

ODDS AND ENDS.



IN building brick houses in positions where they are not protected by surrounding property do not forget that hollow walls will add greatly to the convenience of the occupiers. They will render the house cooler in summer and warmer in the winter, and will assist in materially in keeping the house dry. The cost of hollow walls is only very little higher than that of walls built solid.

During the hot weather that has prevailed of late it is of great importance in erecting buildings in stone or brick to thoroughly wet every stone or brick before it is laid. The water not only removes any dust that may have accumulated and would prevent the mortar adhering, but it causes a much better adherence between the bricks or stones and the mortar than would otherwise be the case, because of the tendency to suck up moisture in dry and hot weather. This may seem at first sight an item of little importance, but there is more in it than may appear.

What is the best paint for general iron work used in the construction of a building? Many prefer metallic paint, but experience has shown that for practical purposes nothing is better than red lead. The first cost is somewhat greater, but the increased durability renders it cheaper in the end. It should be added that the red lead should be applied directly to surface of the clean iron, not on top of a coat of oil or of metallic paint as is sometimes done.

A method of finishing doors and other woodwork that appears to be coming into favor is the following: The doors are of hardwood and are filled with a very dark filler; they are then polished in wax, when they present a semi-dull appearance that is somewhat pleasing. Ornamental headed nails made of white metal are then driven in the doors at regular intervals but in a way to form a somewhat elaborate design of scrolls. Each of the doors leading into the same hall are finished in different designs as far as the nails are concerned, but the prevailing color is the same throughout. The effect is very good.

A paragraph that went the rounds of the architectural press about a year or so ago was to the effect that in Norway the custom is, in building in winter, to use mortar while it is hot, after slaking, with the object of preventing the mortar from freezing before it has time to set hard. The item is plausible enough, but the usefulness of the information is destroyed by the fact that lime that evolves much heat is entirely unsuitable for the use of making good mortar.

Painting is perhaps less understood by builders and architects than other branches of the building trade. For instance in finishing in the natural wood specifications frequently call for shellac and two coats of varnish in jobs where such a finish is not required. Shellac is probably the best first coat for hard pine that there is, but is not too expensive for ordinary work. "Liquid filler" or surfacer is largely used as a substitute in the United States and gives general satisfaction while saving at least one third of the cost, because the liquid filler is practically a varnish although it contains silice, starch or other substance that fills up the pores of the wood and stops suction. A little point that is not generally known even among painters is this: To produce the best results use liquid filler for the first coat and add about one third of the filler to the second coat. A third coat of varnish just as it comes from the cans will make a very good job. The writer recently saw a church the walls and ceiling of which were finished in pine that had been treated in the way described with very satisfactory results.

FIRE ESCAPES FOR PUBLIC BUILDINGS.

QUEBEC, AUGUST 19th, 1892.

EDITOR CANADIAN ARCHITECT AND BUILDER.

SIR,—New York's and more recently Boston's new building law, as noticed and commented on in late issues of the *New York Engineering Record*, contain many pertinent provisions as to the safety of buildings against accidents by fire, or due to faulty construction; but I have not yet seen anything in them or in those of any other city, which thoroughly provides for escape in case of fire, from the upper tiers or galleries of theaters, assembly and lecture halls, academies of music and the like, or from the upper floors or stories of factories, colleges, convents, asylums, hotels and boarding or even tenanted houses, nor, in a word, from any building where there are large assemblages of human beings and especially when the old and infirm have to be dealt with, as well as the helpless infant.

Regarding such buildings, a provision of the "Boston Act" is that they shall have from each apartment (which, of course, also means from each floor or story) two independent ways of egress, one of which shall be enclosed in brick walls and shall have no interior openings other than the doors of the apartments from which it is an exit.

Now there is certainly no absolute safety in this proviso of doors opening from the inside into said stairway; for even though the enclosure be of brick and the stairs of iron, stone or other incombustible material, and that flames from below could therefore not run up through such a stairway and endanger the floors above, still the fact of any communication at all between the stairway and the inside of the building would allow all of the heated air and gases from the burning portions of the building to pass upward through such a well or shaft, and thus effectually cut off retreat in that direction.

On the contrary, any direct communication between the interior and the stair-case should be studiously avoided. The stairs should only be reached by passing out from the apartment on to an outer unenclosed landing, or open to the sky, and thence to the stairway; and as I proposed some years ago in a paper read before Section III of the Royal Society, I am still of the opinion and maintain that there is no other solution possible in the case of escape from a single or double series of rooms in a hotel or boarding school, etc., opening on a corridor with stairways at each end thereof, allowing the heated air and smoke from below to ascend and fill the passages, thus cutting off escape in the direction of their length, than by egress from each and every rear window of each and every floor above the first or ground floor, by stepping over the sill out to a continuous iron balcony (narrow and with lattice floor not to obstruct light to the window below) communicating with the stair-way—one or more according to the extent—the occupants of the front rooms having only to cross the corridor and escape through the window of the rear room opposite their own.

These stair-ways when in the rear and leading down to an interior court enclosed on all sides, should communicate with the open, the front of the building of street, by a fireproof passage-way leading from rear to front, and as such passage-ways need not necessarily be more than of mezzanine height, the exterior could be reached and the street level attained by a short flight of iron steps, without in any way cutting off communication between any of the ground floor rooms or corridors.

The only argument I have heard advanced against these continuous balconies all around the interior courts of a hotel, is on the score of want of privacy in case of a person from any one of the rooms prying into a neighboring apartment; but as there is not supposed to be any attraction towards the rear, the difficulty might easily be got over by posting in each room among other rules and regulations to be followed by the guests, "No access to rear galleries allowed except in case of fire" with the addition of curtains or frosting to the lower half of sash to render peeping in a pointless endeavour.

Where, as in a theater or concert hall, escape must be looked for in the opposite direction or towards the street or exterior, the same continuous balconies or verandahs can be made an ornamental feature of the several facades, or of one or more of them on the level of each and every tier of inside galleries or boxes, as lately done [I do not say in obedience to my suggestion, though sometime after I made it public] in a theater at Antwerp in Flanders, where each of the fire tiers of inner galleries communicates by some 25 doors or openings radiating from the auditorium with a corresponding series of outer balconies reaching first tier level by fixed iron stair-ways, and thence the street by folding stairs immediately detachable on the mere pressure of a foot spring, or where the first tier level may easily be jumped from without danger to life or limb; the non-existence of fixed stairs from street level being of course a preventive against access to the building excepting through the ingress door where tickets of admission are collected.

Such a system of fire escape galleries and stairs and passages I have computed not in any case to necessarily exceed from 3 to 5 per cent. of the total cost of any building it might be applied to.

CHAS. BAILLARGE, Architect, etc.

MONTREAL.

(Correspondence of the CANADIAN ARCHITECT AND BUILDER.)

Following is the Program of the annual meeting of the Province of Quebec Association of Architects to be held on the 28th and 29th of Sept., in the rooms of the Association, 186 St. James St.:—

Thursday, 28th., Forenoon—Annual meeting at 10.00 a.m.—reading minutes, report, &c.; President's address; election of officers; other business. Afternoon—2.30—Reading of papers by members. Evening—8.00—Annual dinner at the City Club, St. James Street.

Friday, 29th, 10.00 a.m.—Meet at the rooms of the Association and drive to Victoria Hospital, new buildings of McGill College, and new High School. Afternoon—Visiting art collections, buildings, &c., at discretion of members.