

erect two power houses, one in the east end and another in the west.—Jos. Haynes, architect, is preparing plans for stores and dwellings to be erected on the cor. of St. Hubert & Craig sts. for Mr. C. N. Catelli. Tenders will be called next week.—J. A. P. Hulman, architect is preparing plans for a house on Milton St. to cost \$8,000, and one on St. Denis St., cost \$9,000, also plans for small house at Cote St. Antoine.—A. C. Hutchison, architect, is calling for tenders for the erection of a new curling rink.—J. R. Gardner, architect, is preparing plans for a cottage for Mr. Darling, to be erected at St. Rose.—The C.P.R. Co. will make alterations to the store lately occupied by Kenneth Campbell in St. Lawrence Hall block for a city ticket office.

TORONTO, ONT.—The City Council has given notice of its intention to construct the following works: Cedar block roadways on Royce avenue from the C.P.R. tracks to Symington avenue, estimated cost, \$5,250; Herwick street from Bathurst street to Lippincott street, cost \$860; Perth avenue, from Bloor street to Royce avenue, cost \$9,720; Sussex avenue, from Robert street to Borden street, cost \$2,000; High Park avenue, from Roncesvalles avenue to the eastern limit of High park, cost \$18,000.—An order has been issued for the construction of a sewer on Dupont street, from St. George to Huron street.—Building permits have been granted as follows: Mrs. H. A. Rice, 40 Victoria crescent, detached two story bk. dwelling, 17 Starr ave. cost \$3,300; R. M. Scott, 308 Dovercourt road, two det. 2 story and attic bk. dwelling w. side Dowling ave., opposite Leopold st., cost \$14,000; P. Roach, det. bk. dwelling, 527 Givens st., cost \$1,800; corporation of City of Toronto, 2 story and attic bk. isolation hospital, n.s. Gerrard st., cost \$23,000; W. J. McCleary and Jas. McConnell, bk. bay windows and bk. foundation to dwellings, 127 & 129 Baldwin st., cost \$1,000; Churchwardens St. John the Evangelist, bk. church, corner of Portland and Stewart streets, cost \$15,000.

#### FIRES.

The Methodist parsonage at St. John, N. B., was burned on Tuesday last.—A new house at Niagara Falls, Ont., belonging to Mr. John Gray was destroyed by fire on the 17th inst. The loss is estimated at \$1,000, on which there is no insurance.—Connor's furniture store and Martin's taxidermist store at Edmonton, N. W. T., were destroyed by fire on Thursday last. Loss, \$11,000; insurance \$4,500.—Mr. Joseph Buck's residence at Orillia was burned on the 18th inst. The loss is covered by insurance.

#### CONTRACTS AWARDED.

ADOLPHUSTOWN, ONT.—Mr. Alfred Rendell has secured the contract for the erection of the new English church.

CATARAQUI, ONT.—Messrs. Leonard & Smith, of Collinsby, have secured the contract to build the Methodist parsonage here.

SELKIRK, MAN.—The contract for the erection of an addition to the Selkirk asylum has been awarded to John Shaw & Co., at \$5,294.

NANAIMO, B.C.—Mr. J. A. Bittancourt's tender has been accepted by the School Board for the erection of the proposed school house in the South Ward. His tender was \$2,311.

VANCOUVER, B.C.—The contract for laying down oak asphalt pavements on Cordova and other streets has been awarded to Mr. Dan McGillivray. The total cost will be \$90,478.

GUELPH, ONT.—The tender of Mr. D. Keleher for the construction of a stone arched bridge on Edinburgh road, has been accepted by the council. The contract price is \$1,397.

OWEN SOUND, ONT.—The contract for dredging the harbor at this place has been awarded to Mr. David Potter, of Warton, Ont. The Government voted the sum of \$15,000 for this work at its last session.

WALKERVILLE, ONT.—The Globe Furniture Company of this town, have recently secured contracts for seating the following churches: English churches at Ilderton and Merriton, Methodist churches at Walkerville, Ont., and Shawville, Que.; Presbyterian church at Ratho, and Baptist church at Walmer road.

QUÉBEC, QUE.—Mr. David Ouellet, architect, has awarded to Mr. Richard Manger, a contract to build a wooden church in the Parish of Paspebiac, (Baie des Chaleurs.) The said church will be 120 ft. long by 55 ft. wide, stone foundations and clapboard outside. The steeple is to be 177 ft. from the ground, covered with galvanized iron. Estimated cost, \$16,000.

WINNIPEG, MAN.—The Committee on Works have recommended the acceptance of the following tenders for the construction of sewers: on 4th street south, from 1st avenue south to 4th avenue south, and on 6th street to the north line of the north half of lot 152, Dobson & Jackson, \$579; on 6th avenue south, and 14th street south from Colony street to Cornish street, Kelly Bros & Co., \$88,985; on 17th avenue north, Robertson & Ross, \$27,000.—Messrs. Thompson & Grey have been awarded the contract for the erection of a new mission church in connection with Knox church, to be erected on the corner of Portage avenue and Carey streets.

MONTREAL, QUE. It is said the Royal Electric Company has closed a contract with the Poison Iron Works Company of Toronto, to supply a thousand horse power engine for use in the street railway service.—At a meeting of the Turnpike trust held last week, the contract for the rebuilding of Grece bridge, on the Longue Pointe road, was awarded to Messrs. Cote & Bernard.—A. Gendron, architect, has let the contracts for two cottages for Peter Gillespie, Esq., as follows: stone work, Geo. Beaucage; brick work, J. Morache; wood work D. Cyr; J. R. Gardner, architect, has awarded the contract for Mr. Took's summer residence to T. Brunet, Pointe Claire.—Also for Mr. W. McMaster's cottage at Thompson's point, to A. Legault, of this city.—A meeting of the Road Committee of the City Council was held on Thursday last, when the following contracts for sewers were awarded: St. Antoine street, Charrier & Robert, \$6.24 a yard, rock \$3.80 additional; St. Catherine street, Harbor to Levis, Robert Parker, \$6 and \$4; Coleraine street, H. Laporte, \$4 and \$3; Dorchester, from Cadieux to German, Downey, \$6.24 and \$3.50; Fortier street, from Cadieux to German, H. Laporte, \$6.75 and \$4; German street, Crnig to Dorchester, Downey, \$6.24 and \$3.80; Moreau street, Sheridan & Heffernan, \$5.25 and \$4; Ryde street, from Charlevoix to Boulter, H. Laporte, \$3.75 and \$3; Shearer street, H. Laporte, \$6 and \$4. The tenders for supplies of lumber, etc., were referred to the City Surveyor for report.

#### ESTIMATING BY CUBING.

The cost per cube foot of a building depends mainly upon the divisional internal walls and floors; the more numerous the rooms into which the space is divided the greater the cost. Height is certainly a factor of cost, as a high building requires thicker walls; scaffolding and labor become expensive. But if we take two buildings, one twice the superficial area of the other, but the same height, the difference per foot would entirely depend on the interior divisions and elaboration of plan. But to say that the cubing of a bigger and higher building is pro rata higher than for a smaller and lower one is a proposition that does not always hold. It is so only when the rooms are about the same dimensions in both cases. It would for instance, be absurd to cube a large public hall with the usual rooms at a higher ratio than a small villa residence because it was larger and higher. In plain English, the greater the internal space and vacuities the less charge must be placed on the cube foot.

With regard to ornamental facades of wrought stone, a considerable addition per foot must be made upon the cost of a plain brick front. To cube both at the same figure would be wrong. The evidence is the report, for instance, goes to

show that a considerable saving in cost would be effected in carrying out the first design for the Admiralty if the towers were cut off and the engaged and separate colonus of the facades were dispensed with, though at a maternal sacrifice of architectural character and dignity. A plain gurged brick front with stone dressings like that of the old building is estimated to cost about 2s 5d per foot superficial, though the difference between such a facing and the stone front would make a decrease per foot cube of only 1d. The Home and Foreign Offices cost, it is stated, 1s and one-twelfth of a penny per foot cube, or practically is a foot. Other rates are given that are of value. The General Post Office new building cost 8½d per foot, the Bow Street Police Court 11d, the Mayle Police Court 9d, all by Mr. Taylor; St. Thomas Hospital cost 9d, the Royal Exchange is said to have cost 11d. The Houses of Parliament cost as much as 2s 6d per foot cube, the British Museum is 6d, and the recent additions under Mr. Taylor to; the 8d in addition to the original cost of the latter is made up for by the expensive colonnade. Those who know these public buildings will see how materially the cubic space tends to reduce the unit of cost per foot cube.

In speaking of estimating by the cubing system it must not be understood that we really think it prudent to calculate the cost of buildings in this way, but only for the sake of comparison, and as a very useful and often safely approximate guide. Government architects and surveyors have generally adopted the system, and in the department of the public service there are excellent opportunities for making comparisons, and tabulating results.

#### HOW TO MAKE A GOOD SOLDERED JOINT.

Many times in making soldered joints it is difficult to get the surfaces sufficiently clean so the solder will flow readily, and without this it is impossible to make a joint sufficiently tight for most purposes. To solder iron to iron or iron to other metals is a very difficult matter, unless a person understands the little knack of getting good results. One of the simplest and most convenient way of doing this, is first, get the seam or joint as clean as possible without wasting too much time on it, and then before applying the solder make the metal hot enough to boil the acid or soldering fluid when applied. If the fluid is then applied while the metal is hot, it will clean the surface and the solder can then be applied and will be found to flow freely and combine readily with the metal, and a strong and absolutely tight joint can be easily produced in this way. Sufficient heat appears to be the greatest requisite when making soldered joints and it is surprising how the solder can be made to flow freely and combine with the surface of the metal, even when a small amount of corrosion, dirt or grease is present, if the soldering tool is hot enough and large enough to hold the heat, for some time. In soldering electric wires, no particular difficulty is experienced in making the solder attach itself firmly to the copper, for there is a strong affinity between the metals, and the alcohol lamp or blow pipe commonly used, produces sufficient heat to decompose any oxide that may be present.

To solder iron is not so simple a matter, although it is quite easy when the requirements are once understood and complied with. It is necessary to have the iron clean where the soldering is to be done, but it is not necessary to spend any great length of time in preparing the surface, for if it be heated to such a temperature as to cause the soldering fluid to boil, when applied, this will clean the surface even though it is covered with rust, so that the solder will easily and quickly combine with the iron under the influence of the soldering tool, or if the iron is sufficiently heated to fuse the solder a better joint can in many cases be made in this way, than by the use of the soldering tool. There is no use of trying to make a good soldered joint if the article to be soldered contains water, for the water will convey away the heat so rapidly as to prevent obtaining sufficient temperature to cause the solder to combine, although it may be made to stick slightly and any desired amount of solder can be piled on in this way, but it is impracticable to make a tight joint so long as the water is present. Ammonia pipes are often soldered in the manner explained above where the pipe is heated to a higher temperature than the boiling point of water, the soldering fluid and this immediately followed with the solder. A little practice with the soldering materials, just to see how they work, will serve a better purpose in teaching a person how to do good work, than would be obtained from practice on regular work during the same length of work.—*The Heating Engineer.*

#### A CHECK IS NOT CASH PAYMENT.

The Supreme Court of Minnesota has lately rendered a decision of much interest to the business community in declaring that bank checks are not cash, and do not possess legal value as money until cashed. In other words, the giving of a check on a bank is not a payment when passed between debtor and creditor, but only becomes so when the money is received on it.

The court holds that in accepting a check from a debtor there is no legal presumption that the creditor takes it in absolute payment, but only conditionally, or as a written acknowledgment of the debt. Where goods are sold for cash on delivery, and the purchaser tenders payment in a check or draft on his banker, such payment is only conditional; and the delivery of the goods, if made, is also conditional. If the check is dishonored on presentation, the seller may retake the goods for the purchase money, even from the possession of a third or innocent party, unless it can be shown that the seller has been guilty of such negligence as would stop him from recovering in equity.

This decision is among the first rendered by higher courts that is so far-reaching, and if supported by other tribunals, will settle a mooted question in commercial circles. The same principle has been applied to unpaid notes by one or two courts, which have held that the seller does not lose his lien for purchase money, no goods sold, until he receives the actual cash, and may retake at any time prior thereto if the indebtedness be not met at maturity.