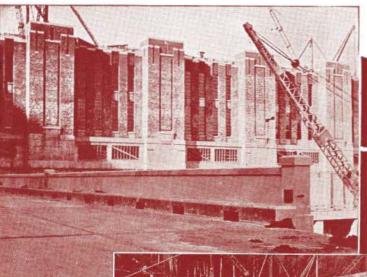
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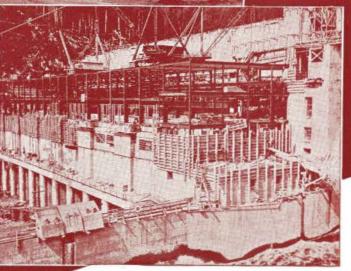


Vol. XI, No.9 SEPTEMBER, 1934

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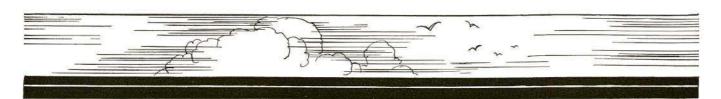
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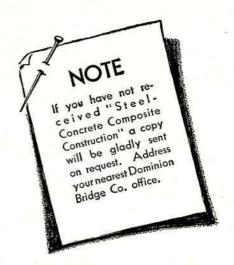
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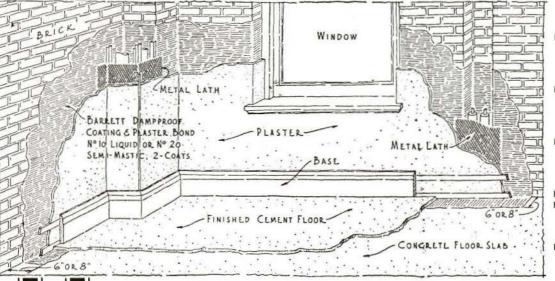
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THE JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

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TORONTO, SEPTEMBER, 1934

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MANOIR RICHELIEU MURRAY BAY, QUEBEC

John S. Archibald Architect

The original hotel was destroyed by fire in September, 1929. This new, modern, fireproof structure done in monolithic concrete was ready for occupancy in June of the following year. The speed necessary in construction together with the economy effected and the Chateau type of design adopted for these hotels in Canada, is presumably the justification for the use of concrete for a style that is traditionally associated with stone. A lot of the charm of this style would be lost by not having the material that it is associated with and grew out of, but on account of its isolation in rugged natural surroundings the defect does not detract from the general impression to the same extent.

CONCRETE AS A MEDIUM OF ARCHITECTURAL EXPRESSION IN BUILDING*

BY A. H. CHAPMAN, F.R.A.I.C., F.R.I.B.A., A.R.C.A.

SHOULD like to make it clear that I am not before you as any kind of authority on the use of concrete as an architectural medium, but I am simply going to try to give you an architect's point of view.

Architects may seem to lack enterprise, but if you consider their position you will see that there is reason for this. An architect is responsible for his client's investment, and it is often a large investment in proportion to his means. Consequently security is sought; an avoidance of leading his client over untrodden paths even though these may lead to an alluring adventure for the architect personally.

A painter, musician, or author may explore unknown fields with impunity knowing that if unsuccessful he alone suffers. Not so an architect, as his failure means a loss to those who have trusted him. A building has to stand in a public place and face condemnation or approval, and even though the judgment of the architect may be vindicated in a decade or so, it is no consolation for the client in the meantime.

Personally, I feel that concrete as a means of architectural expression has great possibilities. The essential principle of the constructions stirs the imagination. The Egyptians built with huge blocks of granite—the Grecians in blocks of marble—the Gothic arches curved aloft composed of comparatively small stones set cunningly to obtain equilibrium, but you can build any shape, size or strength into a fantastic monolith: a monolith as strong as

^{*}From a paper presented by Mr. Chapman at the 30th Annual Convention of the American Concrete Institute held at Toronto on February 20th, 21st and 22nd, 1934, and published in the May-June Issue of their Journal.



WARNER BROS. THEATRE, LONG BEACH, CALIFORNIA

A type of building where the solution has resolved itself into heavy blocks of massing, a type that gives great scope for the application of the principles of monolithic construction. For economic reasons in a building of this type an expensive facing material cannot be used throughout, and we have in consequence that cheap result of a Queen Anne front and Mary Ann back. Here it has been avoided and the result gains in dignity.



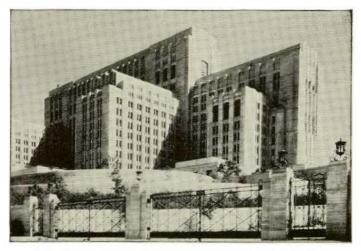
ST. JOSEPH'S CHURCH, SEATTLE, WASHINGTON A. H. Albertson, Architect

The truth in the expression of construction that is particularly desirable in Church building together with the large masses of masonry that develop from the nature of the problem, give an interesting field for the use of monolithic concrete construction.



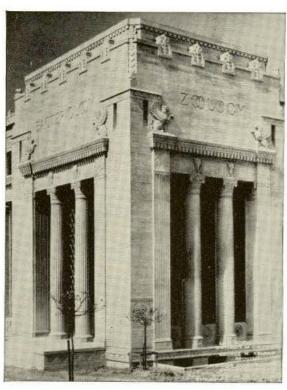
SUNSET TOWER, LOS ANGELES, CALIFORNIA Leland Bryant, Architect

In this building there is a breadth of treatment that is an expression of the system of construction. The ornament where used is of an all over pattern. It is a decoration on a monolithic surface with no tendency to give an ornamental portion a separate entity with a frame or base and cornice. Also note the colossal size of the ornamental parts.



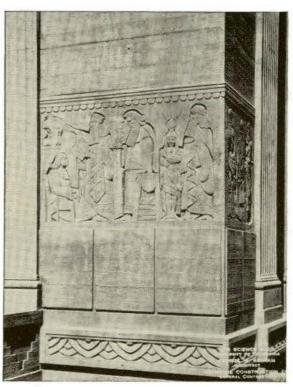
LOS ANGELES COUNTY GENERAL HOSPITAL, LOS ANGELES DESIGNED BY AN ASSOCIATED GROUP OF ARCHITECTS

This large building has a structural steel frame and an exterior of monolithic concrete. Its size and massing carries off the crudity of surface produced by leaving ordinary concrete frankly as it comes from the forms. It is a courageous, sincere achievement and the economy effected, so important in this type of building, disarms the detail criticism of the surface texture. This is a big step in advance for monolithic concrete in a large building or group of buildings particularly where economy is an important element.



DETAIL OF LIFE SCIENCE BUILDING

From the corner pavilion of this building, an impression is obtained of a rectangular monolithic mass with the openings framed with architectural detail. This part of the design lends itself quite satisfactority to expression in monolithic concrete construction. Note the modelled work, a detail of which appears in the accompanying illustration.



DETAIL OF ORNAMENT— LIFE SCIENCE BUILDING

An illustration of some modelled ornament which incidentally is not Neo-Grec. This work was done by plaster waste molds set in the form work. It shows clearly the texture left by the removal of the forms. It is not a beautiful texture, nor would it weather well, but it is an honest surface—'a poor thing but mine own." The roughness left by the forms is preferable to having the walls rubbed down to a dead monotony.



McDANIEL MOTOR COMPANY BUILDING, LOS ANGELES

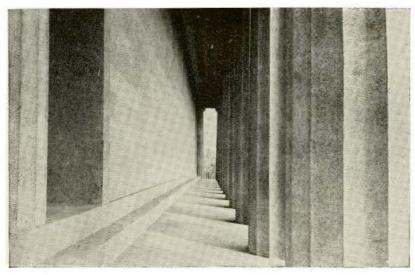
An architectural expression of the system of construction. A generous monolithic mass that could hardly be done in any other system of construction.



THE PARTHENON, NASHVILLE, TENNESSEE George O. Nevine and Russell E. Hart, Architects

A replica of the Parthenon a Athens built and used as an art museum. The general colour of the structure is buff, while the background of the pediment and the metopes are produced in the colours of the original building.

An interesting achievement from the concrete construction point of view, in the effect of the texture and the ability with which the concrete has been handled. It is moreover, the reproduction of a marble building wonderful in its perfection of design and workmanship, and the cost of reproducing it in any other material than concrete would be very much greater.



DETAIL OF NASHVILLE PARTHENON

An interesting photograph of the peristyle of the building shown above. It gives an idea of the texture and the perfection of workmanship. The walls are particularly interesting.

stone in compression and as strong as steel in tension. This is the wonder of it and the element that should find expression.

The duty of the architect is to grasp this new principle and interpret it.

A building should first express the practical function it serves, then be beautified by conforming to the laws of proportion in mass and line, but it should also, if possible, be an honest expression of its means of production. The feeling of sincerity is deeply embedded in human nature. We like a thing to be consistently, throughout, what it appears to be on the surface, and this is an important principle of architecture.

A steel or concrete frame filled with brick or tile and faced with stone that looks solid and as though it were doing most of the work, but in reality is just a thin veneer, is an architectural lie that many of us are guilty of. A concrete wall with the face dressed and possibly the junction of pours that shows the different operations featured as one of the architectural elements composing the design would be a sincere expression of construction.

Now let us face the important architectural question. Can a surface for structural concrete be developed that in colour, texture and weathering propensities would compare favourably in its naked simplicity with natural stone? By this I do not mean that it must imitate stone, but would have its own character of texture as it has in its method of construction. There is no doubt in my mind that this is physically possible and it seems to me that it should be possible economically.

Most of the methods of treating the surface come under the following heads:

Leaving the concrete frankly as it comes from the forms.

Bush hammering the surface.

Rubbing the surface.

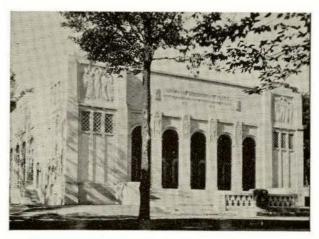
Acid washing to clean the aggregate.

Painting.

And then we have the great variety of surfaces used in pre-cast work, but this latter work as far as architectural design goes is just another type of stone work, and does not express the particular character of concrete construction.

It is, however, in some of the textures produced in pre-cast work that we can see the great possibilities of surface treatment, particularly those where the concrete is ground and rubbed giving a surface that weathers well and shows clearly the actual composition of the material and can be made very attractive. I have seen some very satisfactory surfaces produced in this manner with ordinary gravel as the aggregate.

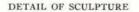
We grind terrazzo and concrete floors by the acre. Surely this can be done on a vertical surface by suspending a grinding machine with an inclined hanger that would produce a positive pressure



NORTON MEMORIAL AUDITORIUM, CHAUTAUQUA, NEW YORK

Otis F. Johnson, Architect

All the ornament was made with waste molds and cast in the same concrete as the structural parts of the building. The cost of this building was approximately 25c per cubic foot, which forms quite an achievement in economics. It has not a particularly monolithic feeing, as what expression is imparted by the broad simple frieze is counteracted by the framing of the rest of the design.



This illustration shows the simple treatment of some of the modelling on the building shown above. It was done with waste molds and shows how the relief was obtained without projection beyond the face of the wall, a form of treatment which is particularly adaptable to monolithic construction.



against the wall. If by this method, results can be produced that compare favourably with the surfacing used now in first class buildings, there is a margin of from 40c to \$1.00 per square foot to work on besides the saving in space of from four to six inches in the whole perimeter.

It might be of interest to you if I quoted from an address made recently by the President of the Royal Institute of British Architects in which he says:

"Even if concrete were a suitable material for large surfaces, it has in its natural state no beauty either of colour or texture, and it weathers badly, getting uglier and uglier instead of more beautiful. Chiselling or bush hammering, combined with a good coloured aggregate, greatly improves it, but as a material for large wall areas, it is unsatisfactory both from a practical and aesthetic point of view." I think Sir Gilbert Scott expresses the feeling many architects have for concrete as a finished surface, and certainly few would question it as applied to traditional architecture.

But we have been building with brick and stone for thousands of years, and developing various architectural expressions with this medium. Concrete construction is hardly a matter of decades.

The development of commercial architecture is a matter of only a few decades and in this class of work I believe that concrete construction has its greatest future.

The feeling of building in large monolithic masses is against all tradition, but is the abstract principle any the less sound for this reason? It is hard for us to estimate to what extent we are enslaved by tradition, but let us break the bounds in our imagination and suppose we had been building in large monolithic masses for hundreds of years with no knowledge of brick. If some enterprising person came along and suggested that we should cover our buildings with little burnt clay blocks, I think we would feel that the idea was so laborious and finicky that we would not entertain it.

If somebody suggested a covering of stone, the idea would be more comprehensible to these imaginary builders of monolithic structures and the

acceptance of the idea would depend on the comparative beauty of the surface they had developed with that of the stone, and whether it would compensate for the more laborious and complicated principle of construction.

I also think these imaginary monolithic builders would have developed a breadth of treatment beautified by molded form that they would be loath to part with.

I would like to make it clear that, in my remarks about the buildings illustrated, I am not pretending to deal with the architectural merits or demerits of the designs as a whole but only as they appear to me in this particular expression of concrete construction. I think you will agree that the illustrations shown indicate that very considerable progress has been made in this comparatively new medium for architectural expression, and give an encouraging indication of what progress will probably be made in the future.

The modernistic tendency to simplify traditional architectural form and to accentuate the expression of function and construction gives a wonderful field for the development of monolithic concrete construction as a new medium for architectural expression.



ROGUE RIVER BRIDGE, OREGON, DESIGNED ON THE FREYSSINET SYSTEM

In this bridge we can appreciate the extent of the achievement in monolithic concrete construction. The form dictated by constructional requirements produces a pleasing effect of lightness and airiness not usually associated with concrete construction.

ARCHITECTURAL ECONOMICS

REMODELLING AND MODERNIZATION OF BUILDINGS

BY RONALD W. CATTO, B.A.Sc., M.R.A.I.C.

ELIABLE statistics state that from 12 to 18% of the volume of construction work in the U.S.A., in normal times, is accounted for by the remodelling or enlarging of existing structures. It would be interesting to have the figures for Canada, but the percentage would not likely be less and during the past four years probably has been even greater.

Remodelling, while in most cases growing out of a desire for greater profits, is usually a study of the possibilities for increased attractiveness, not only in appearance but in layout and essential services. No one is better qualified to visualize opportunities for improvement through remodelling than the architect. Nevertheless, it is true that the majority of owners, when contemplating such activities, think first of consulting a contractor. Architects as a body should take special cognizance of this fact and endeavour to draw attention to the advantages of using the services they have to offer for this type of work. Not until the public is made to believe that even the most trifling building operation can be carried out most profitably through the services of an architect, not until then will the profession participate in what should be its field of usefulness to the same extent as do the other learned professions in theirs.

On the other hand, especially during times when commissions for new work are infrequent, the individual architect may often create business by seeking out remodelling opportunities. When successful, he will probably find that it is not only surprisingly interesting but also remunerative work.

The alteration or remodelling of an old house, in many instances, might secure for the owner equally great or even greater accommodation at less than it would cost to build a new one. However, there enters into this type of alteration, many other considerations outside the scope of architectural Sentiment, "the atmosphere of the economics. place," the love of the old homestead or the wish to live in a new one, the desire to live in a certain district, transportation facilities, accessibility for business reasons and so forth, all play important roles in reaching a decision and cannot be measured in terms of money. Old houses, and indeed many new ones, may often be sold or rented more readily when altered or remodelled. In connection with old houses, perhaps "modernized" would be a better word. But in a great many cases, it will be found that the owner or the estate has no money for such an enterprise and has no inclination to "take on" further financial responsibilities such as loans against the property.

It is only in isolated instances that any real opportunity of "making business" will be found by the architect seeking for it in the old house field and it is proposed, therefore, to deal with alterations and remodelling of revenue-producing buildings only. The investment issue involved with such buildings is usually paramount and invites consideration from a purely economic point of view.

To carry out remodelling work successfully, the architect must have, in addition to a general familiarity with building costs, a full knowledge of the cost of the special types of work which enter into such operations; demolition, shoring, decorating, renovating and cleaning and so forth. These often amount to a major proportion of the entire cost of the work. Also, he should be well-informed as to real estate conditions, rental values and operating expenses. For these latter considerations, consultation with a real estate expert will prove most useful. In many cases, the architect is expected to assist with the financial arrangements by helping to secure the necessary mortgages or building loans. He thus often acts as general financial adviser for the project, and as has been hinted, in some cases in fact, is its initiator. When so broadening the architect's functions, however, too great emphasis should not be laid on such financial elements which have no direct bearing on building beautiful buildings. It is not desirable to create the impression that the architect is a mere cog in the machine of profit making.

Conversely, the idea may well be advanced that beauty and attractiveness in a building have a real influence on its success as an investment. It should be argued that it is not how much money has been spent, but how well it has been spent, which counts when investment returns are being calculated. It is usually not difficult, for the sake of comparison, to point to two similar establishments, one of which is obviously not doing a business to warrant the lavish expenditures which have been made upon it, while the other is apparently prospering under what, measured on a mere cost basis, would be most adverse conditions. Space does not permit a full discussion of all the obvious factors which enter into this phase of the matter. The chief thought to plant firmly in the owner's mind is that the plan and design, the expenditures required to carry them out and the operating and maintenance costs of the building must be co-ordinated and

provided for in a manner which will result in a profitable investment, and finally, that the architect is the person most qualified for this purpose. For this reason he should have control of every item (decorating, fixtures, fittings, furniture, accessories and so forth) entering into the scheme. Or, if this is not convenient or practical, he should, at least, have knowledge of what is proposed and be consulted regarding their suitability and cost.

Having persuaded the owner into this frame of mind, the architect will then be in a position to obtain all the information necessary for the complete study of the problem and to go minutely into the economics of the whole scheme, be it a shop, a factory, an apartment or an office building. He can scrutinize every detail and will be able to avoid many costly mistakes which, if they occurred, even under some different arrangement, undoubtedly would be charged to his negligence, though he were blameless.

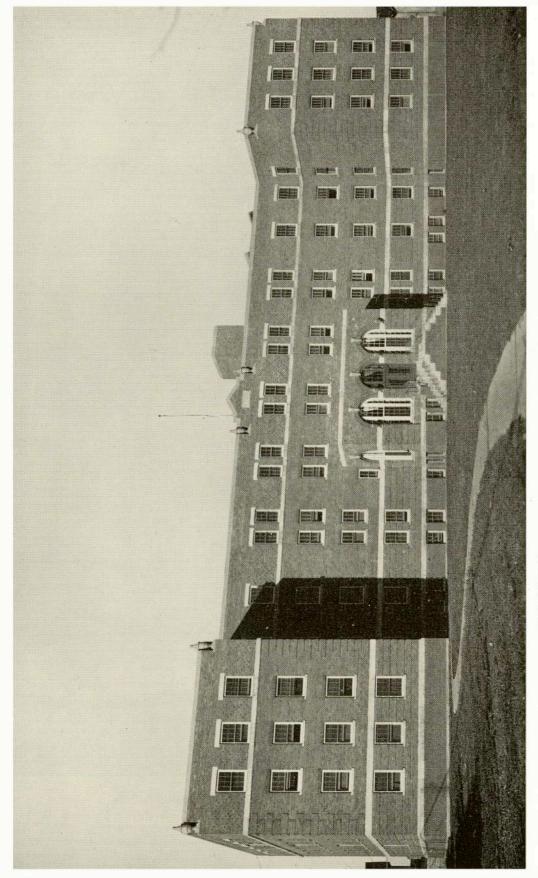
Remodelling is usually made necessary through the fact that a building has become, in some degree, obsolete. Obsolescence in revenue-producing buildings must not be confused with depreciation. Obsolescence is determined by the relative efficiency of other buildings, especially those in the same district. Remodelling may also be made necessary because the character of the district has become entirely different from that which produced the building. Or, it may be that the building was originally misplaced. In any case, it may often be necessary to consider the advisability of remodelling or of building a new building. The question of when to remodel and when to build anew is a very extensive one and can only be touched upon here by enumerating some of the economic factors which must be considered, namely:

- 1. The relative value of the land to that of the building.
- The possibility of a change in the value of the property.
- 3. The change or possibility of change in the character of the district and the resultant change in the type of trade or tenancy.
- 4. The probable extension of the period of usefulness which remodelling could acquire for the building.
- Where extensive alterations are necessary, the comparative cost and resultant revenue of the alternative operations.
 - The comparative difficulties of financing.

If the remodelling of a revenue producing building is to be successful, the locality, neighbouring properties and probable type of customer or tenant must be carefully studied. That quality sometimes called "atmosphere" must be to their liking, even though it outrage the taste of architect or owner, or both. In the final analysis, the work cannot be considered even an architectural success if it does not pay dividends. What is meant by this is, that two shopkeepers dealing in similar types of merchandise, but in entirely different districts, catering to a different class of customer, would require for the best success, quite dissimilar treatments of their premises, even though the costs of such might be the same. In this connection, often it will be noted that the individual ideas and taste of the shopkeeper reflects, very largely, those of the majority of his customers.

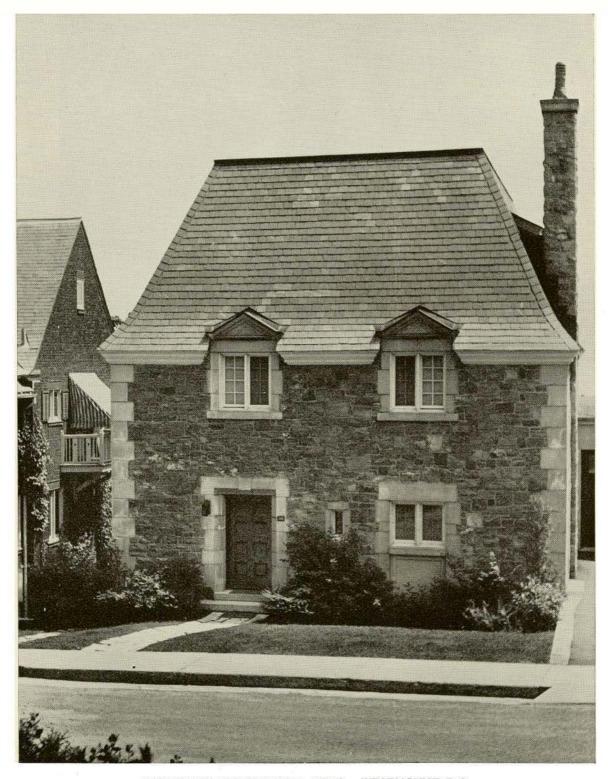
Assuming that a suitable plan and design have been decided upon, it might be of interest to discuss the means of carrying out the work. The cost plus a fixed fee, with an upset maximum cost, type of contract has many advantages for remodelling work and is usually quite fair to both owner and contractor. This method, however, makes necessary the preparation of very complete plans and specifications before the work is commenced, and in addition, there is always the shadow of contingencies arising which could not possibly have been foreseen and which have not been allowed for. When this method, or any other involving tenders, is decided upon, all avenues of information regarding the condition of the building, previous alterations, problems of operating (especially heating and plumbing) and so forth, should be fully investigated. Such information can be gathered from plans of the existing building, if obtainable, from contractors who have done work on the building, the local Building Department, former owners and tenants, real estate and insurance agents. And do not overlook the janitor, who is, usually, a well of useful information.

Another method is to take separate tenders on all trades which can, without doubt, be clearly shown and specified, and let these as separate contracts. The remainder of the work, which usually includes all structural work such as demolition, masonry, steel, carpentry, and sometimes plastering and all odd jobs which cannot be accurately figured, is let on a cost-plus basis to a reliable contractor, preferably one who has done similar work for the architect on previous occasions. This method has the advantages of assuring the owner a fixed cost for a very considerable proportion of the work, and at the same time, of permitting any number of changes to be made as the work is being done without involving in each case a deduction or addition to the contract. Also, it reduces the time required for the preparation of detailed plans and specifications, and thus allows the architect to devote more time to supervision. The result of this is that the work is carried out in the best possible way and the owner, therefore, benefits in no small degree.



NURSES' HOME—REGINA GENERAL HOSPITAL, REGINA, SASK.
F. C. Portuall, M.R.A.I.C., Architect

Page 135 September, 1934



RESIDENCE ON EDGEHILL ROAD—WESTMOUNT, P.Q. Shorey and Ritchie, M.M.R.A.I.C., Architects

CHARLES BARRY CLEVELAND

1880-1934

We sat in John Pearson's study—the white-haired architect who lovingly designed the Memorial Chamber in Ottawa's Parliament Tower, and myself, a much younger man. For a while we found it hard to talk. We were sharing a tragedy which, on the evening of August 18, fell upon a camp in the Ontario woods and beclouded the cultural life of a great city.

Charles Barry Cleveland, F.R.A.I.C., F.R.I.B.A., of Toronto, had, with stunning suddenness, left us; stricken by a heart

attack as he watched a programme of sports arranged by the boys of Bon Echo Camp, where, with his wife, he had gone to spend a week end with their son.

To John Pearson it meant the dazing loss of a valued partner, confidant and friend. To me, as to every member of the Arts and Letters Club, it meant the loss of a gracious, kindly, eternally-working president, and, more than that, of as warmly sympathetic a heart as ever befriended those who practise the arts.

"Two years ago," said Pearson, rising and pacing the floor, "I went to St. Paul's Cathedral on the occasion of the tercentenary of the birth of Sir Christopher Wren, to place, on behalf of the Royal Architectural Institute of Canada, a wreath upon Wren's tomb. I was particularly interested in the wreath laid there by the Royal Institute of British Architects. It was inscribed simply, 'Sir Christopher Wren-an archi-

tect and a gentleman.' Were I asked today to write an inscription to Barry Cleveland, I could think of none more fitting—'an architect and a gentleman.'

"I have received innumerable letters from contractors, builders, workmen and manufacturers-spontaneous expressions of regret, which pay impressive tribute to the gentleness and consideration with which Cleveland treated those working under his direction.

"He stood steadfastly by the traditions of his profession and upheld its ethics with burning zeal. The style he affected he was sure of. He had a meticulous genius for minute detail.

"In the twenty-two years of our association together, not once did we have a difference of opinion."

The weeks have passed since the impressively simple service at which hundreds of architects, artists, writers, musicians and civic officials stood while Dr. Healy Willan played the Dead March as it seldom has been played before; but, day after day, men continue to tell me of countless acts of kindness that will keep ever green the memory of Charles Barry Cleveland.

Cleveland had a rich inheritance in architecture. His great-great-uncle was Sir Charles Barry, who designed the British Houses of Parliament. Born in Melbourne, Australia, in 1880, he was taken to England at an early age. On leaving

school, he was articled to William D. Fawcett of Cambridge and later to W. D. Caroë, the eminent church architect of London, and to the late Leonard Stokes.

It was while in Cambridge that he met his future wife, Dora Lumby, daughter of the late Reverend J. R. Lumby, D.D., who preceded Dean Inge as rector of the Anglican Church in the university city.

In 1912, Cleveland came to Toronto and became associated

with the firm of Darling and Pearson. In time that firm engaged in a colossal and difficult work, that of designing additions to the Sun Life Building in Montreal. Then John A. Pearson went to Ottawa to erect the Parliament Buildings, and the superintendency of the Sun Life Building devolved upon Cleveland. Other buildings with which he was similarly connected were the Canadian Bank of Commerce Building, Toronto, Trinity College, the Anatomy Building of the University of Toronto, Toronto Art Gallery and the Toronto General Hospital.

For the last twelve years of his life, Cleveland had made an intensive study of hospitalization and had become conversant with it in every particular. The present Private Patients Pavilion of the Toronto General Hospital, which many architects concede ranks first anywhere on this continent, was largely

due to his intensive study. Nine years ago, he was received into partnership in the firm of Darling, Pearson and

Cleveland. Known in the profession for his sane judgment and

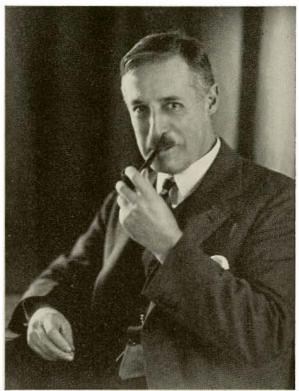
analytical mind, Cleveland was continually consulted concerning individual professional problems, as well as those which beset the Ontario Association of Architects when the question of revising the by-laws and schedule of fees came under consideration.

Cleveland gained the reputation, as chairman of those committees, of being a painstaking taskmaster but not asking of others more than he did of himself.

Some of the members still have vivid memories of burning the midnight oil in their deliberations and being forcibly reminded that a close and continuous attendance at the meetings was essential if the trust which their confreres had placed in them was to be justified.

The first president of the Arts and Letters Club to die during his term of office, Cleveland's last act there was to organize an exhibition of pictures in aid of a Toronto artist, who had suffered terrible injuries in an automobile accident.

Not only was he interested in painting and painters, but his genius for detail and harmony was expressed through music and pageantry. He was consulted in the staging of many festivals, was mass director of the great pageant chorus at



CHARLES BARRY CLEVELAND, F.R.A.I.C., F.R.I.B.A.

the Canadian National Exhibition in 1922, and it was due to his master marshalling, as a member of the Pageantry Committee of Toronto's Centennial this year, that the pageant moved with smoothness and precision.

For many years he had been a member of the Conservatory Choir, under Dr. Ernest MacMillan. He loved singing as he loved to hear music.

And back of all these enthusiastic and unremunerated efforts there was something of which Augustus Bridle has, I

think, caught the spirit:—"There was in C. Barry Cleveland a great, chivalrous soul, in which reverence for high art was superbly energized by glowing enthusiasm. It was never in him merely the detailed plan or the great idea or the enormous energy of either a great building or a colossal chorus that created the master inspiration; it was the rare instinct of a courtly gentleman, who knew how to express a master authority over masses of people just by kindness in the working of a great plan."

H. Napier Moore.

ACTIVITIES OF THE INSTITUTE

A meeting of the executive committee of the council of the Royal Architectural Institute of Canada was held in the rooms of the Institute, 627 Dorchester Street West, Montreal, on Wednesday, August 29th, 1934, at 10.30 a.m.

Present: Messrs. W. S. Maxwell, president; Alcide Chaussé, honorary secretary; W. L. Somerville, honorary treasurer; Ludger Venne; E. I. Barott; H. L. Fetherstonhaugh; Philip J. Turner and I. Markus, secretary.

Reading of Minutes: The minutes of the meeting of the executive committee held on May 23rd, 1934, were read and approved.

R.I.B.A. Exhibition of Contemporary Architecture: The secretary informed the meeting that in reply to the cable sent to the R.I.B.A. following the last meeting, they had requested that the Institute forward all available photographs for selection by their committee, following which they would communicate direct with the individual architects advising them of the size and type of the enlargements required, and that these enlargements would be retained by the R.I.B.A. for their permanent exhibition.

The meeting was further informed that 196 preliminary photographs, representing the work of 42 architectural firms had been submitted to the R.I.B.A. and that their exhibition committee had selected for enlargement 22 of the photographs, representing the work of 16 architectural firms. The R.I.B.A. had further requested the Institute to forward the enlargements selected not later than the middle of September.

National Construction Council of Canada: The secretary informed the meeting that the National Construction Council was exceedingly gratified at the success of its efforts in that the Dominion government had undertaken a programme of public works throughout Canada at a cost of forty million dollars, the object of the programme being to increase employment and reduce expenditures for relief purposes.

The meeting was informed that the Public Works Construction Act provided that all work estimated to cost five thousand dollars or more must be let by tender, and that the minister of public works is authorized to employ such architects and engineers in private practice as may be required.

A letter was read from the National Construction Council under date of July 18th, advising the Institute that in considering the budget for the current year it was thought advisable to reduce the assessments payable by the constituent organizations by approximately fifty per cent.

Employment of Private Architects on Public Works: The president informed the meeting that following the announcement of the public works programme he had arranged for an interview with the minister of Public Works at Ottawa in order to impress upon him the need and justice of employing architects in private practice wherever possible on the projects included in the public works programme. Mr. Maxwell read a communication he had sent to the minister of Public Works following his interview setting forth the arguments he pre-

sented in behalf of the architects in private practice. The meeting expressed its appreciation to the president for his efforts in this connection.

The secretary reported that up to the present time approximately forty architects in private practice had been retained in connection with the projects included in the public works programme.

A number of letters were read relative to the terms and conditions under which architects in private practice are to be engaged by the department of Public Works. After the letters had been given consideration, it was considered inadvisable to raise any objection at this time in the matter of fees as the public works programme was purely an emergency measure and should therefore have no effect on the existing fee schedules established by the various provincial associations.

A letter was read from the secretary of one of the provincial associations, pointing out that many of the buildings included in the public works programme were being given to individual firms of architects instead of to groups of architects which would provide employment to a greater number of members of the profession. The secretary was requested to advise the association that the government had already appointed associated architects on a number of the projects and it was presumed that the same policy would be followed in each of the provinces.

Inter-Provincial Relationships with Regard to Reciprocal Registration: The president advised the meeting that he had received communications from the presidents of all component societies with reference to the registration laws affecting reciprocal registration and submitted a brief analysis of the various regulations. After some discussion, during which it was pointed out that one of the provincial associations had not yet ratified its new by-laws, it was considered inadvisable to publish the comparative analysis of the regulations in The Journal at the present time.

R.A.I.C. Contract Documents: The secretary reported that approximately 1710 copies of the standard forms of contract, 200 copies of the standard form of tender, and 550 copies of the architect-client agreement had been sold up to the present time. He pointed out that there had been a greater demand for the various Institute documents during the current year than formerly.

R.I.B.A. Matters: A letter was read from the R.I.B.A. under date of August 10th extending an invitation to the Institute to be represented at the opening of the new R.I.B.A. building in London, and the R.I.B.A. Centenary Celebrations which will take place in London from November 21st to 24th, 1934. The secretary was instructed to advise the R.I.B.A. that every effort would be made to have the Institute officially represented on that occasion, and was further requested to publish a note in The Journal drawing the attention of the members to the R.I.B.A. Centenary Celebrations and requesting that members who expected to be visiting England at that time to so advise the Institute.

The secretary informed the meeting that the University of Toronto had nominated one of their students as a candidate for the Victory Scholarship competition and that arrangements had been completed for the holding of the "en loge" in Toronto under the direction of Mr. V. D. Horsburgh.

The Late C. Barry Cleveland: Deep regret was expressed by the members of the executive committee at the loss suffered by the profession in the death of Mr. C. Barry Cleveland of Toronto, a Fellow of the Institute.

Congratulations to Hon. Irenee Vautrin: On motion by Mr. Venne, seconded by Mr. Chaussé, the secretary was instructed to convey to the Hon. Irenee Vautrin the congratulations of the Institute on his having been appointed minister of Colonization in the cabinet of the Quebec legislature.

Miscellaneous: A letter was read from the Architectural Institute of British Columbia calling attention to a notice they had received of a meeting of the Canadian Fire Marshals Association, to be held in Ottawa on August 28th, at which they would take up the question of a national building code for Canada. The letter further stated that the A.I.B.C. did not consider the Canadian Fire Marshals Association the proper organization to discuss a structural building code as this was a matter for the architects, engineers and contractors.

The secretary was instructed to advise the A.I.B.C. that the R.A.I.C. is in accord with the opinion expressed by them and that Mr. Somerville and Mr. Craig, who expected to attend a meeting of the Dominion Fire Prevention Association in Toronto, would discuss the matter with the association at that time.

The president informed the meeting that he had sent a letter of congratulations to Ian MacAlister, the secretary of the Royal Institute of British Architects on the occasion of his having received a knighthood in the recent King's Birthday honour list; and also to Sir Giles Gilbert Scott on the occasion of the celebration of the centenary of the R.I.B.A.

A letter was read from the Architectural Institute of British Columbia under date of June 8th enclosing a copy of the proposed contractors' statute for the province of British Columbia and asking for the opinion of the Institute on the proposed legislation. As similar legislation had been proposed for the province of Ontario, the matter was referred for consideration to Mr. H. E. Moore and James H. Craig who had represented the architects on the Ontario committee.

Date and Place of Next Meeting: It was decided to hold the next meeting in Montreal on Wednesday, October 10th, 1934 at 10.30 a.m.

Adjournment: The meeting adjourned at 6.45 p.m.

NOTES

Herbert H. G. Moody, M.R.A.I.C., announces the opening of an office for the practice of architecture at 348 Main Street, Winnipeg, Man.

Members of the Province of Quebec Association of Architects have been invited to exhibit photographs of their work at the National Produced in Canada exhibition which is to be held in Montreal, from November 7th to 17th.

J. A. S. Houle, M.R.A.I.C., announces the opening of an office for the practice of architecture at 2007 Bleury Street, Montreal.

A competition has recently been announced for a design for the proposed Welland-Crowland War Memorial to be erected in Welland, Ontario, at a cost of \$25,000, exclusive of foundations. The competition will be limited to approximately thirty Canadian architects and sculptors who have been invited to submit designs, and three prizes will be awarded as follows: First prize—\$400.00; Second prize—\$250.00; Third prize—\$150.00. The jury of award will consist of Messrs. Gordon M. West, past president of the Royal Architectural Institute of Canada, E. Wyly Grier, president of the Royal Canadian Academy of Arts, John M. Lyle, architect of Toronto, C. W. Jefferys, artist, and two lay members.

In a report submitted to the mayor of Toronto by His Honour Dr. Herbert A. Bruce, lieutenant-governor of Ontario, in behalf of a civic committee appointed to investigate housing and slum conditions in the city of Toronto, it was pointed out that there were fifteen hundred dwellings that were unfit for human habitation, and that there was also a physical shortage of suitable dwellings in the city for the existing population.

Sir Raymond Unwin, past president of the Royal Institute of British Architects, will pay another visit to the United States very shortly accompanied by Dr. Kahn of Frankfurt, and Miss A. J. Samuel, manager of the Bebington (Cheshire) U.D.C. Housing Estates. Sir Raymond's tour has been arranged by the National Association of Housing Officials, Chicago, in the interests of the National Housing Act recently announced by the president of the United States.

In the Australian exhibit at the recent Canadian National Exhibition, Forsey P. Page, president of the Ontario Association of Architects, was presented by Mr. L. R. MacGregor, Australian trade commissioner, with a gavel inlaid with two hundred and thirty pieces of Australian decorative wood. Mr. Page, in accepting the gavel, stated that it would be used at council meetings of the association, and thus would be a perpetual reminder of the pleasant relations between Australia and Canada.

* * * * *

The Royal Institute of British Architects has extended an invitation to the members of the Royal Architectural Institute of Canada to attend the centenary celebrations of the R.I.B.A. which are to be held in conjunction with the formal opening ceremonies of the new R.I.B.A. building in London. The celebrations will begin on Wednesday, November 21st, and will continue until Saturday, November 24th. His Royal Highness the Prince of Wales has consented to be present at the centenary banquet which will be held on November 22nd. Members of the Institute who expect to visit England during the centenary celebrations are requested to notify the secretary of the R.A.I.C.

Raymond M. Hood, prominent New York architect, died at his home in Stamford, Conn., on August 14th, at the age of fifty-two. Mr. Hood, while comparatively unknown twelve years ago, won the competition for the Chicago Tribune Building which was awarded the Gold Medal of Honour in architecture by the Architectural League of New York in 1926. Mr. Hood was also responsible for the design of other well known buildings including the American Radiator Building in New York, the New York Daily News Building, and the seventy-storey office building in Rockefeller Centre. He also played an important part in the planning of the Century of Progress Exposition at Chicago.

Dr. Hendrick Petrus Belarge, famous Dutch architect, recently passed away at the Hague, Netherlands, at the age of seventy-eight. Dr. Belarge was awarded the Royal Gold Medal in 1932 by His Majesty the King, on the recommendation of the Royal Institute of British Architects in recognition of his distinguished accomplishments in architecture.

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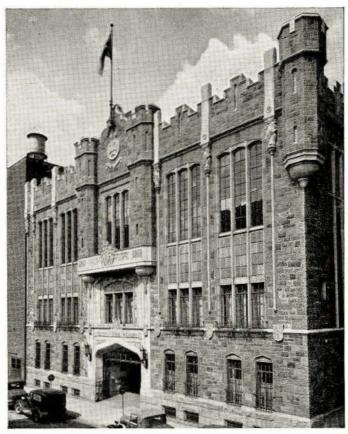
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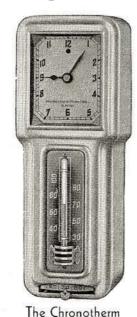
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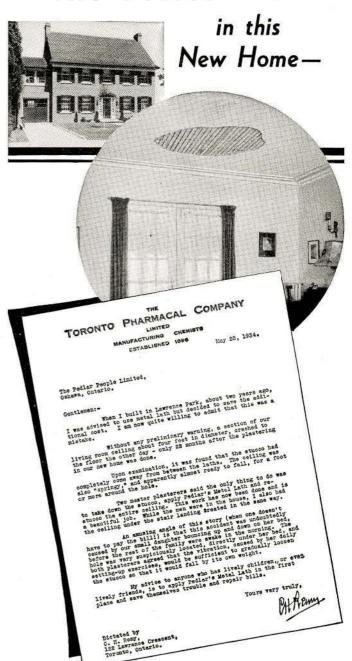
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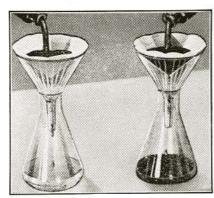
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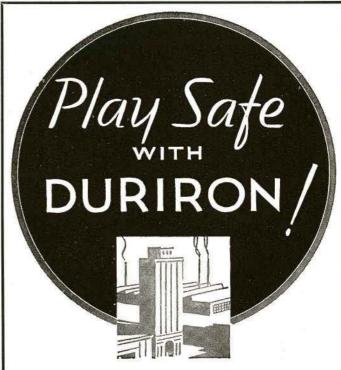
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- Acids are so commonly used today in all manufacturing processes that it pays to play safe and install Duriron Acid-proof Drain Pipe in all types of structures, and especially in the following:
- Hospitals and Institutions
- High School and College Laboratories
- Laboratories of Industrial Buildings
- Kitchens of Hotels and Restaurants
- Photographic Studios and Engraving Plants
- Battery Stations and Emergency Lighting Rooms
- Soda Fountains, where carbonated water is used
- Cinder Fills, where corrosion is outside the pipe
- The cost of Duriron Acid-proof Drain Pipe and fittings is small indeed compared to banishing forever the fear of acid-destroyed pipe, leaks, repairs and expensive replacements.
- Rehabilitation of plants which have been shut down; remodeling commercial buildings; have quickened demands for Duriron. Our representative in your territory will furnish helpful suggestions and prices, or write us.

SHAWINIGAN CHEMICALS LIMITED

Stainless Steel and Alloys Division
MONTREAL

ST. CATHARINES

WINNIPE

VANCOUVER

DURIRON ACID PROOF DRAIN PIPE

HOSPITAL BUILDING IS DAMAGED BY FIRE London Blaze Fails to Disturb Patients-Loss \$1,000. WIRES ARE BLAMED tempted in Cairo School Negotiations Special to The Mail and Empire. London, Sept. 18 A lively fire in the attic of the four-storey wing for merly used as a nurses, home at vicmerry used as a nurses home as stiff toria Hospital gave fremen 30-minute fight late this afternoon, but without inconvenience or injury The loss, estimated at about \$1,000, was attributed by investigators to to patients or staff was attributed by investigators to electric wiring. Fused wires were located by Chief Charles Scott in the attic, and were later examined by Inspector W. E. Rider of the electrical spector W. E. Riger of the circumstantinspection department. The possibility that a circuit had been insed was being probed this evening. The fire was discovered by a memor of the staff who found smoke isber of the staff who found smoke issuing from the attic. Firemen atsuing from the attic. Firemen sides,
tacked the blaze from three nurses
tacked a class of probationaricipation
while a class below they executed trouble.
They are the serious to hospital of the patients was disturbed.
according to hospital of the patients was disturbed.

Yes, blame the wires!

What is overfusing? Making the wires carry more current than that for which they are safely rated. The result is that at some weak part there is going to be overheating, with the inevitable fire. The trouble with fuses is that they can be replaced by higher capacities than the wires can safely carry. They can be entirely bridged thereby destroying all protection.

NOFUZ

Nofuz is non-tamperable. It is installed at a definite rating. The wire is protected at all times. Ask your electrical jobber for full details.

Canadian Westinghouse Company, Limited
HAMILTON - ONTARIO

Branch Offices: Vancouver, Calgary, Edmonton, Regina, Winnipeg. Fort William, Toronto, Montreal, Halifax.

Service and Repair Shops: Vancouver, Calgary, Regina, Winnipeg, Toronto, Montreal.

Westinghouse



8134

JOHNSON



Shown at right
INTERIOR OF AUDITORIUM

In this ultra-modern school building, 176 Johnson Dual Thermostats operate valves on direct radiators and also the valves and dampers in unit ventilating machines. Proper sequence of operation for all of the devices which heat and ventilate the building is assured . . . A complete system of Johnson duct thermostats and switches operate the dampers and valves at the indirect ventilating apparatus . . . The Dual Thermostats are arranged in nine groups, according to the usage of various types of rooms. Two such groups are provided for the classroom section, one for offices

and library, one for the auditorium, two for the gymnasium section, one for the band rooms, and two for domestic science and manual arts... Unit ventilators are controlled in such a way that those in one room may be operated without affecting any other room. A "normal" temperature of 70 degrees or a reduced "economy" temperature of, perhaps, 50 degrees may be had in any section of the building at the will of the operator. Moreover, the dual thermostat in any room may be set at the "normal" temperature, regardless of conditions maintained elsewhere.

Each Johnson Dual Thermostat is capable of maintaining either of two temperatures. Johnson Dual Control allows heating occupied rooms to a "normal," 70 degree temperature while unused sections of the building are maintained at 50 degrees. At night, the entire building is carried at the reduced temperature, an "economy level" from which it is neither difficult nor expensive to re-heat in the morning. Separate steam mains are not required. The Dual Thermostats are connected in groups arranged in such a way that rooms used during evening hours, or at other odd times, may be handled separately. Switches at a central location select the normal "occupancy" temperature or the reduced "economy" temperature for the thermostats in each group. Single rooms may be cut from the group operation by means of a push button on each thermostat, furnished in those cases where such flexibility is desirable.

JOHNSON TEMPERATURE REGULATING CO. OF CANADA LTD.

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