

CONCRETE: ITS USE AND ABUSE*

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CONCRETE is a material which lends itself to many kinds of manipulation. It can be cast, poured, pressed, assembled in the shop or on the job; it can be applied in liquid or in solid form to the work immediately in hand. So many are the possible methods of its application—such a diversity of means may be employed towards its legitimate ends—that some of its enthusiastic sponsors see in it a panacea for structural ills, and possibly for æsthetic building ills, a substitute for all previously employed building materials—excepting, possibly, door hinges—and a perfect end in itself. Therefore it behoves those who can impartially survey the entire field to offer both warning and encouragement—encouragement in its legitimate use, warning against its too free employment, especially where other materials may better serve the conditions.

The economics of the general situation favor concrete, and through this factor alone, there may arise a tendency toward its too general employment, toward its substitution for other materials which, though, perhaps, costing more in mere money, satisfy the senses and better fulfil geographic and climatic conditions.

The cheapness and ease of casting a flat slab of concrete has led certain enthusiasts to advocate the general adoption of a flat-slab type of roof in any and all parts of the country (and ultimately of the world). It is advocated for a northern climate because it can very cheaply be made strong enough to hold a load of snow and ice. But that is not what a roof is for; it is to shed snow and ice. The flat-slab roof is advocated for a southern climate because the overhang for shade is so cheaply procured. The shade is desired, but not at the expense of ugliness, which results from unembellished overhangs—and concrete embellishments are expensive.

Simplicity Which Begets Ugliness

The factors of ease and economy in manufacturing concrete slabs, whether to be applied vertically or horizontally, contribute to a "simplicity" which tends towards stupidity, and to a barrenness which begets ugliness. Where the general form is stupid and ugly, not much in the way of reclamation can be effected by proportioning of windows or application of superficial ornament. If the mass is interesting and appropriately conditioned, geographically and climatically, slight defects in details will not too seriously challenge the taste; but an ugly mass is fatal.

In spite of the manifold and varied means, methods, processes, applications, manipulations, textures, surfaces and colors appertaining to the use and employment of concrete as a medium of architectural expression and embodiment, I am not certain that I should advise its sole and unlimited agency in housing the activities of any one neighborhood or community. Indeed, I am quite certain that I should not so advise, and this not altogether on the ground of a needed variety, but that there are other materials which transcend even concrete as a medium of certain desired expressions of the human spirit in the art of architecture. And I should desire to see no community curtailed of, or denied, the right and power to express the best that is in it in the materials best adapted to that expression.

Thus marble, granite, iron, bronze, brick, slate—each one possesses inherent qualities or characteristics not translatable into concrete even through the agency of base and artificial imitation. In the matter of brick, for example, there is scale to the unit which relates the mass to human desires and experience in an intimacy possible with no other material, while in natural color and texture the range is boundless. But even with all that, brick needs other materials in its neighborhood for contrast and variety—purple-green of slate, soft white of stucco, weathered grey of timbers, with carvings and turnings, and craftsmanship which

cannot be imparted by a mold, however exquisitely the surface be wrought by the modeller's hand.

Æsthetic Expression in Concrete

I assume that, as an architect, I am expected to say that the only way to make concrete an accredited and acceptable building material adapted to all human material and æsthetic needs is to have its essence filtered through the alembic of the architectural profession or its representatives.

If you wish me to say it, of course I will—with reservations. Now the most stupid of anachronisms are perpetrated by so-called architects (they really are untutored archaeologists, or, rather, grave robbers), and the most blatant of modernisms, cut off from all context of history, have emanated from, again, so-called architects (they really are unlettered sentimentalists). But I will say that the possibilities of concrete as a medium of æsthetic expression in building may best be apprehended by a sincere architect, with knowledge of modern social conditions and tendencies, working in co-operation with those who know the material at first hand, and who also are sincerely working to exploit nothing, but to develop the latent and inherent possibilities of a worthy material. Such architects exist; such material and men exist. They should come together.

AMERICAN WATER WORKS ASSOCIATION

AT a meeting of the committee that has charge of the arrangements for the convention of the American Water Works Association, which will be held next month in Montreal, it was announced that arrangements had been completed with the Beaconsfield Golf Club whereby the members of the association who play golf may use that club during their stay in Montreal. An afternoon tea will be given June 24th at the club house for the ladies attending the convention.

The personnel of the entertainment committee was increased by the addition of Messrs. Pitcher, Sutherland, Leclerc and Stephen, all of Montreal. The chairman of the committee is H. G. Hunter, resident engineer at Montreal for the New York Continental Jewell Filtration Co.

The committee decided to request the mayor of Montreal to open the convention with an address of welcome, and to ask R. A. Ross, city commissioner, of Montreal, who is president of the Engineering Institute of Canada, to welcome the delegates to Canada and to extend to them the courtesies of the institute. It was decided that the informal reception and dance to be held during the evening of June 21st should consist of a concert in Windsor Hall, dancing in the Ladies' Ordinary at the Windsor Hotel, and refreshments to be served at 11 p.m. Messrs. Lesage and Hunter were appointed as a sub-committee to make arrangements for the Lachine Rapids trip. Messrs. Stephen and Hunter were appointed a sub-committee to arrange for the smoker.

A member of the entertainment committee will be in attendance at the convention at all times to advise out-of-town delegates regarding places of interest in Montreal, and to furnish whatever other information may be of service to the visitors. A photograph of the convention will be taken by William Nottman & Sons. Mr. Hunter was appointed as a committee of one to make arrangements with Charles Wood, of Philadelphia, for the golf tournament which is held annually in connection with the convention of the association. Messrs. Pitcher, Sutherland, Lesage and Hunter were appointed as a sub-committee to arrange the visit to the filtration plants of Montreal, Friday, June 25th.

At a recent meeting of the St. John, N.B., branch of the Engineering Institute of Canada, G. G. Murdoch was elected chairman; H. F. Bennett, secretary-treasurer; E. P. Vaughan and A. Gray, members of the executive committee. The other members of the executive committee are the retiring chairman, C. C. Kirby, and C. O. Foss and G. G. Hare.

*From an address delivered in Chicago at the Conference on Concrete Housing.