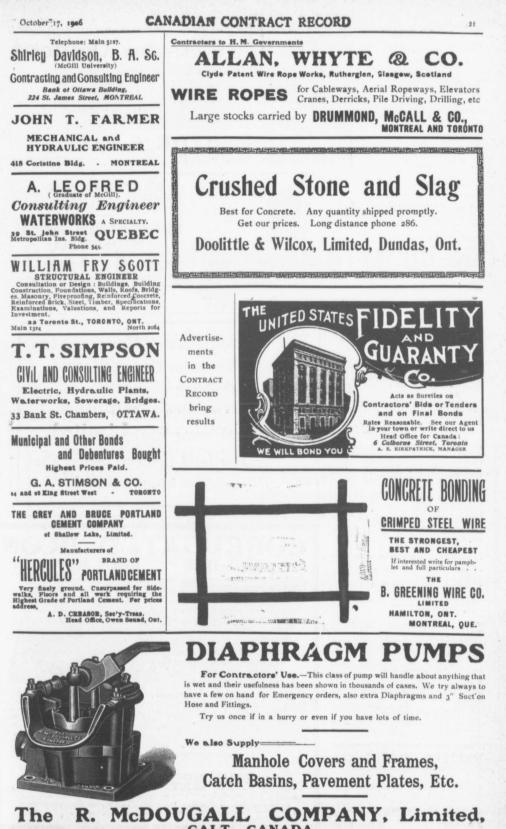
The new Homewood Sanitarium building, a large stone structure on Delhi street, has had work to the value of \$50,000 done this year. On the new Armouries, this year, work to the value of \$40,000 has been done. The Guelph Carpet Mills propose erecting a new weaving shed this fall, to cost \$12,000.

The partnership of Sword & Ludgate, lumber contractors, Parry Sound, Ont., has been dissolved.

Amongst the papers read at the recent convention of the American Society of Municipal Improvement in Birmingham, Ala., was one on "Municipal Asphalt Plant of Hamilton," by Mr. E. S. Barrows, City Engineer, Hamilton, Ont.

Mr. Robert Surtees, formerly city engineer of Ottawa, Ont., died at his residence on McLaren street, in that city, on September 30th. He was seventy-one years of age and had held the position of city engineer for over twenty five years, and later became engineer to the Ottawa Improvement Commission.





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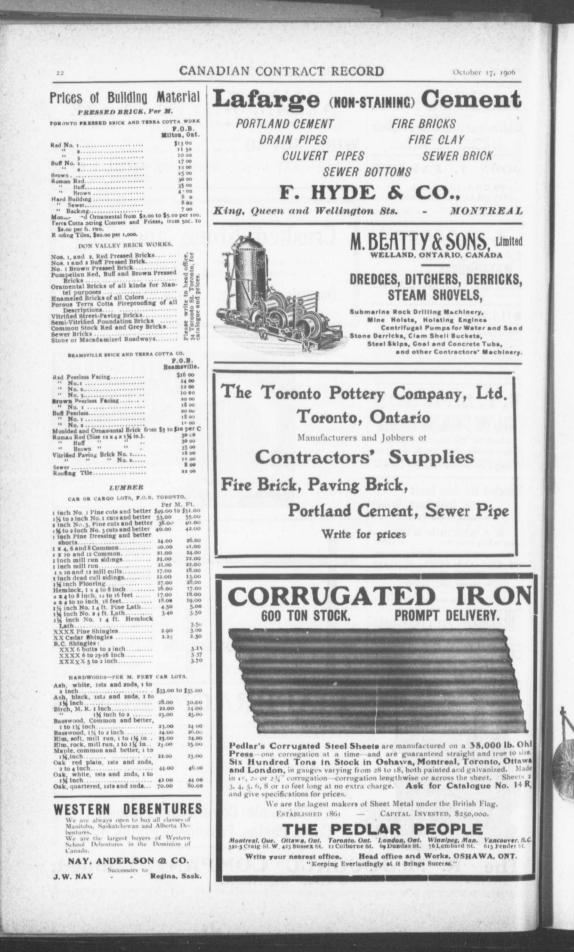
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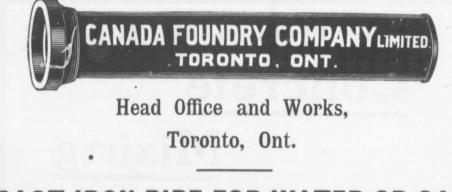


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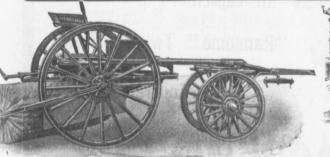
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