

plate, the lower end being open to cellar. Vent flues in stack should be placed as near floor as possible, and should be controlled either by a door or register face. A larger flue of this type would be suitable as a cold air inlet to furnaces.

LONDON MASTER PLUMBERS' ASSOCIATION.

THE following are the officers elect of the above association: E. Russell, president; C. Needham, first vice-president; J. R. Haslett, second vice-president; T. S. Partridge, treasurer; William Smith, secretary, 265 Dundas street; William Skelly, corresponding secretary; C. W. Walker, inner guard.

HOW TO FIND THE SPECIFIC GRAVITY OF BRICKS.

In estimating the weight of any particular structure made of bricks, especially for engineering purposes, it is quite a common thing, says the British Clayworker, for the engineer to weigh half-a-dozen or so of bricks and multiply for cubic contents of the structure. This weighing may be done by the direct method, or by ascertaining the specific gravity of the bricks. When the latter is carefully calculated it is the best method, for the following reasons, but if it is not carefully ascertained (and it very rarely is) the results are of very little real practical value. In the direct method of weighing the brick there are usually several uncertain factors. The brick having remained in the office for some time becomes dry, and will not, of course, weigh as much as when it was first received from the maker, unless the latter had previously kept it in a dry place. It is safe to assume that in the building it is better to estimate on a maximum basis. At the same time, if to gain that end the brick be saturated with water, and then weighed, the result must be very unsatisfactory, as it greatly overestimates the normal weight under any circumstances if it is to be regarded as a unit in calculating the weight of any solid piece of brickwork. Very few people understand the way to take the specific gravity of a brick properly. If the brick is practically non-porous the result comes out right enough, but that is not very often the case. To take the specific gravity correctly the brick must first be well dried, not artificially, because that may lead to the formation of microscopic cracks. Then it must be weighed, either actually, or relatively as in a spring (Joly's) balance, or specific gravity steel-yard. After that the brick may be immersed in water, taking care that one face of it just projects (about $\frac{1}{8}$ in.) above the water. It should remain in the water for at least 24 hours, and longer if air bubbles still rise to the surface, and in fact until these latter cease to be formed. The brick is then fully saturated. If, during the process, the brick has disintegrated at all (as rubbers are wont to do) the water should be carefully decanted and the disintegrated particles weighed, the amount being subtracted from the gross dry weight. Now weigh the saturated brick in air, which will give the amount of water absorbed. Then weigh it in water and add the amount of the water absorbed to that weight. The weight thus ascertained must be subtracted from the weight in air, and the weight in air being divided by the product will give us the true specific gravity of the brick. The part of the work usually neglected is the addition of the amount of water absorbed to the weight in water; also experimenters habitually fail to leave one face of the brick above the surface of the water when testing for absorption.

AN ARCHITECTS' CLUB.

A SOCIAL club has been formed among the younger architects of Toronto. The first meeting took the form of an informal lunch at Coleman's new restaurant on Monday afternoon (Jan. 24th) at 1.30, where a pleasant hour was passed in discussing the organization of the club and topics of mutual interest. It is proposed to meet at lunch every Monday at the same hour, when such other meetings as may be deemed advisable will be arranged for. Those present were: Messrs. J. Francis Browne, Eden Smith, C. H. Acton Bond, Henry Sproatt, Charles Langley, A. H. Cassels, William Rae, J. P. Hynes, Sandford Fleming Smith, S. G. Beckett, J. C. B. Horwood, Arthur E. Wells, W. C. Vaux Chadwick.

LEGAL.

G. BEAUCHAMP ET AL VS. TOWN OF MAISSONEUVE, QUE.—This was an action before Mr. Justice Curran in the Superior Court at Montreal, for a balance due on the account of plaintiff, for work done, and for the price and value of the hire of certain stoves and scaffolding used in the new building of the town. The plaintiffs claimed \$238.55. The defendant offered \$60. The only item disputed was that for the hire of the stoves, eight in number, used for the drying of the building, and the cost of the scaffolding. The plaintiff had proved that a reasonable charge for each stove was 25 cents per day, and 50 cents per day for the scaffolding. There was considerable delay in the completion of the works, but not through the fault of the plaintiff. Several experienced contractors had established the reasonableness of plaintiff's charges. He claimed for 90 days, but the proof did not cover that period. Judgment for \$226.05 and costs of suit.

SHERLOCK VS. POWELL.—Judgment by Justices Falconbridge and Street in the Divisional Court at Toronto on appeal by defendant from report of Neil McLean, an official referee, in favor of plaintiff for \$166.10 and costs, in a proceeding to enforce a mechanics' lien upon certain houses on Alice street and Trinity square, in the city of Toronto, in respect of work done by plaintiff under a contract for plumbing. Defendant contended that there was one entire contract between himself and plaintiff for the plumbing work in the houses in question and other houses in Glenbaillie street, in the same place, and the plaintiff was not entitled to payment until all the work under such contract was done, and also that the work was not properly executed, etc. Held, that the contract is what must govern the parties, and not the tenders upon which it was founded, and the contract was an entire contract for the performance of the whole of the work set forth in it, for the whole price of \$867 agreed to be paid, and it is plain from the evidence of the plaintiff himself that he has not yet completed the work according to the contract. Held, also, that there was no evidence of any acceptance of the work as completed or any waiver of compliance with the contract. The taking possession of the houses, with a protest against the plaintiff's assertion that his work was completed, is not an acceptance of the work or a waiver of objections to it. Appeal allowed with costs and action dismissed with costs.

The firm of Roy & Content, architects, Montreal, has been dissolved.