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CANADIAN CONTRACT RECORD

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

EVERY THURSDAY

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. 8.

DECEMBER 9, 1897

No. 45.

THE CANADIAN CONTRACT RECORD,

PUBLISHED EVERY THURSDAY

As an Intermediate Edition of the "Canadian Architect and Builder."

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Upper Flat of 243 Church street, Toronto, with use of hoist; suitable for builders or carpenters. ARMOUR & MICKLE, 12 and 14 King Street West, Toronto.



To Contractors

Separate tenders, addressed to the undersigned, will be received through registered post up to noon on

JANUARY 1st, 1898,

for the various works required in the erection and completion of a

HOUSE OF INDUSTRY

at Beeton, Ontario, for the Municipal Corporation of the County of Simcoe.

Plans and specifications may be seen on and after Monday, the 13th day of December next, at the offices of EDEN SMITH and EUSTACE BIRD, A.R.I.B.A., Architects, Toronto and Barrie.

A deposit in cash or marked cheque, payable to the order of the Treasurer of the County of Simcoe, equal to 5 per cent of the value of the work tendered for, must accompany each tender as a guarantee of good faith. Should any party or parties whose tender may be accepted fail to execute the necessary contract and give satisfactory security for the due fulfillment thereof, his or their deposit will be forfeited to the said counties.

Deposits of unsuccessful tenderers will be returned. The lowest or any tender not necessarily accepted.

JOSEPH WHITESIDES,
Chairman Property Committee.

Elmgrove P.O., County of Simcoe, Ont.

Monaghan & Sutherland, contractors, Halifax, N.S., are said to have assigned.



Tenders for Stone

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on THURSDAY, DECEMBER 23rd, 1897, for the supply and delivery of 200 tons of stone, in ten ton lots and upwards, at the House of Industry, in this city.

Contents of envelopes containing tenders must be plainly marked on outside.

Specifications may be seen and forms of tender obtained at the office of the City Engineer.

A marked cheque, payable to the order of the City Treasurer, Toronto, for 5 per cent of the amount tendered for up to \$1,000, and 2½ per cent of the amount over that sum, must accompany each and every tender, otherwise it will be ruled out as informal.

The lowest or any tender not necessarily accepted

JOHN SHAW (Mayor),
Chairman Board of Control.

Toronto, Dec. 7th, 1897.

CONTRACTS OPEN.

DAUPHIN, MAN.—A new school is required.

SOUTH WOODSLEE, ONT.—The erection of a new school is talked of.

EDEN GROVE, ONT.—The G.T.R. has decided to rebuild the station here.

NIAGARA FALLS, ONT.—The Synod of Niagara will build a see-house for the bishop.

FAIRVIEW, B. C.—The Winchester Mining Company purpose erecting a large stamp mill.

SLOCAN CITY, B. C.—A local company has made a proposition to install an electric light plant.

ROSSLAND, B. C.—T. G. Elgie has made a proposition to the town to erect reduction works next spring.

DOMINION CITY, MAN.—The village has decided to offer a bonus of \$3,000 for the erection of a grist mill.

MORRISBURG, ONT.—The town is discussing the question of bonusing a paper mill to the extent of \$20,000.

LONDON, ONT.—James A. Page has been granted a permit for a brick veneer cottage on English street, to cost \$800.

MARYSVILLE, N. B.—Arrangements are being made for the erection of a pulp mill on the island below the large saw mill.

HAMPTON, N. B.—The Methodist congregation have decided to build a new parsonage. James Piers has the contract for foundation.

LISTOWEL, ONT.—The town is offering for sale \$6,110 worth of local improvement debentures, bearing interest at 4%, payable yearly.

BRANTFORD, ONT.—The Verity Plow Company offer to erect buildings to cost \$40,000, in consideration of certain concessions by the city.

BRANDON, MAN.—Mr. C. Adams, M.

P.P. for Brandon, advocates the building of the Dauphin road to Brandon and then south, probably to Boissevain.

CHATEAU RICHER, QUE.—We understand that a waterfall, presumably the Sault a la Puce, is to be utilized for furnishing power for manufacturing.

FREDERICTON, N. B.—Mr. Willard Kitchen has purchased the Cummings property. It is the intention to erect thereon a Masonic temple of brick and stone.

BELLEVILLE, ONT.—The Intelligencer states that an English syndicate is negotiating for the control of the Belleville street railway, with a view to the extension of the road to Tweed.

PORT ARTHUR, ONT.—Mr. Jenison will proceed at once to complete plans for developing the water power of the Kakabeka Falls, which will be transmitted to Fort William and Port Arthur.

OWEN SOUND, ONT.—The C.P.R. are said to contemplate the erection of a third elevator here.—The Beet Sugar Company will ask the Ontario government for a bounty. They offer to erect extensive buildings.

ANDOVER, N. B.—Dr. Welling, A. E. Kupkey and J. S. Sutton have been appointed a committee to report on the cost of a suitable waterworks system for the village. The work is not likely to cost over \$5,000.

SUMMERSIDE, P. E. I.—Chairman Hunt, of the town council, has received from Prof. Lee an estimate of the cost of waterworks and sewerage for this town. The estimate for the waterworks system is \$72,000, and for the sewerage \$30,000.

BRAMPTON, ONT.—The town has purchased the Crowforth residence for a House of Industry.—A by-law will be submitted to the taxpayers to raise \$10,000 for the improvement of roads and bridges. The vote will be taken on the 3rd of January.

VICTORIA, B. C.—It is the intention of Weiler Bros. to erect a large business block on Broughton street.—Mr. Frank Jaynes, general superintendent of the Western Union Telegraph Company, states that the line is to be extended to this city.

GALT, ONT.—At a meeting of the council last week it was decided to submit to the ratepayers, at the municipal elections, by-laws for the enlargement of the market square, the erection of a modern fire-hall, a fire alarm system, and a sewerage system for a portion of the town.

ST. THOMAS, ONT.—The by-law to confirm an agreement between the city council and the Street Railway Company for the electrification of the street railway was carried by the ratepayers last week. The company agrees to build six and one-half miles of track and to strengthen the Wilson bridge.

ST. JOHN, N. B.—Fred. Sandall, Chamberlain of the city of St. John, will

receive tenders until the 28th inst. for the purchase of \$125,000 of debentures, issued for the building of wharf accommodation.—The New Brunswick Cold Storage Company have made a proposition to the city to erect a cold storage plant.

HAMILTON, ONT.—An Illinois paving brick manufacturer wants to settle in this city if he can secure a desirable location.

GODERICH, ONT.—Representatives from this town have been negotiating with the G.T.R. regarding the erection of an elevator here. It has been agreed that the Grand Trunk would give a free site, carry all material free of charge, and give a cash bonus of \$5,000; that the elevator must be built by a joint stock company, and be of 1,000,000 bushels' capacity.

SHERBROOKE, QUE.—The new building to be erected by the Sun Life Assurance Company will cost about \$40,000.—By-laws were carried by the ratepayers on Friday last authorizing the expenditure of the following sums: \$125,000 for the purchase by the city and improvement of the Sherbrooke water system; \$15,000 for the construction of a new bridge over the St. Francis river, and \$35,000 as a permanent improvement fund.

AYLMER, QUE.—The proposed sewerage system, plans for which have been prepared by E. J. Rainboth, C.E., of Ottawa, was discussed at a public meeting last week. A communication was also read from the Pontiac and Pacific Junction Railway Company, asking that the Minister of Railways and Canals be petitioned to grant such privileges to the promoters as will permit of work being commenced.

KINGSTON, ONT.—It is said that Sir George Kirkpatrick and Mr. John P. Caruthers are at the head of a movement to establish an iron ship-building industry in connection with the locomotive works in this city.—The ratepayers will be asked to grant \$50,000 to Abbott & Co., of Montreal, to establish rolling mills in this city. They have agreed to expend the sum of \$200,000 on buildings and plant.—On the 3rd of January the ratepayers will vote on a by-law to raise \$17,000 for opening a public street.

VANCOUVER, B. C.—The C. P. R. have made a proposition to the city to spend half a million dollars on the erection of a station building and extension of wharves. They offer to erect a large passenger depot and an extension of 400 feet to its wharf at once, and to proceed with the remainder of the wharf and with other terminal buildings and yards from time to time until completed; also that a draw or pivot span shall be placed in the company's bridge across False creek, sufficient for the passage of such craft as are likely to make use thereof. The city is expected to build an overhead bridge of the height required by law crossing the company's tracks at the foot of Gore avenue.—A. Skinner & Co. has purchased property, corner Hastings and Homer streets, and will build thereon.—T. H. Davies, of Honolulu, purposes building a warehouse.

OTTAWA, ONT.—The Public School Board propose to spend \$6,450 for the purchase of lots upon which to erect new schools.—The City Engineer has recommended that the stone breaking for macadam purposes be done by crusher instead of by hand.—The Unitarian congregation has been organized, and propose to build a church in the course of a few months. The purchase of a site is now being considered.—The city engineer will shortly invite tenders for annual supplies.—Ald. Davidson will ask the city council to provide that all contracts over the value of \$200 be awarded by tender.—E. F. E. Roy, secretary Department of Public Works, will receive tenders until Thursday, 30th inst., for the construction of a breakwater at Judique, Inverness county, Nova Scotia. Plans may be seen at the

office of E. G. Millidge, resident engineer, Antigonish, N.S., and Allan McDonnell, Judique, N.S., and at the above department.

WINNIPEG, MAN.—A scheme is proposed to form a joint stock company to erect a workingman's hotel, with accommodation for 100 beds. The necessary capital is placed at \$13,000. Among those interested are J. H. Brock, H. H. Smith, A. F. Stephens, and others.—At the last session of the Dominion Parliament a vote of \$25,000 was made for the purpose of increasing the outflow from Lake Manitoba, to prevent the overflow of the lake, but nothing was done towards carrying out the work. It is now reported that the work is to be proceeded with in the early spring. The work necessary to materially reduce the waters of Lake Manitoba would be quite an expensive operation. Thos. Guerin, who made an investigation for the Dominion government, estimated that it would cost \$281,000. This involved the cutting of a canal from Lake Manitoba to a point on the Faulford river, below the rapids on that stream, and a second canal from Lake St. Martin to Lake Winnipeg.

QUEBEC, QUE.—A deputation, composed of Messrs. McDonald, Paradis and Montgomery, of St. Johns, and Mr. Montgomery, of Lacolle, have asked for a subsidy for the construction of a railway bridge at Lacolle.—Mr. C. F. Sise, of Montreal, was in the city last week in connection with the new building to be erected by the Bell Telephone Co. It is to be built on the corner of St. John and St. Angele streets, and will cost in the vicinity of \$15,000. Work will be commenced early in the spring.—John Breakey, lumber merchant, and others are seeking incorporation as the Chaudiere Valley Railway Company, to build a railway from Quebec along the Chaudiere river for a distance of six miles, and to construct a deep water terminus at Levis. The capital stock is \$150,000.—B. Houde & Co. will enlarge their manufactory on Ste. Claire street.—David Ouellet, architect, is preparing plans for a building to be erected at the Riviere des Chiens, Montmorenci, for M. A. Toussaint.

HAMILTON, ONT.—Mr. Waite, architect, of Buffalo, has recently been in the city, and it is rumored that he has been engaged by the banks to prepare plans for a large building. It is thought to be a clearing house.—Mrs. Hoodless, Mrs. Charlton and others are endeavoring to secure the erection of a normal training school of domestic science, to cost \$10,000.—Mr. J. N. Lake and Ald. Emory had a conference last week about the proposed radial railway from this city to Guelph. The promoters will shortly make a proposition for the construction of the road. Plans have been prepared for a bridge from the high level road to the Plains road, a distance of 370 feet.—The promoters of the Hamilton, Chedoke and Ancaster electric railway are making a vigorous effort to dispose of the balance of the stock, and hope to commence operations at an early date.—A committee of the Board of Education is negotiating with a view to getting a grant from the Minister of Education for the extension of the Ontario Normal College.—R. J. Larkin has been granted a permit to erect a dwelling house on Herkimer street, between Kent and Queen streets, to cost \$3,000.—Wm. & Walter Stewart, architects, have taken tenders for remodelling the Spectator building.

TORONTO, ONT.—Burke & Horwood, architects, have prepared plans for a Bible Training School to be built on College street, opposite the Dental College, to cost \$15,000.—The City Engineer, in his fortnightly report presented to the Council on Monday last, recommends the following new works: 30-foot macadam roadway on the road leading north from Queen's

Park crescent to Bloor street, cost \$3,500, 6 inch mains on Pacific ave., from Atlantic ave. to Salisbury ave., cost \$626.61; on Chamberlain ave., from Wellington ave. to Tecumseh street, cost \$776.87; on Piper street, from the end of the present 6-inch main a distance of about 250 feet east, cost \$196.91; on Front street east, from the end of the present 6-inch main a distance of about 250 feet, cost \$236.65.—Darling & Pearson, architects, have prepared plans for a large skating rink on Cowan ave., to have a framework of iron and an ornamental front. The estimated cost is \$5,000.—The City Council has given notice of its intention to construct the following works: Asphalt pavement on Elgin ave., from Avenue road to Bedford road, cost \$6,170; asphalt pavement on Station street, from York to Simcoe streets, cost \$10,000; brick pavement on lane running east off Leader lane, first north of Wellington street, cost \$950; macadam roadway on Davenport road, from Yonge street to Hazleton ave., cost \$5,500; brick pavement on track allowance on McCaul street, from Queen to College streets, cost \$20,100; brick sidewalk on Bloor street, from Yonge to Sherbourne streets, cost \$2,035; concrete sidewalk on east side Queen's Park crescent, from College street to Grosvenor street, cost \$760; concrete sidewalk on east side Church street, from Front street to King street, cost \$960.—Tenders are invited by the city in this issue for the supply of 200 toise of stone.—At a special meeting of the Separate School Board held on Tuesday, it was resolved to submit a by-law for the issue of \$50,000 debentures on capital account.—The Market Improvement Committee have presented a report on the improvement and extension of St. Lawrence market. The report recommends a large market, to extend from King street to the Esplanade, where a wharf would be built. The buildings, it is stated, should consist largely of iron and glass.

MONTREAL, QUE.—J. Alcide Chausse, architect, is preparing plans for a residence to be erected on Champlain street for Joseph Cote.—The Road Committee have decided to expend the sum of \$75,000 for the construction of a main sewer in St. Denis ward.—The Health Committee have asked the Council for a grant of \$72,000, to be expended as follows: \$10,000 for repairs to the Civic Hospital, or, if reconstructed, \$25,000; new morgue, \$27,000; to complete the stables of the scavenging department, \$10,000.—The City Hall Committee have appointed Aldermen Sadler and Carpenter as a sub-committee to report on the improvement of the sanitary condition of the city hall. Plans therefor will be prepared by Mr. Perrault, architect. The sum of \$70,000 will be required for interior and exterior improvements.—The report of the superintendent of waterworks includes the following estimates of permanent works to be carried out: The replacing of forty miles of 6-inch pipe and forty-six miles of 4-inch pipe, cost \$861,027; improvements to prevent the freezing of hydrants, \$20,000; two hundred new hydrants, \$40,000; extension of pipes to reservoir, \$85,630; duplicating all the pipes under the canal, \$23,880; giving fire protection to St. Jean Baptiste Ward, \$70,760; increase of service pipes between the two reservoirs, \$7,500; to re-connect the main on Notre Dame street cut, at the commencement of the building of the East End station, by bringing it by way of Craig street, \$24,225; short connections in streets, \$6,500; self-acting check valves, \$7,500. The total amount asked for is \$1,455,000.—It is the intention of Rev. Father Quinlivan and other priests of St. Patrick's church to build a Catholic high school on the elevated plateau at the corner of Palace and St. Genevieve streets. Plans are now being prepared by Mr. Wm. E.

Doran, architect, and it is probable that work on the new structure, which will contain improvements, will be commenced early in the spring.—Mesnard & Daoust, architects, are preparing plans for a church, two colleges and one convent, tenders for which will be invited shortly.—It is rumored that the governors of the Royal Victoria Hospital, Montreal, are considering plans for a \$100,000 extension.

FIRES.

A business block at Carleton Place, Ont., owned by Wm. McDiarmid and George Keys, was burned on Monday last.—The G. T. R. station at Severn Bridge, Ont., was totally destroyed by fire on the 1st inst.—James Waddell's residence, one mile from Sunderland, Ont., has been burned. Insurance, \$400.—Richardson Brothers' elevator at Kingston, Ont., was recently consumed by fire, at a loss of \$60,000. The owners will rebuild at once.—The dwelling of Gordon Baker, jr., at Osnabruck Centre, Ont., was destroyed by fire on Saturday night.—The Western Hotel at Thamesville, Ont., was damaged by fire on the 3rd inst.—The works of the People's Heat and Light Company, at Halifax, N.S., were recently partially destroyed by fire. The loss is covered by insurance.—The premises of the American Tire Company, King street west, Toronto, suffered \$6,000 damage by fire last week.—Falardeau's hotel at Lake St. Charles, near Quebec, has been burned. It was insured for \$2,800.—The shoe and larrigan factory and shingle mill of W. H. Lawrence & Co., at Burr's Corner, eighteen miles above Fredericton, N. B., on the Woodstock branch of the C.P.R., was burned on Friday of last week.—Perine & Co.'s wool and twine mills at Doon, Ont., on the Galt & Elmira branch of the Grand Trunk Railway, were completely destroyed by fire on Tuesday last. The loss is heavy.

CONTRACTS AWARDED.

CHelsea, QUE.—A contract has been given for repairs to the Catholic church.

STE. CUNEGONDE, QUE.—The Dominion Rubber Co. have been awarded the contract for 500 feet of fire hose, at 85 cents per foot.

OTTAWA, ONT.—The contract for masonry on the Soulanges canal, recently taken from Mr. Archie Stewart, has been re-let by the Dominion government to Ryan & Macdonald.

LONDON, ONT.—A. J. Brown, of Toronto, whose tender was accepted for several sections of the sewerage system, but who wished to amend his tender on the ground of error, has finally signed the contract at the original figure.

VICTORIA, B. C.—G. C. Hinton & Co. have secured the contract for electric lighting and bell work for the new addition to the Dominion Hotel. A. Sheret, of Fort Street, secured the contract for the plumbing and sanitary arrangements.

BROCKVILLE, ONT.—The Councils of Leeds and Grenville have awarded contracts as follows in connection with improvements to the jail and the erection of a jailer's residence: Iron work, Hamilton Fire Escape Manufacturing Company; steam heating, Brown & Semple, Brockville; alterations to jail and jailer's residence, R. Johnson, Brockville.

PEMBROKE, ONT.—James Fowler, American consul, and a prominent contractor of Arnprior, have been awarded the contract for building the Pembroke Southern Railway from Pembroke to Golden Lake, on the Ottawa, Arnprior & Parry Sound railway, a distance of about forty miles. It is understood that the contract figure is in the neighborhood of \$200,000. Mr. Fowler states that surveyors will be sent out immediately to

make the final survey, and that contracts for material, etc., will be given out at once.

QUEBEC, QUE.—The contracts for the improvement of the interior and exterior of St. Peter church, Kiviere du Sud, has been awarded to Mr. St. Hilaire, of St. Romuald. The amount of contract is about \$8,000. Tanguay & Vallee are the architects.—Contracts have been awarded as follows for the restoration of Geo. Chateaufort's house on St. Gabriel street: Carpentry, M. DeVarennes; masonry, Emile Cote; plumbing, O. Picard & Son; roofing, Ph. Dallaire.

HULL, QUE.—The Waterworks Committee have recommended the acceptance of the following tenders for supplies for the extension of the waterworks system: St. Lawrence Foundry Co., of Toronto, 500 tons of pipe at \$23.70 a ton. Thos. Lawson, Hull, 47 hydrants at \$20 each; special castings to the same firm. Garth & Co., Montreal, pig lead; 5 valves at \$4.50; 6 valves at \$9.10; 8 valves at \$12.60. Laverdure, of Ottawa and Hull, lead pipes, 5 valves at \$7.50, 4 valves at \$5.50, nozzles (Montreal pattern) 18 cents. Valves, stopcocks, 40 cents, yarns at \$5.50. There were no tenders for service boxes.

MONTREAL, QUE.—A building permit has been granted for a building, stone and brick, on Berr street, for Jos. Carriere; masonry contractor, Louis Ouiment; carpentry, Jos. Carriere.—The contract for heating the new Mechanical and Mining Engineering building of the McGill university has been awarded to Garth & Co. The contract includes 800 square feet of radiation.—A. C. Hutchison, architect, has accepted the following tenders for a building on Stanley street for Andre Smith: Masonry, J. H. Patterson; carpenter and joiner's work, Thos. Ford; roofing, G. W. Reid; plumbing and heating, Jas. Hutchison; bricklaying, W. Peel; plastering, Knott & Gardiner; painting and glazing, Castle & Son; ironwork, Dominion

Bridge Co.—The contract for doors, sash and mouldings for the C.P.R. east end station has been awarded to W. Baril, who will also supply the sash for the manufactory of the company at Hochelaga.—A. Leveque, architect, has let the contract for a house on Jardin street, four tenements, stone and brick, gravel roofing, for J. A. Lefebvre, to Jos. Guertin.—Arthur St. Louis, architect, has let the contract for the carpenter and joiner's work of a house for J. B. St. Louis to Soucisse & Brouillette.

TORONTO, ONT.—H. F. Strickland, electrical contractor, 77 Adelaide east, has been awarded the electric work in connection with the Lawlor building, corner King and Yonge streets.—The Sites and Buildings Committee of the Separate School Board have recommended that the following tenders for the erection of a four-room school on McDonnell square be accepted: Mason and brickwork, William Keane, \$2,299; carpentering, T. Cooney, \$1,995; slating and tinsmithing, J. P. O'Hearn, \$312; plastering, James Laikin, \$279; painting and glazing, John J. Brennan, \$175; plumbing and heating, W. J. McGuire & Co., \$785; total, \$5,845.—On Tuesday last the Board of Control accepted tenders for annual supplies for 1898 as follows: Coal and wood, Standard Fuel Company, \$5.10 for hard coal, and \$3.89 and \$4.40 for soft coal per ton. Brass and bronze castings, Dean Bros. Cast iron pipe, St. Lawrence Foundry Company, at \$3.12 for 4-inch, \$4.63 for 6-inch, and \$13.13 for 12-inch. Sand, east of Simcoe street, E. Ashton & Son, Queen street east, at 63½ cents; west of Simcoe, John Mullen, at 60 cents per cubic yard. Paving brick, east of Simcoe street, Don Valley Company, west of Simcoe street, Ontario Paving Company, each at \$14.75 per 1000 for No. 1 and \$9 per 1000 for No. 2 brick. Hydrants, three way, St. Lawrence

(Continued on page 4.)

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THE GRAND HOTEL, St. Hyacinthe, Que.

THE NEW CUSTOMS-APPRAISERS STORES, NEW YORK, now building, which will consume 5,000 tons.

THE PARLIAMENT BUILDINGS, OTTAWA, portion of which was recently destroyed by fire and rebuilt.

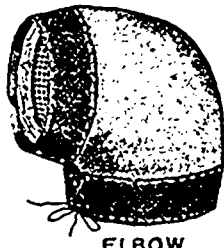
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Foundry Company, \$29.25; two-way, \$27.50; four-way, Hamilton Fire Escape Company, \$57. Stop valves, C. H. Perkins, \$13.45 for 6-inch and \$28.45 for 12-inch. Lead pipe, Ontario Lead Pipe and Barb Wire Company, \$4.40 per cwt. Iron valve and stop-cock boxes, St. Lawrence Foundry Co., \$1.40 for large and \$1.30 for small iron valve boxes; \$100 for double and \$65 for single iron stop-cock boxes. Lumber for sidewalk, The Reid Co., \$11.67 per 1000 feet for planks, scantling or boards. Cedar paving posts, The Reid Company, \$4.49 per cord; culls, \$4.29 per cord. Gravel, east of Yonge street, unscreened, Ashton & Son, 61½ cents per cubic yard; screened, John Bourne, \$1 per cubic yard; west of Yonge street, to John Mullen, at 64 cents for unscreened and \$1.05 for screened. Curb stone, The Owen Sound Stone Company. Lumber for waterworks, The Reid Company, \$12.79 per 1000 feet; hemlock, \$9.17 per 1000 feet; pine timbers, \$12.79 per 1000 feet; hemlock timbers, \$9.17 per 1000 feet. General supplies, W. F. Maas, Queen street, \$4.613.05. Special iron castings, Galloway, Taylor & Co., \$1.40 per cwt. Rubber valves and rubber, The Gutta Percha and Rubber Company. Wire nails, Aikenhead & Co., \$1.70 net per cwt. The tenders for oil and sewer pipe were referred to the city engineer for a report.

BUSINESS NOTES.

Morin & Bros., contractors, Maison-neuve, Que., have dissolved partnership.

E. Gauthier & Co., contractors, Montreal, have commenced business.

Clark & McFarlane, builders, Summerside, P. E. I., have dissolved partnership.

R. Coulson, dealer in builders' supplies, Niagara Falls, Ont., has sold out to Tallman & Co.

Pierre Dansereau, plasterer, Montreal, has filed a contestation of demand of assignment.

Aristide Belair, contractor, Maison-neuve, Que., is reported to have compromised at 50 cents on the dollar.

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THE EUROPEAN CEMENT SITUATION.

In an article under the above heading, a writer in the Cement and Engineering News thus reviews the European cement market.

The European Portland cement industry has been very satisfactory during the present season; prices have advanced, and the advance has been well maintained in the face of a decreasing demand from the States. Prices to-day are much higher than during the same period last year, due largely to the increased home consumption.

One year ago London Portland cement makers were offering cement at 22s. (\$5.50) per ton of 2,240 lbs. at their works in bulk; at present it is held at 27½s. (\$6.65), to 28¾s. (\$7.15) per ton in large shipping orders, the purchaser bearing all charges from the works. This is equivalent to \$1.54 per cask of 400 lbs. t.o.b. export steamer, London.

With regard to German cement, we are in a position to speak with some authority. At the present time we find it very difficult to get delivery of German cement at all. The bulk of the works have more business than they can get through, and although they have put up their prices export orders continue to flow. Such well known brands as Alse, Germania, etc., cannot be bought under 6s. per cask f.o.b. Hamburg, and it is very certain that next season there will be an equally lively

demand, and there is no chance, we think, of any reduction in price for next year.

We may say the prospects for local consumption next year in Germany are also very heavy, and recently very large contracts have been taken up by some of the Central and South German works for supplying cement to Southern European importers.

As regards Belgian cement, it was generally thought that when the American demand slowed off the works in that country would find themselves in an awkward position, as up to a year or two ago the United States was one of the chief consumers of Belgian cements. Fortunately for the Belgian makers, the large demand on English and German cements has thrown business into Belgium, with the result that to-day the works scarcely know which way to turn to keep ahead of orders, and prices have shown quite a record advance during the last few months. To-day's price for a first-class natural cement is about 4s. 8d. per cask f.o.b., or say, 5s. 10d. per barrel, cost and freight New York, Philadelphia, Boston or Baltimore. Lower qualities can probably be laid down at 2d. to 3d. less, but it is a cement that reliable dealers do not care to handle.

From the present outlook there is little inducement for English and German cement makers to cultivate American trade.

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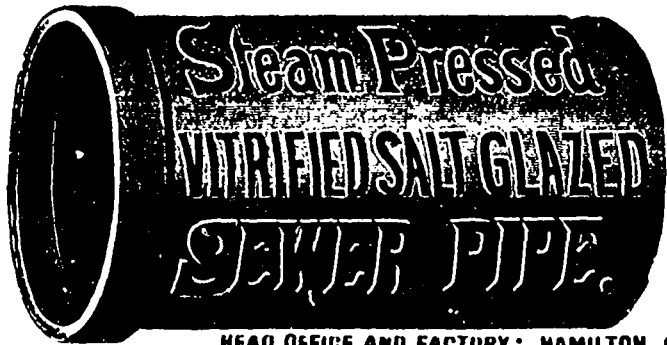
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MUNICIPAL DEPARTMENT

CEMENT OR STONE WALKS.

The local board of improvements has passed a resolution that nothing but stone or cement walks shall be built hereafter within the corporate limits of Chicago, unless a majority of the frontage owners petition for plank. The numerous damage suits against the city resulting from personal injuries from defective plank walks reaches nearly one million dollars, and calls for several attorneys to conduct the litigation, while the judgments obtained and the court costs amount to large sums annually. The result of the order will diminish the volume of litigation and insure the safety of citizens from broken limbs and bones.

TRACTION ON ROADS.

The amount of literature devoted to the improvement of common roads which has appeared during the past few years is a sufficient earnest of the importance of the subject to the community at large, as well as of the interest which that community takes in the matter. Again, conventions and other organized operations, together with the persistent and well-directed work of many individuals prominent in the movement, evidence the fact that there is no lack of lay effort, which, fortunately, is bearing excellent fruit. Civil engineers, also, have responded efficiently to the demands for good roads construction, so that probably no better roads could be built with the materials available and under existing conditions than can be found in some portions of the country; but after all that is said (and much more might be said), and even in view of the facts that the enhancement of the value of real estate and the economy of improved facilities in highway transportation have been given due prominence, it is unquestionably true that quantitative data as to the economy of improved roads is yet lamentably scarce. This is a matter so largely civil engineering in character that it naturally would not receive first attention in the broad consideration of the subject by the public; yet it may almost, if not quite, be said to lie at the very foundation of the whole business. At any rate, if the greatest economy of transportation be reached, it will be found that the greatest degree of improvement has been attained.

The securing of quantitative data concerning the economy of improved roads involves the whole question of traction, not only as it touches the determination of the forces required to move given loads on the various classes of road surfaces, such as dirt roads, macadam and asphalt, both on levels and grades, but also as it bears on the improvement of vehicles. The results given by the old

authorities, Morn and Navier, and by others, are well known to be anything but satisfactory when applied to the conditions of to-day, and, while there are some isolated later determinations of more or less value, the field yet lacks complete and systematic working. There is probably no way at the present time in which the cause of good roads can be so strongly fortified or efficiently advanced as by a comprehensive and thorough system of traction tests on all conditions of both improved and unimproved roads, on levels and grades, so conducted as to exhibit clearly and conclusively the effects of improvements and of various conditions of maintenance. There can be no argument so convincing to the average member of the country community, particularly, as a clearly-cut contrast between the small load laboriously hauled over the ordinary unimproved highway and the much larger load (perhaps five or six times as heavy as the former) smoothly transported with less effort over the improved road surface. This is really the kernel of the whole matter on which the development of all the arguments for good roads most largely depends. It is much to be desired that parties who are interested in this question should institute and carry out under competent engineering supervision such an investigation as that which we have outlined above. It would not be an undertaking of great expense, but the results would be of the greatest value in themselves and they would give added value to those of a fragmentary character which have already been made.

By some tests made on the roads of the United States Road Exhibit of the Cotton States and International Exposition at Atlanta, it was shown among other things that a team which readily drew a net load of 6,000 pounds up a 10 per cent. grade on a macadam road with an indicated pull of 1,000 pounds, failed completely to take the same load down a 6 per cent. grade, with an indicated pull of 1,900 pounds; indeed, before the team could be started down this 6 per cent. grade it was necessary to reduce the net load to 1,500 pounds. It was also shown by the tractometer that the pull on an ordinary dirt road was essentially a succession of jerks or blows as destructive to vehicle as they are wearing to the team. Such quantitative results as were obtained were convincing as to the advan-

tages of an improved road surface, and they most pointedly emphasize the need of complete and thorough investigation of these traction matters which affect or are affected by the improved roads.

TYPHOID FEVER AND WATER SUPPLY.

Typhoid fever and dust were referred to at some length in a communication from Drs. Kelsch and Simonin to the Paris Academy of Medicine on October 5, which is abstracted in the British Medical Journal. They report, according to that journal, that in the summer of 1896 there were 18 cases of typhoid fever in a small barracks. The water supply was pure, but it was found that in the autumn of 1895 three cases of typhoid were laid up in the room where the epidemic began nine months later. Those furthest from the beds and the room suffered least. The flooring was taken up, the rooms disinfected, and no more typhoid appeared. A few months later 22 cases occurred in a barracks in another town. The building was small, and the rest of the town free from the disease. This time some dust was collected from the floor of the barracks, and, on examination, Eberth's bacillus and the bacterium coli were discovered in it. About the same month typhoid broke out in two rooms only, in large barracks. The men in the rest of the building remained perfectly exempt from fever. The water supply was absolutely free from specific germs. The dust in the two rooms was subjected to close scrutiny, and the bacterium coli and Eberth's bacillus in every condition were found in abundance. These investigations show that the commonly accepted belief in the spread of typhoid fever by water alone may not be justifiable.

The brick pavements in Washington, D. C., are referred to as follows in the annual report of the Engineer Commissioner, Capt. W. M. Black, Corps of Engineers, U. S. A.: "Further tests are being made of brick pavement on a concrete base, in the hope that the recent improvements made in the quality of the bricks manufactured for street work will show a greater toughness in the material, which will prevent the splintering under traffic which has caused the dissatisfaction in the past. In the absence of any conclusive laboratory test for paving brick, it is deemed best to make the test of actual use, and thus to determine what makes of brick can be depended upon. In the latter work in alleys an elastic asphalt joint on the sides has been used to provide for the expansion of the brick pavements, which has caused trouble elsewhere."

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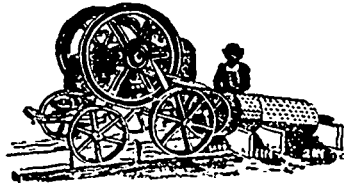
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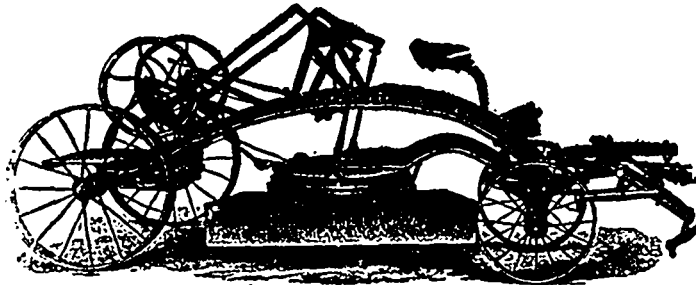
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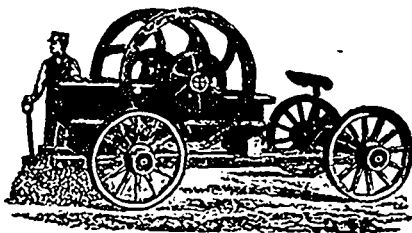
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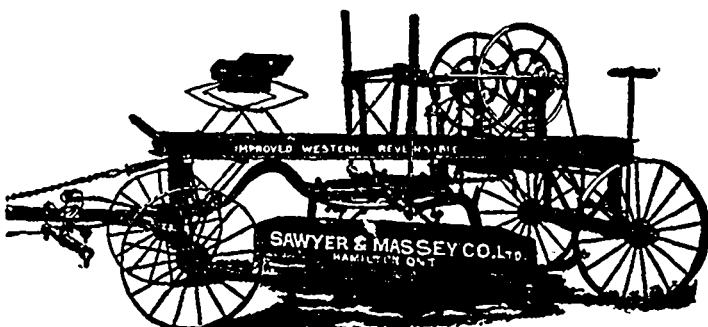
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In the "Canadian Architect and Builder."

Large index table listing various categories of advertisements such as Architects, Cements, Interior Decoration, Roofing Materials, etc. with corresponding page numbers.

Table listing prices for Dimension, per cub. ft., Kent Free stone Quarries, River John, N.S., etc.

Table listing prices for SLATE, Roofing (per square), red, purple, unfading green, etc.

Table listing prices for PAINTS, White lead, Can., per 100 lbs., zinc, Paris, etc.

Table listing prices for PORTLAND CEMENTS, German, per hl., London, Newcastle, etc.

Table listing prices for OMENT, LIME, etc., Portland Cements, German, per hl., etc.

Table listing prices for TORONTO, MONTREAL, Hydraulic Cements, Thorold, per bbl., etc.

Table listing prices for HARDWARE, The following are the quotations to builders for nails at Toronto and Montreal.

Table listing prices for IRON PIPE, Iron pipe, 3/4 inch, per foot, etc.

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