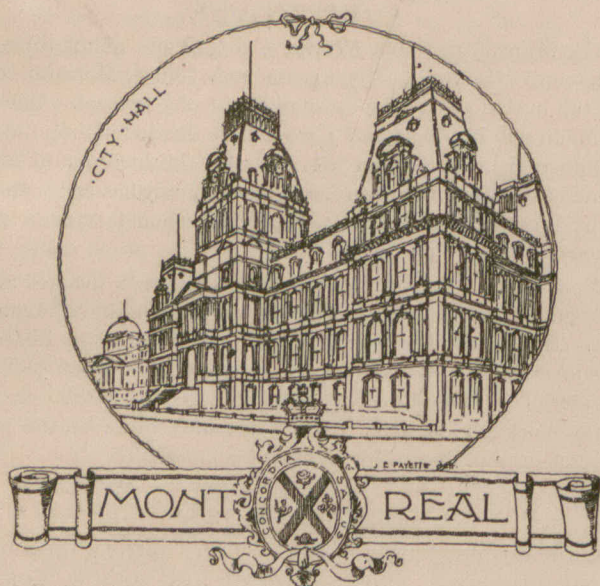




(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

The authorities of St. James Cathedral have commissioned Mr. Vincent, a local sculptor, to proceed to Rome and study carefully Bernini's famous canopy in the Basilica of St. Peter, in order that he may be able to reproduce a perfect copy for the cathedral here. This copy will measure 43 feet in height and will be embossed in bronze.

It is to be hoped that the exhibition of improved fire appliances in connection with the recent meeting of Fire Chiefs in this city was an object lesson which will not be lost upon our city authorities. The fire loss in Montreal in recent years has been abnormal and has necessitated the payment of high rates of insurance.

The students examinations of the Province of Quebec Association of Architects which were announced to take place in July, have been postponed until January with the consent of the candidates, who are few in number. The January examinations will take place in Quebec.

MASTER PLUMBERS' ASSOCIATION.

The committee of the Master Plumbers' Association appointed for the purpose of preparing a constitution and by-laws for the Association have completed their task, and at a general meeting of the craft held on Aug. 3rd, the constitution and by-laws were discussed and adopted. The meeting adjourned until Thursday, August 9th, for the election of officers. At a meeting held on that date the following officers were elected:

Executive Board—J. Lamarche, President; John Date, 1st Vice-President; Alphonse Champagne, 2nd Vice-President; Henry Padden, 3rd Vice-President; W. M. Briggs, Secretary; Joseph Gibeau, French Corresponding Secretary; J. W. Hughes, English Corresponding Secretary; P. Leclerc, Jr., Financial Secretary; W. A. Stephenson, Treasurer.

Sanitary Committee—J. W. Hughes, Chairman; John Date, Jas. Mattinson, A. Sigouin, J. C. Jactol.

Audit Committee—J. Watson, Chairman; P. Desforges, T. Jacotel.

Arbitration Committee—P. Carroll, Chairman; A. Demers, George Von, Geo. Rosser, H. Bailey.

Apprenticeship Committee—W. Britton, Chairman; E. C. Mount, A. Cardinal, J. Sadler, A. Blais.

Legislative Committee—F. Brunet, Chairman; D. Gordon, D. Oimet, J. Burns, P. Leclerc, Jr.

General meetings of the members of the Association will be held on the 1st and 3rd Thursday of each month at St. Joseph's hall, corner of St. Catherine and St. Elizabeth streets.

LEGAL.

Messrs. Brown & Love have entered suit against Mr. E. J. Lennox, architect for the new city and county buildings at Toronto, to recover the amount of a cheque for \$7,000 which they deposited with their tender for the completion of the building. Messrs. Brown & Love's tender was accepted and they entered upon the work, but subsequently withdrew because, as they allege, they were unable to continue owing to the litigation in which the works were involved. The architect claims that by withdrawing from the work the plaintiffs forfeited their deposit. He will therefore retain possession of the money until instructed by the courts what disposal should be made of it.

Application is made for incorporation by the Crown Pressed Brick Company, of Ottawa, with a capital of \$100,000.

STUDENTS' DEPARTMENT.

USEFUL HINTS.

Moorish fretwork is becoming more a favourite than ever. It is used most successfully when varnished, but not painted. Paint destroys to some extent the sharpness of the outlines.

A good egg-shell polish for fancy woods may be made by dissolving together in 40 parts of alcohol the following:—Three parts of shellac, 1 part of gum mastic and one part of sandarac gum. The polish may be applied with a brush or cloth.

When it is desired to paint ironwork in exact imitation of stone, let the last coat of paint be very thick and be applied quite freely. After it has commenced to dry dust on sandstone crushed and reduced to powder. If the paint is of the same colour as the stone the imitation will be a very natural one.

MOUNTING PHOTOGRAPHS.—Starch dissolved in water is a good material for fixing mounts to photographs, and not so liable to discolour the photo afterwards. To fix them, have two pieces of plate glass, or any other kind of material similar, place the mount on one, and having smeared the photo with the prepared starch, place it in its proper place, then put a sheet of blotting paper and the other plate of glass, &c., and a sufficient weight to press the photo perfectly to the mount. Let it remain a few hours, and then remove the glass, &c.

A ceiling that is coming to be very popular for cafes and restaurants, and some of those drug stores that depend largely on their soda fountains for their revenue, is made of square glass panels, separated by narrow wooden moldings, the back of the glass being marbled by some such process as that used in marbelizing slate for mantles, while occasional panels are filled with decorative designs. The effect is very similar to Mexican onyx or polished marble, and is specially adapted for all such purposes. Narrow brass bead moldings would look particularly well to separate the panels, though they would be somewhat expensive.—Painting and Decorating.

THE USE OF TIMBER.—To obtain the greatest strength in timber beams, joists, rafters, and breastsummers, the depth must greatly exceed the width—the greatest strength opposed to the greatest strain. A joist 6 by 3 will bear twice as much if put edgewise as it would if laid flat. If the weight to be supported be in proportion to the length, then, the width remaining the same, the square of the depth divided by the square of the length ought to be the same also—i. e., the depth of a joist ought to be in direct proportion to the length, and for stiffness the width proportionate to the depth. Where the question is of a piece of timber supporting itself, the weight is as the length multiplied by the depth, and we must multiply this again by the length for a divisor. A rod of fir 1 in. square, or a plank 10 in. by 1 in. laid flatwise, would keep quite straight with a bearing of 5 ft. A piece of timber 10 in. square would swag very much with a bearing of 50 ft.

PAINTING IRONWORK.—At a meeting of the Association of Engineers of Virginia, Mr. S. Wallis dealt with the painting of ironwork. He recommended that the first coat should be red lead ground in raw linseed oil, used within two or three weeks after mixing, and kept thoroughly mixed when in use. This coat would dry in from twenty four to thirty hours. For a black finish the next two coats should be made up from a paste composed of sixty five per cent. of pigment and 35 per cent. of raw oil. The pigment should consist of sixty-five per cent. of sulphate of lime and thirty per cent. of lamp black, to which should be added five per cent. of red lead as a drier, the whole thinned to a proper consistency with pure boiled oil. For a red or brown finish the paste should contain seventy-five per cent. of pigment and twenty-five per cent. of pure raw oil. The pigment in this case would consist of fifty per cent. of sulphate of lime, forty per cent. lime carbonate as a drier. Lead paints were not recommended for finishing coats on account of chalking, nor zinc paints on account of cracking.

INTERCOMMUNICATION COLUMN.

This column is intended to afford a means of correspondence for students, builders and all our readers desiring information they cannot otherwise obtain. Questions for which an immediate reply is required should be marked "Urgent." Names and addresses of correspondents must be sent with their communications, but these may be signed with initials or otherwise for publication.

"Quiz" writes: Can you give me a satisfactory method of measuring chimney shafts?

ANSWER.—Take them as solid, work them out cube, and reduce it to superficial 6 in. work, and then allow a certain amount for parqueting, in which case, you must use your judgment. To measure brickwork reduce the superficial measurements of 18 in. to a standard thickness—i. e., 9 in.—deduct all openings, and allow a certain amount for bedding window frames, &c. The angles of brickwork are not as a rule charged any extra, this coming in the price for 9 in. work. Reduced moulded brick jambs are measured lineal, and arches are given in quantity at so much each; of course, price depending on what kind of arches they are. Eave courses are measured lineal.