

This paper reaches every week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and leading Contractors in all lines throughout Canada.

Vol. 14

**DECEMBER 30, 1903** 

No. 46.

#### THE CANADIAN CONTRACT RECORD PUBLISHED EVERY WEDNESDAY

As an Intermediate Edition of the Canadian Architect and Builder.

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### THE C. H. MORTIMER PUBLISHING COMPANY

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#### WANTED

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#### Town of Saint Boniface

## Water Works Supplies

Scaled tenders will be received by the under signe until 12 o'clock, noon, on MONDAY, THE TOWN TOWN THE TOWN TH

THEO. BERTRAND,

Secretary Treasurer. Saint Boniface, Man., Dec. 15, 1903.



Sealed tenders for supplies for the year 1904
Sealed tenders for supplies, addressed to the
Superintending Engineer, Welland Canal, St.
Catharines, will be received until 20 o'clock on
TUESDAY, THE 12TH OF JANUARY, 1904, for
the supply and delivery of various articles of
Timber, Hardware, Castings, Fuel, Paints Oils,
etc., for use on the Welland Canal and its
branches for the year 1904.
Specifications, forms of tender and other
information may be obtained at the Superintending Engineer's office, St. Catherines, on and
after MONDAY, THE 21ST DECEMBERS, 1905.
The lowest or any tender not necessarily
accepted.

By order.

By order, L. K. JONES

Department of Railways and Canals Ottawa, December 19th, 1903.

#### Office for the Canadian Bank of Commerce to be Erected at Orangeville, Ont.

Tenders for the various trades required will be received by the architects up to SATURDAY and the second of the se

DARLING & PEARSON, Architects, Toronto, Ont.

## **TENDERS**

Sealed tenders addressed to the County Clerk, R. P. Miller, Rainbam Centre, Ont., and endorsed "Tender for Oswego Creek Bridge," will be received until SATURDAY, THE 23RD OF JANUARY, 1994, for the construction of a bridge across the Oswego Creek on the township line between the townships of Canboro and Boulton, accordance with plans and specifications prepared by the County Engineer, W. H. Pairchild. Said plans and specifications may be seen at the Office of the Engineer at Simceo, Ont., or with the undersigned near the site of the proposed by the County Engineer, W. H. Pairchild. Said plans and specifications may be seen at the office of the Engineer at Simceo, Ont., or with the undersigned near the site of the proposed by the County Engineer, W. H. Pairchild. Said plans and specifications may be seen at the best office of the Said County of the County Engineer, W. H. Pairchild. Said Pairchild. S

Tenders will also be received up to TUESDAY, MARCH 18T, 1904, for the laying of a concrete floor upon the said bridge, work to be done according to plans and spec fications of the county Engineer, and under his supervision.

The lowest or any tender not necessarily accepted. GONGGE VAN KERIERD.

ccepted.
GEORGE VAN KEUREN,
Chairman Road and Bridge Committee,
Haldimand County Council,
Dunnville, Dec. 22, 1993.

#### CONTRACTS OPEN.

LINWOOD, ONT .- A new Lutheran church is to be built here.

DELTA, ONT .-- The Merchants' Bank of Canada will erect a new building here next spring.

RAINY RIVER, ONT.—It is the intention of James Harty to build a modern hotel here.

OSHAWA, ONT .- A plebiscite will be taken on January 4th on the question of a waterworks system.

FLETCHER, ONT .- The ratepayers of school section No. 4 have decided to build a new separate school.

FORT FRANCES, ONT. - It is probable that the Presbyterian congregation will build a new church.

ST. THOMAS, ONT .- The question of increasing the water supply is receiving the consideration of the council.

SARNIA, ONT.—Anderson, Berger & Co., of Milwaukee, are considering the establishment of a grist mill here.

CHIPPEWA, ONT.—William Pew, W. Aldous, D. Dixon, and S. Flommerfelt each intend building a new residence. ST. CATHARINES, ONT. - The waterworks superintendent has been in-

BELLEVILLE, ONT .- It is probable that a new residence for ladies shortly be built in connection

structed to call for tenders for ten fire

Albert College.

hydrants.

GUELPH, ONT.—The city council have sold the fair grounds pro erty to the Dominion government as a site for an armoury

TILSONBURG, ONT .- The Middleton & Bayham Cheese Co, at a meeting held here last week, decided to build a new factory at Courtland.

FORT WILLIAM, ONT. — The Public School Board have asked the council to purchase a site for a new building in Ward 4.

NORTH VANCGUVER, B.C.-The by-laws to provide funds for construction of bridges and a municipal building were carried by the ratepayers.

OWEN SOUND, ONT.-A joint stock company, with a capital of \$200,000, -A joint formed to erect a five-storey being brick temple and music hall.

NORTH SYDNEY, N. S. — Mr.

Cooke, Government Engineer, was in town last week selecting a site for the new Intercolonial Railway freight shed.

GLACE BAY, N.S.—It is rumored that a site has been purchased here on which to build a brewery, but the names of the interested parties have not been announced.

CHARLOTTETOWN, P. E. I.—The Prince Edward Island Railway is calling for tenders for erection of stations at Albany, Kinkora, Northam, Richmond, and Fredericton.

CHESTER, ONT —A meeting of the vestry of St. Barnabas church will be held on January 7th to consider the advisability of purchasing a site and building a new edifice.

YALE, B. C.—The Spallumcheen Improvement Co. has been organized with a capital of \$25,000, to improve the Spal lumcheen river by the construction of canals, dams, slides, etc.

ST. JOHNS, QUE. - The Singer Mfg. Co. have decided to remove their factory from Montreal to this place, where they will build a factory capable of turning out 100,000 machines annually.

COLLINGWOOD, ONT. — The company promoted by E. D. Moris, of Toronto, to establish a gas plant in this town intend to send their expert to England in January to purchase plant and piping.

KINGSTON, ONT .--Queen's Medical Faculty have asked the Ontario government to establish here a branch laboratory in connection with the Provincial Board of Health for the examination of pathological specimens.

GASPE BASIN, QUE .- Two parties

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of engineers are at present making the final surveys of twenty miles of the final surveys of twenty miles of the Quebec, Western and Atlantic Railway and the contract for construction will likely be given out this winter.

VANCOUVER, B.C .-- Plans are under way for the establishment in this city of a large pork packing plant. The proposed site fronts on the inlet between Hasting saw mill and Cedar Cove, and was ecently purchased by P. Burns

DELHI, ONT .- R. A. Dickson, solicitor, has made application for the in-corporation of the Brantford & Erie Railway Co., to construct a line of railway from Brantford to Port Dover, with a loop line extending from Waterford to Delhi and Lynedoch.

WALKERVILLE. ONT. - Alex Laforge, of Windsor, has made arrange ments with the Jackson Cement Stone Machine Co., of Jackson, Mich., to establish a Canadian factory for the manufacture of concrete construction blocks. The factory will be built in this town.

LANARK, ONT .- The town council LANARK, ON1.—The town council are considering the building of a new bridge to replace the one at the lower reach of the Clyde River,—Bids received by J. M. Rogers, Chairman Finance Committee, up to January 16th for purchise of 65,000 county debentures.

OAKVILLE, ONT .- The town coun cil have passed a by-law granting the Hamilton Electric Radial Railway Co. the privilege of operating an electric rail-way on Rebecca and Randall streets, said streets to be macadamized at the expense of the company. The company are to build a bridge over the Sixteen Mile Creek.

WELLAND, ONT. - Tenders invited up to Tuesday, January 12th, of or supply of timber, hardware, castings, supply of timber, hardware, castings, paints, oils, etc., for use on the Welland canal during the year 1904. Specifica-tions from the superintending engineer, St. Catharines.—The Dominion Marine Association will memorialize the Dom inion Government to enlarge the Welland canal.

FREDERICTON, N. B.—The Commissioner of Public Works is asking for tenders for rebuilding Black river bridge, St. John county, and repairing the Elliott bridge in Queen's county and the Aboushagan bridge in Westmoreland county.—The Provincial government will receive tenders up to January 18th for building of the Rye Road bridge at mouth of the Black river.

QUEBEC, QUE.—It is stated that a large new theatre will shortly be erected on Crown street, south of Joseph street, where the site has already been chosen.

—N. Michaud, M. P., has applied for the incorporation of the "Compagnia du Chemin de Fer Hebertville, St. Bruno, Alma," for the purpose of constructing a railway in the county of Lake St. John.—J. A. Drake, of Chicago, denies the report that he intends to build a large hotel in this city

STRATFORD, ONT .- P. A. Peterson was in the city recently in connection with the survey of the proposed C.P.R. branch line between Goderich and Guelph.

—The Grand Trunk Railway Company will at an early date commence the en-largement of the shops here.—Capitalists represented by H.M. Sloane, of Chicago, and N. N. Cantin, of St. Joseph's, may build an electric railway between Stratford and St. Joseph's, on Lake Huron.

ST. JOHN, N.B.—The New Brunswick Southern Railway Co. have commissioned Mathew Neilson, C.E., to report on the work necessary to put the road in condition to handle through business. It is understood that the imbusiness. It is understood that the imbuilding of a bridge across the St. Croix river and the extension of the road to the eastern side of the city. A line will probably be built from some point along the bay shore to Fairville.-R. H. Cushing, Director Public Works Department, will receive tenders up to February 15th, 1904, for the construction of a steel, screw propelled ferry boat for this

WINNIPEG, MAN.-The Winnipeg & Selkirk Street Railway Co. are seeking power from the Provincial Legislature to build a radial railway encircling Winni-peg.—It is stated that the C.P.R. con-template extending the Elm Greek-Car-man branch to Darlingford by way of Rosebank, also that the Canadian Rosebank, also that the Canadian Northern Railway will extend their Carman line to Somerset .-- A new proposi tion to supply power to the city has been submitted by D. A. Keizer, who offers to supply 3,000 horse power at \$17.50 per horse power per annum.

HAMILTON, ONT .which Ambrose Small, of Toronto, is the head, has about closed a deal for the purchase of the Grand Opera House and Dr. MeKelcan's residence at the rear. It is the intention of the purchasers to either enlarge and modernize the present threatre or build a new one. - The T. H. Pratt Co. have acquired property for the purpose of extending their premises.—Build-ing permits have been granted as fol-lows: Arthur Woolley, brick dwelling, William street, between Barton and Bird streets, cost \$1,200; G. W. Bing-ham, addition to building, 27 South Wellington street. cost \$1,000.

OTTAWA, ONT. - Extensive im provements to the interior of the post office building in this city are to be undertaken after the new year.—Plas for the new Central station have been filed with the Railway Department.—The Public School Board will probably appoint an architect to report on the Elgin. Archibald and Creighton street schools, with the view of making improvements and additions thereto.—The by-law to provide for the extension of the Bell street bridge has secured its second reading in council.—At a meeting of the secular priests of the Ottawa diocese, held last week, it was decided to erect, at a cost of almost \$40,000, a new diocese and seminary to replace that destroyed in the University fire. - The Canadian Province of the Oblate Order have agreed to subscribe \$10,000 towards the rebuild of the Community House of the Order.

MONTREAL, QUE. - John Ken-Commissioners, has reported that in order to pave the wharves during the coming season it would be necessary to have on hand 8,500 tons of blocks order to proceed with the work the coming spring, this not taking into

account the blocks required for the paving of sheds, etc.—It is generally understood that the Dominion govern-ment has passed favorably on the plans for harbor improvements and that v a short time the work will be commenced. The plans call for two-storey sheds upon the four piers in front of the centre of the city, these sheds to be constructed of steel and concrete. Over the tops will run the grain conveyors, and on the level with the floor of the upper storeys will be the wagon roadways connecting the streets. The estimated cost \$2,500,000.-Frank Thompson & Co., of Coal & Coke Company, with a capital of \$4,500,000. Coal areas have been purchased in the East Kootenay district British Columbia, and the work of de-velopment will be undertaken at once. The process of mining will be by tunnel-ling into the sides of the hills and mountains.—It is reported that a company has been formed to build an ex-pensive hotel on the present site of the Natural History building, corner versity and Cathcart streets, the build-ing to be eight-storeys and to have 250 drooms, with large res:aurant attached. William Kearney, proprietor of the Oxford restaurant, is at the head of the

TORONTO, ONT .- A movement is on foot to erect a new public school building near the Kingston road.—A. J.Rus-sell Snow and R.W. Barker, of the Balmy Beach Park Commission, have explained to the council of East Toronto the proposition of the Commissioners to erect bath and boat houses on the beach, also a club house, at a total cost of \$4,500. Messrs. Darling & Pearson, architects, this city, are asking for tenders up to January 30th, 1904, for erection of an office building for the Canadian Bank of Commerce at Orangeville, Ont.—The Dominion Government has appropriated \$2,600 for a brick pavement on Armour street and a concrete sidewalk on University avenue in front of the armouries. The following works are about to be undertaken by the city council: Asphalt pavement, Adelaide street, Church to larvis, cost \$8,447; Belmont street, from Yonge street to Davenport road, cost \$7,729; Atlantic avenue, from Liberty street to 224 feet south, cost \$1,129; street to 224 feet south, cost \$1,129; Sheridan avenue, from Dundas street to Lindsay avenue, cost \$4,940. Cement concrete sidewalks, north side Davenport Place, from Davenport road to 358 feet east, cost \$288, and south side, from Davenport road to 505 feet east, cost \$685; north side Farley avenue. Tecumseh to Niagara, cost \$878, and south side same street, cost \$871; south side Queen street, from Parliament to Power, cost \$560, and from Sackto Power, to Power, cost \$560, and from Sack-ville to 246 feet east of Power, cost \$301; south side of Queen street, Sackville to Sumach, cost \$1,194, and from 522 feet

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## OUR 1904 WISH

We Wish Our Customers, Both Present and Prospective, A Bright and Prosperous New Year & & & & & & & & &

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MONTREAL, P. Q.

west of Strachan avenue to 1,095 feet further wes', cost \$1,314; south side Belmont street, from McMurrich to Davenport road, cost \$683; east side Logan avenue, Queen to Natalie, cost \$458; south side D'Arcy street, McCaul to Beverley, cost \$936.; west side Berkeley street, Esplanade to Front, cost \$761.; west side Sherbourne street, King to Britain, cost \$1,012; west side Clinton street, from Mansfield avenue to College street, cost \$861; north side Ulster street, from Bathurst to Euclid avenue, cost \$1,250; north side of Bloor street, from Dufferin to Brock avenue, cost \$867; south side Sussex avenue, from Huron to St. George, cost \$422. — Building permits have been granted as follows: E. Taylor, pair two and a half-storey brick and stone dwellings, west side Delaware avenue, near Hepbourne street, cost \$3,000; N. Ausman, two and a half-storey brick dwelling, 104 Albany avenue, cost \$2,200; T. Buress, one-storey brick store. west of Strachan avenue to 1,095 feet further wes', cost \$1,314; south side Ausman, two and a ball-storey brick dwelling, 104 Albany avenue, cost \$3,200; F. T. Burgess, one-storey brick store, 770 Queen street east, cost \$2,000; Jas. Lindela, four-storey stone and brick tenement house, 159 and 161 York street, cost \$24,000; Connery & Hillman, pair two storey brick and plaster dwellings, north side Hallam street, near Shaw street, cost \$1.000. Shaw street, cost \$1,600.

#### FIRES.

Dry kiin of the Canada Cabinet Co., at Gananoque, Ont., totally destroyed, loss \$8,000—Pianing mill of T. Atchison & Co., Hamilton, Ont., damaged to the extent of \$15,000.—Factory of the National Table Co., Owen Sound, Ont., comp'etely destroyed, loss \$50,000.

CONTRACTS AWARDED.

MONTREAL, QUE.—The tender of A. Bourgie has been accepted for building a new morgue on St. Catharine street.

MOUNT FOREST, ONT.—The contract for plumbing in the Knapp House has been let to Scott & Murphy, of this

BURNS, ONT.—Mornington town-ship council has accepted the tender of

James Rustin for construction of the Langford drain; price \$1,250.

GODERICH, ONT.—The McKillop township council has awarded the con-Bridge Co., of Mitchell, Ont. F. Gutteridge has the contract for the cement

a charter.

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The Three Rivers Planing Mills Company, Three Rivers, Quebec, has obtained THE DOMINION WIRE ROPE CO., LIMITED MONTREAL

## DEPOSITING CONCRETE UNDER WATER.

Laying submerged concrete for the Nussdorf lock at Vienna was described in the Zeitshrift of the Austrian Society of Engineers recently. The excavation was made to a depth of 26'24 feet below water level and a very large mass of concrete was deposited over the surface through movable vertical chutes. The lock has a total width of 92 feet over all and 49'2 feet clear inside. The excavation was made full width between sheet piling, and the bottom was filled in with rammed sand and gravel so as to form a kind of invert. with its upper surface horizontal in the middle and sloping upwards a little on both sides. On this foundation was built a mass of concrete having a total thickness of 13'12 feet in the centre, where the upper surface was 13'12 feet below water level. At the sides of the lock the concrete walls were carried up to a height of 3'28 feet above water level, with a thickness of 8'2 feet. Three longitudinal rows of piles were driven on each side of the axis of the lock and supported a six-rail track about 7 feet above water level. On this track moved three carriages which spanned the full width of the lock transversely. Each carriage had three trolleys, one in each of the main panels of the transverse bents of piles. Each trolley carried a vertical telescopic tube through which concrete was deposited on the bottom of the lock. The tops of these tubes were level with a transverse track which ran from end to end of the carriage. The ends of these tracks just cleared the outside rows of piles which, on one side of the lock, supported a distribution track parallel with the axis of the lock. The concrete was delivered by dump cars running on the distribution track which delivered it to smaller dump cars on the carriage tracks. These cars in turn discharge their contents into either of the three chutes on each carriage. The carriages were traversed from end to end of the lock, and as each chute moved nearly one-third the length of the carriage, the whole area of the lock was commanded by the nine chutes. The concrete was deposited in three horizontal layers 3.28 feet thick, but these layers were not laid

continuously, being built in comparative ly narrow banks or ridges, so that the different strata would key together and form a corrugated mass that was thought to be more satisfactory than one with continuous horizonal joints. As the concrete was deposited the chutes were shortened, and the three layers were successively placed. After the main body of the bottom and the side walls had been built by this method, the water was pumped out and a 23feet layer of concrete was rammed over the bottom and completed with a finishing surface o'o foot thick. The chutes were of different lengths in the three carriages, the first ones depositing the concrete up to a level of 23 feet below the surface, the next set depositing the concrete between that level and 19.7 feet, and the last completing the sub-aqueous work up to the final height of 16.4 feet below the surface.

#### CONVENTION OF MASTER PAINTERS.

The annual convention of the National Association of Master House Painters and Decorators of United States and Canada will be held in Toronto, February, 9, 10, 11 and 12, 1904. This will be really the first international convention and it is being looked forward to with considerable interest. It is expected that there will be a large attendance of painters from the leading Canadian cities and towns.

## Speight & Van Nostrand

Room 405 Temple Building, TORONTO, CAN. Field Notes of the late F. F. Passmore. The Northern Industrial Company, Limited, of Montreal, has been incorporated, to manufacture charcoal products, lumber, pulp, paper, etc.

ducts, lumber, pulp, paper, etc.

The Winnipeg Ceiling & Roofi g Company has been incorporated at Winnipeg, Man, with a capital of \$50,000. The promoters are William J. McMartin and M. J. McMartin, of Duluth, and W. D. McFarlane, H. M. Howel! and J. G. Mathers, of Winnipeg.

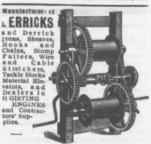
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Mr. Ballantyne, Canadian manager of the Sherwin-Williams Company, treal, states that prices on paints and varnishes remain the same for the open-ing season, with the exception of a few lines which are advanced. The firmness is due to the fact that, with the exception of linseed oil, all 1aw materials necessary for the manufacture of paints and varnishes have increased in cost.

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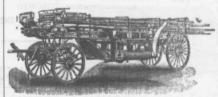
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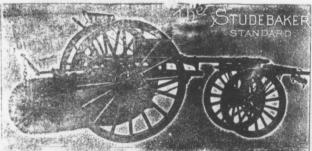
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Because no sweeper so effectually does she work for which it is designed as "The Studebaker."
It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical presion. It Wears Well. "The Studebaker" has the smallest number of working, parts, and has
see gearing than any other sweeper made. It is free from all unnecessary complications. With

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Does not clog or get out of order. Greatest width of spra v

Can be graded from driver's seat to any volume. We also make an .

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#### BUSINESS NOTES.

Davis & Ezerman, Michell, Ont., are advertising their planing mill for sale.

The Consolidated Rubber Tile Company, of Canada, Limited, has been in-corporated in Montreal.

The dissolution is announced of the firm of J. N. Arcand & Company, painters, Montreal.

Incorporation has been granted incor-porating the Manitoba Composite Brick Manufacturing Company, with a capital

stock of \$100,000. Winnipeg is to be the chief place of business.

The Smeeth planing mill at Goderich, Ont., has been purchased by J. C. Gold-thorpe, who is forming a joint stock company to operate it.

Samuel Cameron, who died at his home near Cornwall, Ont., December 17th, was a well known railroad contractor for many years. He was born in Cornwall 76 years ago, being a son of the late Col. Camer-

A. H. Poole, contractor, Sydney, N.S., is reported to have assigned.

J. F. Reid & Company, plumbers, etc., Smith's Falls, Ont., are said to be offering to compromise at thirty cents on the dol-

A suit is in progress between the Bay of Quinte Riilway Company and the Hungerford Marble Company to deter-mine the value of the marble quarry taken by the railway company for its right-of-way. right-of-way.



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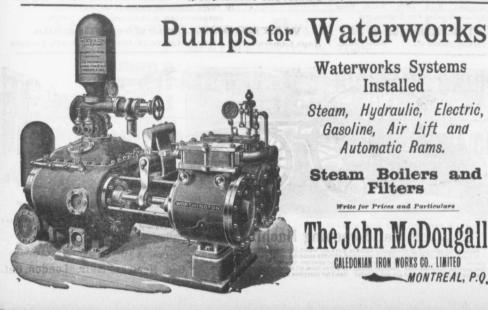


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#### A CONCRETE BRIDGE.

What is claimed to be the first solid cement bridge of its kind in the province was that erected last summer about a mile east of Tavistock, over a small creek on the boundary of Perth and Oxford counties. It has a span of thirty feet, with absolutely no support underneath between the abutments at each end, and yet the thickness of the floor is only fourteen inches. Seven days after this bridge was built it allowed the passage over it of a twenty-The abutton load without a tremor. ments at each end are 31/2 feet thick at the base and 21/2 feet at the top. Like the rest of the bridge, they are solid cement. A railing about three feet high is also of solid cement. The bridge cost \$635. Extremely interesting is the manner of its construction. A wooden substructure is first built. Upon this the floor of the bridge is laid. Upon four inches of cement inch and three-quarter steel rods are laid, running lengthwise, and ten inches apart. Three inches more of cement are laid on this, then a layer of woven wire is put on. Over this another coating of cement is laid, then another layer of wire, and on top of all enough cement to make up the total thickness of fourteen inches. railing, which is also strengthened with wire, is an important factor, as it helps to bind the bridge together and increase its strength. This is by reason of heavy bolts run downward through the railing and fastened firmly to the floor.

Some 249,160 feet of cement walks were laid this year in the town of Orillia, Ont., at a cost of \$23,000. The work was done under the supervision of Councillor Todd. As a slight recognition of his labors a motion was introduced to grant him the sum of \$100, out certain aldermen protested, saying that other members of the council had worked hard and faithful and had never received any remuneration. The motion was voted down.

The first year of city ownership of the Stratford, Ont., waterworks shows that the works have been run at a net profit of \$2,458.91. All this, however, has been invested in much-needed extensions. Extensions to mains have been made at a cost of \$8,464.39, this being expended upon over 5,000 feet of new mains. This week the electors will vote on a by-law to hand over the waterworks to a Board of Commissioners, also to hand over the city parks to a Board of Park Commissioners.

The excellent preservation of wrought iron by hydraulic cement is strikingly illustrated by samples recently cut from a water pipe that had been forty-four years in constant service in New Brunswick. The destribution system for the city water supply of West St. John was laid in 1859 with riveted pipes from 4 to 12 inches in diameter, which were covered

inside and outside with coatings of pure Rosendale cement about 1 inch thick. The metal was a good quality of soft wrought iron rolled to No. 22 gauge, and many of the pipes are still in service under a pressure of 60 pounds per square inch. Samples recently cut out by Mr. William Murdock, superintendent of water-works, were found to be in surprisingly good condition, and one piece was split down the side and flattened so as to be easily packed, and was sent to Mr. J. A. Jamieson, C. E., Montreal, in whose office it may be

seen. Despite the severity of the treatment received, a large proportion of the surface of the iron is still covered with the cement mortar, which adheres firmly, and wherever the metal is exposed, it is bright, and entirely free from rust.

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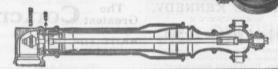
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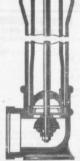
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