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CANADIAN CONTRACT RECORD
A WEEKLY JOURNAL OF
PUBLIC WORKS · 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.

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THE CANADIAN CONTRACT RECORD,

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The low cost of iron and steel at the present time is strikingly pointed out in a statement by William Garrett, of Joliet, Ill., the inventor of the Garrett rod mill, who said that wire nails are sold so low that if a carpenter drops one it is cheaper to let it lie than to consume the carpenter's time in picking it up. The Iron Age has been induced by this remark to do some figuring on the subject. Assuming that it takes a carpenter 10 seconds to pick up a nail which he has dropped and that his time is worth 30 cents an hour, the recovery of the nail would cost 0.083 cent. There are 200 sixpenny nails in a pound, which is worth about 1.55 cents, so that the value of each separate nail is 0.0077 cent. Or in other words, it would not pay to pick up 10 nails if it took 10 seconds of time worth 30 cents an hour to do it in.

CALCULATING RADIATING SURFACE.

In figuring the amount of heat necessary to warm a room, says the Boston Journal of Commerce, many engineers include also in the calculation the amount of heat given off by the occupants. Such a calculation could not affect the radiating surface necessary to warm the room previous to its occupancy, but would be included in estimating the amount of heat necessary to maintain the temperature in a room. Such an estimate includes the assumption that each person gives off 400 heat units per hour, that each gas jet gives out 4,800 heat units per hour, and each incandescent light 1,600 heat units per hour. With steam at about atmospheric pressure each square foot of radiating surface will give out from a radiator about 400 heat units per hour, so that the presence of one person in the room is reckoned as worth one square foot of direct radiator. In a school room with fifty scholars, the heat they would give out would be equivalent in this assumption to a 50-foot radiator. One gas light would be the equivalent of twelve square feet of heating surface under this assumption, which is the one given by A. R. Wolff in a lecture before the Franklin Institute. This seems a rather large amount, and judging from what a gas jet will do in the way of heating, we hardly think a man would want to substitute two gas jets for his 20-foot steam radiator. We should figure rather upon a 4-foot burner, giving out about 2,000 heat units per hour instead of 4,800, and this would answer for but five square feet of heating surface. The presence of persons and lighted gas jets in a room will certainly require less heat from the heating surface, but we do not believe should be included in calculating the heating surface for a room, though it may be included in figuring the temperature at which air heated outside may be allowed to enter the room. Mr. Wolff gives the value of one square foot of bronzed cast-iron radiator at only 250 heat units per hour, and a gas jet at 4,800 heat units, making the gas jet worth a 19-foot radiator, supplied with steam at three pounds pressure. Our own experience is that the radiator, properly placed, is worth at least 400 heat units and a gas jet decidedly less than Mr. Wolff gives. Possibly the presence of many scholars in a school room will account for why a heating plant that apparently failed in the preliminary trials was found to be all right when the school was in session, though cold at the opening of the session.

CONTRACTS OPEN.

PRESTON, ONT.—An opera house block will be erected here.

BROOKLIN, ONT.—Dr. Starr proposes erecting a new residence.

MONCTON, N. B.—The erection of a new hospital is being agitated.

COMBER, ONT.—The purchase of a chemical fire engine is being considered.

THESSALON, ONT.—John Glanville has decided to rebuild his store recentry burned.

STRATFORD, ONT. — The Board of Trade is strongly urging the erection of a new fire hall.

HOWICK, QUE.—J. J. Logan has purchased Bryson's hotel and intends rebuilding it.

ST. CATHARINES, ONT—R. Peterson is making peparations to erect a brick store on James street.

GUELPH, ONT.—The construction of a sewerage system for the city will probably be undertaken at an early date.

OTTAWA, EAST, ONT.—Plans for a new town hall have been prepared by Mr. H. Ballantyne. It will be a brick building, to cost $2,500.

CHICOUTIMI, QUE.—The School Commissioners have decided on the erection of three new schools one in each district of the village.

WINDSOR, ONT.—Daniel Scotten has purchased a lot at the corner of Ouellette avenue and London street and intends erecting a business block.

VICTORIA, B. C.—The City Council in pursuance of a scheme for improving the water supply of the city, have called for competitive plans for new filter beds.

AMHERSTBURG, ONT.—The Mullen-Gatfield Coal Co. propose constructing substantial docks here. Work will be commenced as soon as the weather will permit.

GLACE BAY, C. B.—Tenders are invited until the 4th of March for the erection of a Presbyterian church at this place. Plans may be seen on application to the Secretary, A. D. McRae, at the Union Bank.

WALKERTON, ONT.—Whole or separate tenders, addressed to John C. Kelly, Box 175, are invited until Thursday, the 21st inst. for the erection of an addition to the R. C. church in this town. Plans may be seen at the Presbytery.

KINGSTON, ONT.—Tenders are invited by T. O. Bolger, City Engineer, until 6 p. m. of the 21st inst. for 200,000 feet B.M. of 2 and 1½ inch plank for walks, and for 40,000 lineal feet of 5×4 cedar sleepers, also for the supply of hardware, etc.

VANCOUVER, B. C.—Thos. F. McGuigan, City Clerk, invites tenders until the 28th inst. for two street sprinklers delivered at Vancouver.—H. F. Hoffar has prepared plans for two buildings to be erected on Cordova street, between Cambic and Carrall streets. The cost will be $14,000 and $11,000. Work will be commenced in the near future.

PORT HOPE, ONT.—H. V. Saunders, Town Clerk, invites tenders on behalf of the corporation until noon of the 15th March for the construction of a system of waterworks for the town. Plans may be seen at the Town Hall, Port Hope, and at the offices of McLennan, Stuart & Chapman, civil engineers, Leader Lane Chambers, Toronto.

LONDON, ONT.—The City Hospital Trust Board will again request the City Council to take action regarding the erection of an addition to the hospital.—Additional school accommodation is required, and a committee has been appointed by the Board of Education to report in the matter.—The necessity of making some improvements to the City Hall has suggested the idea that a new building is required. It is urged by some that a municipal building should be erected jointly by the city and county, to be used as a city hall, court house, county jail and various offices.

REGINA, N. W. T.—Tenders for the purchase of $10,000 of debentures are invited until the 28th inst. John Secord, Town Clerk.— R. B. Gordon, Clerk Executive Committee, invites tenders until Monday, the 4th of March, for the erection of various territorial exhibition buildings in this town. Plans of the buildings may be seen at the following places: office of D. Smith, Department of Public Works, Winnipeg; Northwest government offices, Regina; office of Mr. Coombs, Town Clerk, Prince Albert; office of W. Pearce, Calgary, and at Mr. Randall's office, Edmonton.

OTTAWA, ONT.—The plans and specifications for the Lakefield section of the Trent Valley canal are almost completed, and tenders for the construction of this section will, no doubt, be called at an early date. Mr. R. B. Rogers is superintending engineer.—E. J. Rainboth, C. E., has recommended the survey of the route of the electric railway from Hull to Aylmer.—Tenders for the construction of the Hurdman Bridge are invited by C. Macnab, County Clerk, until noon to-day (Thursday). Plans may be seen at the Court House.—E. F. E. Roy, Secretary Department of Public Works, will receive tenders until the 26th inst., for the construction of a wharf at Burnt Church, Northumberland County, N. B. Plans may be seen at the post-offices at Newcastle and Chatham, N. B., and at the above department.—Jas. Mather, architect, is preparing plans for a new residence for A. MacLaren at Buckingham, Que.

HAMILTON, ONT.—The Jail and Court House Committee have selected A. W. Peene, architect, to prepare plans for a new jail building. The plans must be approved by the Dominion Government.—At the last meeting of the Hospital Committee a sub-committee was appointed to report on the additional heating apparatus required at the hospital, and also as to the necessary furniture required to furnish the new House of Refuge.—A. W. Peene, architect, corner James and Main streets, invites tenders until Saturday, the 16th inst., for carpenter, painting, plumbing, and tinwork required in the erection of a club house, at the foot of Wellington street, for the Victoria Yacht Club.—A new wing will probably be added to the press house of the Waterworks Department.—Mr. Henderson, M. P., interviewed the Minister of Public Works at Ottawa, in regard to the construction of the proposed bridge over the canal at Burlington Beach. Tenders for masonry have already been received by the department, and the tenders for the iron work will be called for in a few days.—The City Engineer has been requested by the Sewers Committee to prepare an estimate of the cost of a trunk sewer on Garth street.

WINNIPEG, MAN.—Mr. S. F. Peters, architect, of this city, has just returned from Toronto, where he consulted with the management of the Western Loan Co. regarding the reconstruction of their office building in this city, which was recently destroyed with the exception of the walls. It has been decided to utilize the remaining portion of the old building. The interior will, however, be entirely remodelled.—The Fire, Water and Light Committee have recommended to the City Council that tenders be called for the electric lighting of the streets with from 150 to 200 arc lights for a period of three years from the expiration of the present contract in April next.—At the last meeting of the Board of Works it was decided to construct a new steel superstructure for the Osborne street bridge at a cost of $9,500, and the legislative committee was authorized to procure such legislation as will enable the city to issue debentures for the amount without submitting a by-law to the ratepayers.—The question of repaving Main street was taken up, and it was resolved to recommend calling for tenders for cedar block, vitrified brick, stone and asphalt.—The extension of Gladstone street, at a cost of $5,000 is under consideration.—The Committee on Works has recommended the construction of pipe sewers on Francis street, Proud street and Osborne street, at a cost of $1,900.—R. W. Jameson, Chairman Finance Committee, invites tenders until the 29th of March for the purchase of $40,000 of debentures.

MONTREAL, QUE.—The St. Jean Baptiste Electric Co. propose building new lines of railway this spring extending to the commercial parts of the city. Tenders will also be called at an early date for new engines and dynamos to be added to their plant at the corner of Rachael and Montana streets. The capital stock will be increased to $500,000.—At the general meeting of the Municipal council of St. Louis du Mile End, held last week, it was decided to call for tenders for supplying stone for the corporation. The plan for lighting the town by electricity was also adopted, and tenders will also be invited. The Montreal Carriage Co., which was recently granted a bonus of $15,000 by the municipality, was given an extension of time in which to commence operations.—The Health Committee has decided to recommend to Council to purchase property in Delorimier village offered by Guimond & Brosseau as a site for the proposed hospital for contagious diseases. The National boulevard scheme as presented to the Road Committee provides for a boulevard of a total width of 150 feet. The cost of the scheme is $450,000.—A meeting of the Council of the municipality of Verdun was held last week, at which the plans, as prepared by James Adam, C. E., were presented and approved of. The total area of the ground covered will consist of 903,000 feet. Specifications were ordered to be prepared by the end of the present month, when tenders will be called for. Work will commence early in May.—The Harbour Commissioners of Montreal invite tenders until the 5th of March for about 4,000 tons of steam coal and the usual supply of castings, iron spikes, bolts, oil, paint, rope, cotton waste and other stores required for twelve months. Specifications may be obtained from the secretary Alex. Robertson.—Mr. W. E. Doran, architect, has been requested by the Catholic School Commissioners to report on the required improvements in the sanitary condition of Montcalm and Sarsfield schools.—At a special meeting of the shareholders of the Bell Telephone Co., held on Monday, it was decided to issue debentures for $600,000 for the purpose of erecting a new building.—H. Austin Jones, architect is preparing plans for four tenements on Beaudry street, for Mr. A. Purcil. Same architect is calling for tenders for three tenements on Inspector street, for R. Duncan.

TORONTO, ONT.—Tenders are wanted by A. H. Gilmore for all trades except carpenter, for alteration and additions to dwelling on Victoria ave., Eglinton. Plans may be seen at 23 Marlboro ave.—Mr. Hambly, in assuming the chairmanship of the Toronto Public School Board for 1895, urged the necessity of additional school buildings. He stated that 15,000 pupils of the public schools are at present occupying rented rooms, many of which from a sanitary standpoint were very unsuitable for the purpose. A less amount than is required to pay the rent of these rooms, would pay 4 per cent. on the amount required for new buildings.—Messrs. Frankel Bros. propose to erect a large warehouse at the corner of George and Duchess streets.—The Board of

Works on Monday last passed the recommendation of the City Engineer that the sum of $226,000 be expended on new water mains, and decided to recommend the Council to submit a by-law to the citizens to raise the necessary funds. The improvements passed by the board, are as follows: 36-inch main from corner College and Bathurst streets to reservoir, cost $135,500; 24-inch main on Front street, cost $40,000; branch pipes off Front street, cost $22,400; 12-inch main on Avenue road, from Bloor street northerly, cost $5,500; connecting district east of River Don and north of Gerrard street with high level service, cost $2,500; larger mains in Parkdale, cost $2,000. The recommendation of the City Engineer regarding the laying of street car tracks and a pavement on Avenue road was passed on to Council by the Board. A plan for the further reclamation of Ashbridges Bay was presented, but the Board decided to defer action until a later meeting. In connection with this work the purchase of a sand-pump for dredging purposes is recommended.—A meeting of influential business men was held in this city to consider the Nipissing and James Bay railway scheme. It was decided that, should the Grand Trunk not proceed at once with the construction of the road, the members of the meeting would form a company and apply for an independent charter with the object of carrying out the undertaking.—The Sullivan Machinery Co., of Chicago, through their representative, F. K. Copeland, has entered into an agreement with the City Council for exploring the rock formation under Toronto Bay for the purpose of discovering its suitability for the construction of a conduit tunnel for water supply. —In the report of the directors presented at the annual meeting of the Toronto Industrial Exhibition Association, held on Tuesday, it was pointed out that additional buildings would be required in the near future, the erection of new sheep and pig pens; the enlargement of the main building, the reconstruction of the machinery hall, and a new stone building, are among the requirements.

FIRES.

At Morden, Man., on Saturday last, fire destroyed the Morden House, Kilgour's dry goods store, G. W. McLaren's drug store, Sparling's grocery store, Forest's jewelry store, Heiman's liquor store and the Commercial Hotel. The total loss is between $60,000 and $70,000, and the insurance $27,000.—Patrick Cashion's residence at Cobourg, Ont., was burned on the 8th inst. Loss, $2,000; partially insured.—The Orange Hall at Florenceville, N. B., was destroyed by fire last week. Loss, $2,000.—The residence of Robert Alexander, Ridgetown, Ont., was burned recently.—A residence on Division street, Kingston, owned by Edward Dawson, was burned last week.—Fire at Port Dalhousie, Ont., on the 6th inst., destroyed a frame house owned by John Howe and the residence of M. J. Irwin. The losses respectively are $1,500 and $2,000, with small insurance.—The Lake Erie and Detroit River railroad station at Merlin, Ont., has been burned. Building insured. —The residence of D. P. Foster, at Decewsville, Ont., was destroyed by fire a few days ago. Loss partially covered by insurance.—Trinity College school at Port Hope, Ont., was completely destroyed by fire on the 11th inst.. The loss is estimated at $80,000; the insurance being $61,000. Rebuilding will probably be commenced as soon as arrangements can be completed. — M. X. Mattmann's brewery at Pembroke, Ont., was burned last week. It was a new building and was valued at $5,000. No insurance. The Eldon House at Woodville, Ont., has been destroyed by fire. Loss, $6,000 · nsurance $2,000.—Fire at Harrow, Ont., on the 12th inst. destroyed W. S. Wright's dwelling, Straith & Co.'s general store and Roseburg's har ess shop and dwelling. About one-half the loss is covered by insurance. — The Queens Avenue Methodist church, London, Ont., was destroyed by fire yesterday morning, the 13th inst.

CONTRACTS AWARDED.

TRURO, N. S.—Black & Co. have let the contract for the erection of a block of stores in this town to Rhodes, Curry & Co., of Amherst. The contract price is about $12,000.

COMBER, ONT.—J. A. Buchanan, of this place, has received the contract for furnishing the piles necessary for the construction of the Amherstburg extension of the M. C. R. About 10,000 lineal feet will be required, which will cost about $1,600.

WINNIPEG, MAN.—Philip Burnett, contractor, of this city, has been awarded the contract for building a large chimney at the Ogilvie mill and also for other brickwork in connection with new boilers and enlarging the boilers and engine rooms. The chimney will cost about $6,000.

MONTREAL, QUE. — The Municipal Council of St. Louis du Mile End have awarded the contract for building new sewers on St. Urbain street to Bastien & Valiquette. The work will be commenced at once.—Messrs. Perrault & Lesage, architects, have awarded the following contracts: Interior finishing for the Banque d'Hochelaga, W. Scott & Sons; marble work, A. Forsyth. Stores and dwellings for Mr. J. B. Charbonneau, roofing, G. Quintal; plastering, F. Lefebvre; plumbing, G. Quintal. Store and dwelling for Mr. P. A. Rodier; roofing, T. Bonhomme; plumbing and heating, F. Bonhomme. Dwellings on St. Denis street for Mrs. A. Bourgeau, carpenter and joiner's work, L. Beaudry; roofing and plumbing, Lesperance & Chériault; plastering and brickwork, L. Beaudry; painting and glazing, A. Carrieré; masonry, L. Beaudry. Store and dwelling on Peel street for the Bagg estate, masonry, Prénoveau, Turcot & Martineau; carpenter and joiner's work, plastering and painting, L. Beaudry; roofing and plumbing, A. Sigouin; steel work, A. & E. Loignon; brickwork, J. Morache; glazier, Mongenais, Boivin & Co.

NEW COMPANIES.

ESSEX, ONT.—Standard Oil and Gas Co., incorporated; capital, $400,000.

OTTAWA, ONT.—The Tulameen Mining Co., seeking incorporation; headquarters in this city. The operations of the company will be carried on principally in British Columbia.

SHERBROOKE, QUE.—Hall Mowing Machine Co., seeking incorporation; capital, $100,000; incorporators, A. N. Thompson, Sidney Stevens and J. S. Mitchell, of this place, and several others.

PETERBOROUGH, ONT.—Peterborough and Chemong Park Railway Co., applying for incorporation; capital, $100,000; to construct an electric railway from Peterborough to Chemong Park.

PORT COLBORNE, ONT.—Port Colborne and Fort Erie Railway Co., provisionally organized. Directors, W. R. German, of Welland; R. G. Cox, of St. Catharines; F. F. White, of Port Colborne, and others. The construction of the road will be commenced as soon as Government charter is granted.

MONTREAL, QUE.—Montreal Roofing Co., seeking incorporation; capital, $150,000; to carry on business as general roofers and contractors.—Taylor Hydraulic Air Compressing Co., applying for incorporation; capital, $500,000; applicants, C. H. Taylor, J. Millen, W. T. Ross, of Montreal, W. H. Campbell, of Belleville, and others.

BUSINESS NOTES.

Paquet & Fortin have formed a partnership in Quebec, Que., as contractors.

W. H. Wooden, carpenter and lumber dealer, at Burford, Ont., has assigned.

The sheriff is said to be in possession of the effects of Braden Bros., plumbers, Victoria.

The firm of Goodman & White, builders and contractors, Windsor, Ont., has been dissolved. The business will be continued by George E. White.

The firm of Christie & Agar, plumbers and steam fitters, Owen Sound, Ont., has been dissolved, J. H. Christie retiring. The business will be carried on in future under the style of Christie Bros.

A new company will shortly be formed in Moncton, N. B., to manufacture building brick under the dry process. The new concern will be known as the Maritime Pressed Brick and Terra Cotta Co., and will have a capital of $20,000.

AN UNFAIR PRACTICE.

Instances have recently come to our attention, says The Brickbuilder, which would seem to give material men considerable ground for complaint against some architects for decidedly unfair treatment. We cannot see the justice of allowing manufacturers to figure on work and put in bids, which, on their part, is done in all earnestness, when the architect has made up his mind not to give them the contract if they are the successful bidder. One of the most aggravating and yet most common instances of dishonorable practice is that of allowing several manufacturers to estimate with a view to using the lowest estimates to beat down one of the bidders whom the architect wants to have do the work, yet whose initial bid is apt to be above the average. It is usually done by taking the lowest bid to the selected bidder and telling him he can have the job if he will meet the successful bid. We say it is dishonorable because it is dishonest practice. The taking off of quantities and the figuring of costs is no little item in the time of the manufacturer or his agent. He invests this time as a part of his expenses in securing business. The architect who takes his time, having decided not to give him the contract, is a *thief*, for no material-man will estimate unless he thinks he will get the contract if his bid is the lowest. He certainly would not work hard for hours preparing an estimate which he knew would be used only to beat down a competitor.

The architect may give as his excuse that he was not satisfied that the lowest bidder could satisfactorily fill the contract. The only answer to this is that he should satisfy himself beforehand that none but responsible bidders were allowed to figure. It is a characteristic of the best offices that the figuring is not thrown open to Tom, Dick, and Harry, but to a list of reputable contractors and material-men. The architect who "turns down" the would-be bidders frankly, because he has doubts as to their satisfactorily carrying out the contract, is far more honorable and aboveboard than he who allows every one to figure because he dislikes to shut out certain ones.

BRINGING DOWN A CHIMNEY.

To take down a mill chimney, or "stack," thirty-five yards high, is no light undertaking. This is how it was done recently at Salford to make room for a dock railway: First of all a course of bricks was taken out at the foot of the chimney, each brick as it was knocked out being replaced by a wood block. When the bricks had been withdrawn in such number that the chimney was almost entirely resting on its new support, the space below was filled with the materials for a fire. A light was applied, and in a quarter of an hour the supports were burned through, and the chimney leaned forward and fell in a mass In the line of its fall was the gable wall of the old corn mill, which was brought down at the same time.

Sandpaper is at present made with powdered glass instead of sand. Glass is readily pulverized by heating it red hot and throwing into water and finishing the powdering in an iron mortar. By the use of sieves of different sizes of mesh, the powder can be separated into various grades of fineness. A strong paper is tacked down and covered with powdered glass of desired fineness; when the glue is dry the surplus glass is shaken or brushed off. Muslin is better than paper and lasts much longer.

MUNICIPAL DEPARTMENT

BRICK PAVING IN ONTARIO.

THE third annual report of the Ontario Bureau of Mines recently published contains the following on this subject:

So far as is known, only two places in Ontario have made use of brick as a paving material. One of these is the town of Chatham, where in 1890 a brick pavement was laid down on King street, from the Rankin House almost to the Garner House, the busiest part of the main thoroughfare. The bricks were purchased from local brickmakers and were made from clay adjoining the town. They were not burnt hard enough for durability but the pavement is in fairly good shape yet, and all are agreed that brick is the material for Chatham, provided suitable clay could be got and the brickmakers there had the proper appliances for burning it. The other place where vitrified bricks have been put down is Toronto, and to those who have not watched local affairs closely it may be news that there are four miles of streets in this city paved with vitrified brick, all of which were laid down last year. The following are the streets: Dundas street from the bend to Lansdowne avenue; Lansdowne avenue from Dundas to College; College from Lansdowne avenue to Bathurst; Bathurst from Queen to Bloor. The pavement is between the street car rails only. The bricks of which it is composed are all imported from the United States, partly from Massilon, Ohio, and partly from Canton, Ohio. The foundation is a bed of concrete, on which is laid a cushion of sand one inch in thickness, and on this the bricks are placed at edge at right angles to the kerb. They are laid as close to one another as possible, and the interstices are completely filled with paving pitch or Portland cement. Pitch is used on Bathurst street between College and Queen, and on College street between Bathurst and Dufferin, and cement on the remainder of the pavement. The cost of paving brick laid down in Toronto is from $20 to $23 per thousand, made up as follows: price at place of manufacture per thousand, $9 to $10.50, freight $9 and duty $3. It takes from 60 to 64 bricks to lay a square yard of pavement, allowing for breakages. The brick pavements in Toronto having been down scarcely a year do not afford data for a conclusion as to their durability; we expect them to be yet practically uninjured and as good as when laid down. This on examination we find to be the case, and although, owing to the pavement being between the car rails only and thus by its position as well as by its smoothness offering a double inducement to vehicles of all kinds, it has received more than its fair share of travel, the only visible mark of wear is a slight rounding off of the edges of the bricks. The comparative cost of the various kinds of pavement used in Toronto is as follows, including foundations:

	Per sq. yard.
Cedar block on 6-in. sand	$ .75
Cedar block, on 2 layers of 1-in. boards, with tar composition	1.30
Cedar block, on 6-in. concrete	1.50
Light asphalt, 4-in. concrete, 2-in. asphalt	2.10
Vitrified brick, on 4-in. concrete	2.25
Heavy asphalt, 6-in. concrete, 2½-in. asphalt	2.60
Granite sets on 6-in. concrete	3.85
Scoria blocks on 6-in. concrete	4.00

The city authorities are very favorable to the use of brick as a paving material, considering it suitable for traffic of any kind, whether heavy or light. If good paving bricks were made here and sold for the same price as that charged by the United States manufacturers in their own markets, a saving of from 65 to 75 cents per square yard over present cost could be effected, which would reduce the cost of brick pavement to practically that of cedar blocks. In such a state of affairs there would be no choice between the two kinds of pavement. The inodorous, bumpy, short lived block would disappear forever, before the clean, smooth, warm-colored and durable brick. There are miles of cedar block pavements in Toronto which are approaching the point when they must either be renewed or replaced by some better material. It would be a calamity if cedar blocks were again laid to furnish a repetition of the nuisance which this kind of pavement becomes in its unlovely old age; while on the other hand, a public benefit of no mean kind would be conferred by replacing them with smooth, lasting and sanitary brick roadways.

SEWER VENTILATION.

A discussion is going on in the English papers as to the advantages and disadvantages of ventilating sewers directly into the street, by perforated manhole covers; and, as our city sewer departments appear to be just now possessed with a mania for this kind of ventilation, it is worth while to call attention to some of the English views of the matter. It is rather curious that, on the whole, the practical men, such as health officers and city engineers, seem to be opposed to indiscriminate ventilation of sewers into the streets, or propose to modify the system in some way, while the theorists and writers advocate its utmost extension, in its most unmitigated form. There is no doubt that plenty of fresh air will destroy the microbes that are carried through sewage; but the question is whether the danger that some may escape alive from the sewer manholes, and do harm, where these are situated in close proximity to houses, does not counterbalance the advantage of free aeration. We have ourselves known, says the American Architect, of one or more cases of diphtheria, in Boston, which could be traced to no more probable cause than the superabundance of ventilation allotted to the sewers in the neighborhood; and the medical health officer of the town of Fulham, in England, reports that out of two hundred and thirty-one cases of diphtheria occurring in his district within a given period, ninety-six, or about forty-two per cent., were in houses situated within ten yards of a sewer-ventilator. With a reasonable allowance for additional cases, in which the patients were infected by inhaling the air from sewer-ventilators situated at a distance from their dwellings, a very strong case is made out against the exposure of the contents of sewers to the air of crowded streets during a diphtheria epidemic. One English city engineer, impressed with these considerations, writes that he has fitted filters of cotton wool to all the sewer-ventilators within his jurisdiction; and simple as it is, this precaution is an excellent one. With ventilated sewers, Dr. Rauch's successful plan for checking a diphtheria and scarlet fever epidemic, by burning sulphur in the sewers, could not be carried out; but his idea was an excellent one, and it is possible that something of the same kind might be done by flushing the sewers in the seaboard cities by electrolyzed sea-water, which certainly has a powerful effect in destroying the germs of disease.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

SHANNON V. CITY OF TORONTO.—Judgment on appeal by Robert Carroll from order of MacMahon, J., in Chambers allowing appeal from order of Master in Chambers upon summary trial of an interpleader issue, and holding that appellant, was not entitled to money in question, $244. Carroll claimed the money under an agreement with one Booth, who had a contract with defendants, and Booth gave to plaintiffs and Tomlinson and Son orders upon defendants for contract money. The court held that the right of Carroll to fund in hand of defendants must be treated as postponed to rights of plaintiffs and Tomlinson and Son, whose claims, together with cost of proceedings, must be first paid out of fund; but that the verbal assignment to Carroll being good as against Booth, the balance, if any in the hands of defendants must be paid to Carroll, and Booth must pay Carroll's costs of proceedings, including the present and former appeal. Order accordingly.

Re Township of Mersea and Township of Rochester; re Township of Gosfield North and Township of Rochester.—Judgment on appeal by township of Rochester from report or decision of Mr. Britton, referee under the Drainage Trials Act, 1891, allowing appeals by townships Mersea and Gosfield North from report of Joseph Tierman, civil engineer, upon the repair of the river Ruscom drain and Silver Creek branch thereof in the township of Rochester and finding that the assessments against Mersea and Gosfield were illegal and void, and restraining Rochester from proceeding with the proposed repairs, Haggarty, C. J. O., and Maclennan, J. A., held that appeal should be dismissed on merits and referee had jurisdiction. Burton and Osler, J. J. A., held that the referee had no jurisdiction, and appeal should be allowed on that ground. Burton, J. A., expressed no opinion as to the merits. Osler, J. A., agreed with the referee as to the merits. In result appeal dismissed with cost.

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Prices of Building Materials.

CONDITION OF THE MARKET.

TORONTO: Some activity is noticeable in the demand for builders' supplies, and the outlook for the spring trade is said to be getting somewhat brighter as the season advances. General hardware and paints and oils are moving freely, and travellers report business improving. Glass is selling at $1.90 for first break in 100-foot boxes. Plate glass is quiet. There is nothing doing in cement, and prices remain unchanged. The movement of firebricks is light, at $3.25 per 100; Scotch fireclay $1.00 per 100 lbs.

MONTREAL: The business in general hardware is confined to tools and shelf goods, which are in steady demand. In cut nails the jobbing demand is small, and makers do not report any special activity for carloads and larger lots. The cement market is featureless. Glass is selling at $1.20 for first break, with a rebate for wholesale lots. Orders for paints and oils are commencing to come in freely, and prices remain steady. Iron pipe, lead pipe and galvanized iron are quiet, and prices firm.

LUMBER.

CAR OR CARGO LOTS.

	Toronto. $	Montreal. $	$
1¼ to 2 clear picks. Am ins	33 00@36 00	40 00@45 00	
1¼ to 2 three uppers, Am ins.	37 00	40 00	45 00
1¼ to 2, pickings, Am ins	26 00	27 00	30 00
1 inch clear		52 50	60 00
3 x 10 and 12 dressing and 1 better	20 00	22 00	18 00 20 00
1 x 10 and 12 mill run	16 00	17 00	19 00
1 x 10 and 12 dressing	20 00	22 00	18 00
1 x 10 and 12 common	13 00	14 00	8 00 10 00
1 x 10 and 12 spruce culls	10 00	11 00	10 00 11 00
1 x 10 and 12 culls	9 00	10 00	9 00
1 inch clear and picks	28 00	3200	33 00 35 00
1 inch dressing and better	20 00	22 00	18 00 20 00
1 inch siding, mill run	14 00	15 00	14 00 16 00
1 inch siding, common	12 00	13 00	12 00 14 00
1 inch siding, ship culls	11 00	12 00	10 00 11 00
1 inch siding, mill culls	9 00	10 00	8 00 9 00
Cull scantling	8 00	9 00	8 00 9 00
1¼ and thicker cutting up plank	24 00	26 00	22 00 25 00
1 inch strips, 4 in to 8 in. mill run	14 00	15 00	14 00 15 00
inch strips, common	11 00	12 00	11 00 12 00
1¼ inch flooring	16 00	17 00	14 00 15 00
1¼ inch flooring	16 00	17 00	14 00 16 00
XXX shingles, sawn, per M 16 in	2 50	2 60	2 60 2 60
XX shingles, sawn	1 50	1 60	1 60 1 70
Lath	2 40		

VARD QUOTATIONS.

Mill cull boards and scantling	10 00		10 00
Shipping cull boards, promiscuous widths	13 00		13 00
Shipping cull boards, stocks	16 00		16 00
Hemlock scantling and joist up to 16 ft	11 00	12 00	10 00
Hemlock scantling and joist up to 18 ft	12 00	13 00 12 00	13 00
Hemlock scantling and joist up to 20 ft	13 00	14 00 13 00	14 00
Cedar for block paving, per cord		5 00	5 00
Cedar for Kerbing, 4 x 14, per M		14 00	14 00
Scantling and joist, up to 16 ft		14 00	14 00
" " 18 ft		15 00	15 00
" " 20 ft		16 00	16 00
Scantling and joist, up to 22 ft		17 00	17 00
" " 24 ft		19 00	19 00
" " 26 ft		20 00	21 00
" " 28 ft		22 00	23 00
" " 30 ft		24 00	25 00
" " 32 ft		27 00	27 00
" " 34 ft		29 50	29 50
" " 36 ft		31 00	31 00
" " 38 ft		33 00	33 00
" " 44 ft		34 00	36 00
Cutting up planks, 1¼ and thicker, dry	25 00	28 00	25 00 26 00
Cutting up planks, 1¼ and thicker, board	18 00	24 00	18 00 22 00

B. M.

1¼ in. flooring, dressed, F M.	26 00	30 00	28 00 31 00
1¼ inch flooring, rough, B M.	18 00	22 00	18 00 22 00
1¼ " dressed, F M.	25 00	28 00	27 00 30 00
1¼ " undressed, B M.	18 00	19 00	18 00 19 00
1¼ " dressed	18 00	20 00	18 00 22 00
1¼ " undressed	12 00	15 00	12 00 15 00
Beaded sheeting, dressed	20 00	35 00	22 00 35 00
Clapboarding, dressed		12 00	12 00
XXX sawn shingles, per M 18 in	2 60	2 70	3 00
Sawn lath	2 50	2 60	2 50 2 60
Cedar		2 90	2 90
Red oak	30 00	40 00	30 00 40 00
White	37 00	45 00	35 00 45 00
Basswood, No. 1 and 2	28 00	30 00	18 00 20 00
Cherry, No. 1 and 2	70 00	90 00	70 00 80 00
White ash, No. 1 and 2	24 00	35 00	30 00 35 00
Black ash, No. 1 and 2	20 00	30 00	18 00 30 00
Dressing stocks	16 00	22 00	16 00 22 00
Picks, American inspection		30 00	40 00
Three uppers, Am. inspection		50 00	50 00

	Toronto.	Montreal.	
BRICK—$ M			
Common Walling	6 50		6 00
Good Facing	8 00		8 50
Sewer	8 50	3 00	8 50 9 00
Pressed Brick, Per M:			
Red, No. 1, f.o.b. Beamsville	16 00		
" " 2	14 00		
" " 3	9 00		
Buff	21 00		
Brown	24 00		
Roman Red	30 00		
" Buff	35 00		
" Brown	40 00		
Sewer	7 50		
Hard Building	6 00		
Roof Tiles	22 00		
Hip Tile (each)	20		
Ridge Tile "	60		
1st quality, f.o.b. at Port Credit	14 00		18 00
2nd " " " "	12 00		15 00
3rd " " " "	8 00		12 00
Hard building brick	6 50		
Ornamental, per 100	3 00	10 00	
SAND.			
Per Load of 1½ Cubic Yards	1 25		1 25
STONE.			
Common Rubble, per toise, delivered	14 00		14 00
Large flat Rubble, per toise, delivered	18 00		18 00
Foundation Blocks, per c. ft.	50		50
Kent Freestone Quarries *Moncton, N. B., per cu* ft., f.o.b.	1 00		
River John, N. S., brown Freestone, per cu. ft., f.o.b.	95		
Ballochmyle	80	90	65 75
New York Blue Stone			1 05
Granite (Stanstead) Ashlar, 6 in. to 12 in., rise 9 in., per ft.			25
Moat Freestone			70 80
Thomson's Gatelawbridge, cu. ft.			75 80
Credit Valley Rubble, per car of 15 tons, at quarry	8 00		
Credit Valley Brown Coursing, up to 10 inch, per sup. yard, at quarry	1 75		
Credit Valley Brown Dimension, per cu. ft. at quarry	60		
Credit Valley Grey Coursing, per superficial yard	1 50	2 00	2 15
Credit Valley Grey Dimension, per cubic foot	60		75
Clark's N. B. Brown Stone, per cubic foot, f.o.b.	1 15		1 00
Brown Free Stone, Woodpoint, Sackville, N.B., per cub. ft.	1 15		1 00
MadocRubble, delivered, per toise	14 00	14 50	14 00 14 50
Madoc dimension floating, f. o. b. Toronto, per cubic ft.	30	32	
Ohio Freestone, No. 1 Blue Promiscuous, f.o.b.		60	
No. 1 Blue Dimension		65	
No. 1 Buff Promiscuous		80	
No. 1 Buff Dimension		85	
The above prices means freight and duty paid.			
2 in. sawed flagging per sq. ft.		11	
2½ " " " "		13½	
3½ " " " "		16½	
4½ " " " "		22	
5½ " " " "		27½	
6½ " " " "		33	
Duty to be added to these prices.			
Quebec and Vermont rough granite for building purposes, per c.ft. f.o.b. quarry	33	1 50	
For ornamental work, cu. ft.	35	2 0	
Granite paving blocks, 8 in. to 12 in. x 6 in. x 4½ in., per M		50 00	
Granite curbing stone, 6 in. x 20 in., per lineal foot		70	
SLATE.			
Roofing (*square*).			
" red	18 00		20 00
" purple	9 00		10 00
" unfading green	8 50		6 00
" black	7 50		7 50
Terra Cotta Tile, per sq	25 00		
Ornamental Black Slate Roofing	8 00		

PAINTS. *(In oil, $ lb.*				
White lead, Can., per 100 lbs.	6 25	5 50	6 00	6 25
" zinc, Can., " "	6 50	7 50	7 50	8 00
Red lead, Eng	4 00	5 00		6
" venetian, per 100 lbs	1 60	1 75	1 60	1 75
" vermillion	90	1 00	90	1 00
" Indian, Eng	10	12	10	12
Yellow ochre	5	10	4	6
Yellow chrome	15	20	15	20
Green, chrome	7	12	7	12
" Paris	20	25	20	20
Black lamp	15	25	12	25
Blue, ultramarine	12	20	12	18
Oil, linseed, raw, *$ Imp. gal.*	54	59	63	65
" " boiled "	57	63	66	68
" " refined, "	78	85	75	75
Putty	2¾	2½	2¾	2½
Whiting, dry, per 100 lbs	75	1 00	60	75
Paris white, Eng., dry	90	1 25	90	1 10
Litharge, Eng	4	5	6½	8
Sienna, burnt	10	15	12	15
Umber, "	8¼	12	12	15
CEMENT, LIME, etc.				
Cement, Portland, per bbl.	2 25	2 50		3 50
" German "		2 35	2 65	2 85
" London "	2 50	2 75	2 45	2 90
" Newcastle "		2 50	2 05	0
Cement, Belgian, per bbl.		2 30	1 80	2 00
" Canadian "	2 30	2 50	2 25	2 50
" Roman "				2 75
" Parian "	4 50	4 75	4 50	4 75
" Superfine "	6 50	7 00	6 50	7 00
" Thorold, "		1 50		
" Queenston, "		1 50		
" *Napanee*, "		1 50		
" Hull, "		1 50		
Keene's Coarse "Whites"	4 50	4 75	4 50	4 75
Calcined plaster, per barrel			1 55	1 70
Fire Bricks, Newcastle, per M	23 00	30 00	16 50	22 00
" Scotch "	23 00	30 00	24 00	30 00
Lime, Per Barrel, Grey		30		
" " White		40		
Plaster, Calcined, N. B		2 00		
" " N. S		2 00		
Hair, Plasterers', per bag	80	1 00		

HARDWARE.

Cut nails, 5cd & 6cd, per keg		2 40	2 25
Steel " " " "		2 50	2 35
CUT NAILS, FENCE AND CUT SPIKES.			
40d, hot cut, per 100 lbs		5	5
30d, " " "		10	10
20d, 16d and 12d, hot cut, per 100 lbs		15	15
10d, hot cut, per 100 lbs		20	20
8d, 9d, " " "		25	25
6d, 7d, " " "		40	40
4d to 5d, " " "		60	60
3d, " " "		1 00	1 00
2d, " " "		1 50	1 50
4d to 5d cold cut, not polished or blued, per 100 lbs		50	50
3d to 5d cold cut, not polished *or blued, per 100 lbs*		90	90
FINE BLUED NAILS.			
3d, per 100 lbs		1 50	1 50
2d, " "		2 00	2 00
CASING AND BOX, FLOORING, SHOOK AND TOBACCO BOX NAILS.			
12d to 30d, per 100 lbs		50	50
10d, " "		60	60
8d and 9d, " "		75	75
6d and 7d, " "		90	90
4d to 5d, " "		1 10	1 10
3d, " "		1 50	1 50
FINISHING NAILS.			
3 inch, per 100 lbs		85	85
2½ to 2¾ " " "		1 00	1 00
2 to 2¼ " " "		1	1 15
1½ to 1¾ " " "		35	1 35
1¼ " " "		1 75	1 75
1 " " "		2 25	2 25
SLATING NAILS.			
5d, per 100 lbs		85	85
4d, " "		85	85
3d, " "		1 25	1 25
2d, " "		1 75	150
COMMON BARREL NAILS.			
1 inch, per 100 lbs		1 50	1 50
⅞ " " "		1 75	75
¾ " " "		2 25	2 25
CLINCH NAILS.			
inch, per 100 lbs.		85	85
½ and 2¾ " " "		1 00	1 00
2 and 2¼ " " "		1 15	1 15
1½ and 1¾ " "		1 35	1 35
1¼ " "		2 00	2 00
1 " "		2 50	2 50
SHARP AND FLAT PRESSED NAILS.			
3 inch, per 100 lbs.		1 35	1 35
2½ and 2¾ " " "		1 50	1 50
2 and 2¼ " " "		1 65	1 65
1½ and 1¾ " " "		1 85	1 85
1¼ " " "		2 50	2 50
1 " " "		3 00	3 00

STEEL WIRE NAILS.

Steel Wire Nails, 75, 10 and 5 % discount from printed list.

Iron Pipe:

Iron pipe, ⅛ inch, per foot			6c.
" " ¼ " "			7
" " ⅜ " "			8½
" " ½ " "			12
" " ¾ " "			17
" " 1 " "			24
" " 1¼ " "			30
" " 1½ " "			43
Black wrought iron pipe, 67½% off above prices.			
Galvanized " "	40%	" "	
Cast and soil " "	57½	" "	

Lead Pipe:

Lead pipe, per lb	7c.
Waste pipe, per lb	7½

Discount, Toronto and the West, 30 % off in small lots; 30 and 10 % off in ton lots; points east of Toronto, 35 and 10 % off.

Galvanized Iron:

Adam's—Mar's Best and Queen's Head:			
16 to 24 guage, per lb		4½c.	4¾c
26 guage, "		4¾	5
28 " "		5	5¼
Gordon Crown—			
16 to 24 guage, per lb		4¼	4½
26 guage, "		4½	4¾
28 " "		4¾	5

Note.—Cheaper grades about ¼c. per lb. less

Structural Iron:

Steel Beams, per 100 lbs	2 75	2 50
" channels, "	2 85	2 60
" angles, "	2 50	2 30
" tees, "	2 80	2 65
" plates, "	2 55	2 35
Sheared steel bridge plate	2 25	2 35