

the interiors of private houses. Great mansions and great civic buildings differ in degree rather than in kind from these, and, as regards their internal plaster-work, the principles applicable to smaller buildings apply to them. Where deep-beamed and coffered ceilings are used greater structural support is needed for them, and bolder modelling and moulding, of course, to preserve their relation in scale to their architecture. They often, however, present the decorative problem of the treatment of domes, of which in a civic building I have not yet seen a strikingly original treatment in plaster-work. I have seen, you have all doubtless seen, dozens of domes treated with diminishing coffered panels, whose framework ascends on the converging radial lines. Wren left us many fine instances of these.

It has been reserved for the last few decades of this century, and the devotees of the "Gothic Revival," to find that plaster-work is inappropriate to the interior of a church. In the seventeenth and eighteenth centuries, and until near the end of the first half of the nineteenth, plaster ceilings were the rule and not the exception in churches.

A great many very charming ones have disappeared before the hand of the restorer, but several seventeenth and numberless eighteenth-century examples remain. I am glad to see that plaster-work is regaining its place in church interiors; it provides, at any rate, a pleasing variant to ceilings of stained or painted deal, or to open roofs with timbers or small scantling and wrought "die-square." For the enriched ceiling of sanctuary chancel or side chapel, I think it is a most excellent material; and the invention of fibrous plaster makes it possible, with little difficulty and comparatively small cost, to use enriched plaster-work, not only for ceilings, but for other decorative purposes in churches.

The slabs of plaster which bear portions of the design, or completely fill separate panels, are put up like woodwork and screwed to the rafters or furring pieces put to receive them. Each slab should be composed of thinish plaster, embedding layers, usually two in number, I believe, of very wide-meshed canvas, the plaster being worked well through the meshes. They are stiffened with laths or battens and can be worked to any required angle or curve. If the relief is not great they are very light. Where a number of slabs have to be joined to form a ceiling without intermediate ribs, it is customary to pack damp canvas between their meeting edges, which not only protects them, but forms a stiff setting when it dries; the fissures are subsequently pointed in with plaster. Brass screws should be used for fixing and the screw holes, of course, must be stopped in. If steel screws are used, the heads require to be coated with Japan or paint to prevent the inevitable rust from staining the plaster.

The use of fibrous plaster enables one to escape the flatness and rigidity I have spoken of as due to floating surfaces and running mouldings. The casts bear the direct impression of the modeller's handling. The use of this material is not without its artistic dangers, the chief of which is that its modelling is not as a rule done upon the actual ceiling. It is possible, of course, to model in situ, and then cast from the models elsewhere, and that, I fancy, would be one of the safest ways in which to prepare the design of a fibrous ceiling, for nothing can quite come up to the actual position and the actual lighting of the building for which the work is destined. The next best method is to arrange your model in the workshop at as nearly as possible the height that the ultimate casting will occupy, approximating as far as possible the conditions of light and surroundings, and modelling the ceiling from below. If you can manage this, it is wise, at least, to get your model either conveyed to the site it is to occupy, or hoisted up in some similar position for your judgment of effect.

It is essential in case of a ceiling with a cornice and divided by plaster ribs to have cornice and ribs cast from models also, not run. In the case of ribs this can be efficiently done by casting a reverse from the first model and pressing the clay into it to form ribs for the model section of the ceiling. The laying of the moist clay ribs into the ground surface of the model insures the avoidance of rigidity. I have said that it is impracticable to mould with the fingers the actual plaster so as to avoid casting altogether, unless that plaster differs very much from what we generally use. But that difference is now obtained, as I am told, by the use of old or deadened lime and some special kind of sand, and ceilings and other decorative work are modelled in plaster and in position. That, it seems to me, must be the best plan possible when the object is to avoid repetition and when cost admits of it; further, where exact repetition can be avoided the better will be the result.

I have now only a few words to say as to the treatment to finished internal plaster-work. When the plaster—fibrous or otherwise—is perfectly dry, it can be treated with a thin coating of wax dissolved in turpentine, wiped or rubbed here and there with a rag; this gives it a pleasant, soft, ivory like appearance that is more agreeable than the even tint of distemper. (At Groombridge I had the shields and emblems entirely gilded, and then glazed over partially with oil color, the whole of the remainder being waxed). If heraldry is employed the coats of arms must, of course, be colored, or the blazonry is incomplete. There are some good instances of the effect of emblazoned coats occurring in a general field of toned white plaster in the cloisters of Corpus College, Oxford. It is a contrast of which I am fond, that of richly toned heraldry and toned white plaster-work. In church work it is likely that color over the whole surface of the work may be needed, and this presents no difficulties either in the case of oil color or distemper; in the latter case the suction of the plaster will probably need to be stopped with a coat of priming. I referred just now to the effects of a cross light. In

my opinion a ceiling lit from both sides requires color, and perhaps gilding, more imperatively than one lit from one side or end only, when the relief gets its full value through shadows.

Plaster reliefs may, of course, be readily used for decorating wall spaces or arch spandrels in churches.

There is, in fact, no end to its decorative applicability.

Time, and your patience, would fail me if I endeavored to cover all the ground of my subject.

You will notice that I have omitted all consideration of sgraffito work and scagliola, which certainly come under the head of decorative plaster-work; I did so advisedly, for the former subject alone would readily fill the limits of a paper like this.

MONTREAL PLUMBERS' DINNER.

THE master plumbers of Montreal gathered together on Monday, the 1st inst., for their annual banquet, which was held at the Richelieu Hotel. Together with their friends, the company numbered over one hundred. The president of the Association, Mr. P. J. Carroll, presided, having on his right the Acting Mayor, Ald. Dupre, Ald. Beausoleil and Jacques, Messrs. T. Collins, of the Standard Manufacturing Company, F. Martineau, M.L.A., and A. A. DuMond; and on his left Mr. J. Lamarche, president of the National Association, Ald. Grothe, Messrs. Hy. McLareu, Colonel F. Massey and L. A. Mongenais.

After the bill of fare had received due attention, the toasts of Her Majesty and the Governor-General were acknowledged with the usual honors, and Mr. Carroll, in a pleasing speech, proposed the toast of "The National Association of Canada." Mr. Lamarche, in responding, spoke of the good the Association was doing, the benefits derived from being united for mutual protection, the necessity of maintaining the good feeling at present existing between the wholesale men and the plumbers, and the cultivation of a feeling among the journeymen that the interests of the master plumbers were theirs also. He referred to the relation of the plumber to the public, their calling being the one supplying the prevention and the profession of the doctor furnishing the cure to those that did not adopt the former; everybody knew the relative value of these, a case of sixteen to one.

"The Corporation of Montreal" was proposed by Mr. Jos. Thibault, and responded to by Acting-Mayor Dupre, Ald. Beausoleil, Jacques and Grothe.

"Our Guests" was proposed by Mr. W. A. Stevenson and responded to by Messrs. Hy. McLaren, of the Toronto Radiator Company; Col. Massey, of Gurney-Massey Company; Alex. A. Robertson, of the James Robertson Company; Wm. Robertson, of Warden King & Son; J. H. Wynne, of H. R. Ives & Co.; L. A. Mongenais, of the Star Iron Company, and A. A. DuMond. "Our Absent Friends" was proposed by Mr. W. M. Briggs in his usual happy manner, and Mr. E. C. Mount responded. "The Ladies," proposed by Mr. J. W. Harris, evoked a pleasant and witty response from Mr. John Watson.

During the evening Messrs. Briggs, Giroux and Wynne entertained with songs. The success of the banquet is largely due to the energetic work of the committee, of which Mr. Martin was chairman and Mr. Dennan secretary. Mr. Carroll proved an efficient presiding officer.

WINDSOR PLUMBERS ORGANIZE.

AN association of master plumbers has been organized at Windsor, Ont., through the efforts of Mr. Wm. Smith, of London, vice-president for Ontario. The first officers are: Geo. M. Christie, president; Robert Paddon, first vice-president; H. Meadows, second vice-president; Jas. Pennington, secretary-treasurer; James Purser, sergeant-at-arms; representative to master plumbers' convention, Mr. A. Brian. The firms who have entered the association include Messrs. Morton & Christie, Pennington & Brian, L'Hereux Bros., Robt. Paddon, M. B. Squire, H. Meadows, R. Purser & Son, all of Windsor, and Watt & Son, Chatham.

Messrs. W. J. Burroughes & Co., Toronto, have removed to more convenient premises at No. 13 Adelaide street West.

The plumbers of St. Catharines, Ont., have organized an association, with Mr. Albert Chatfield as presiding officer.