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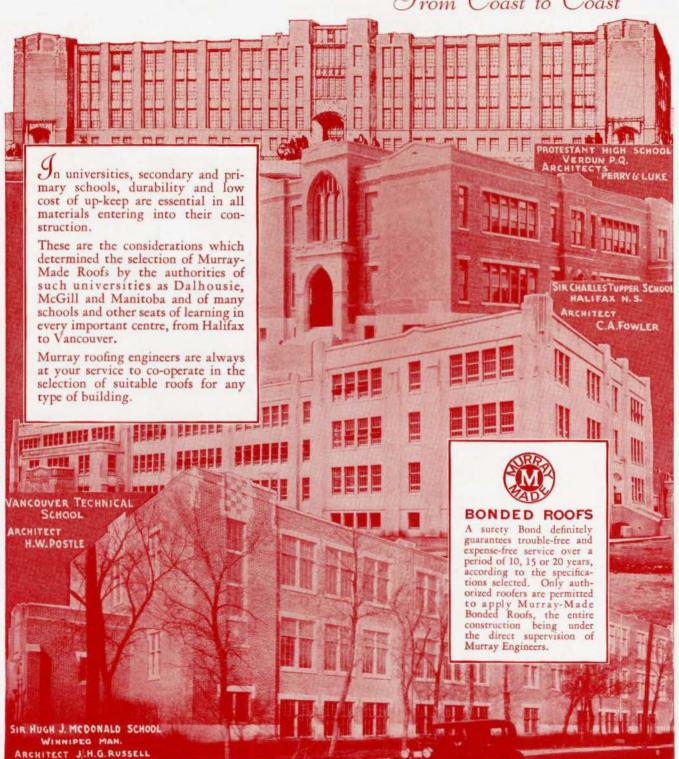


Vol.IX, No. 12 DECEMBER, 1932 TORONTO

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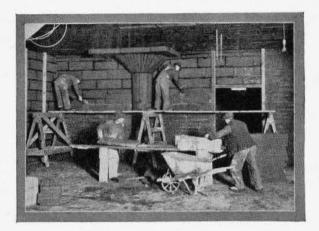
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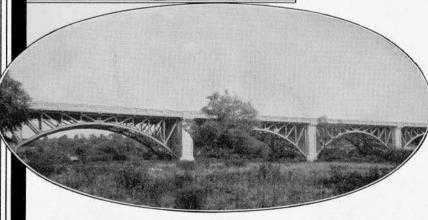
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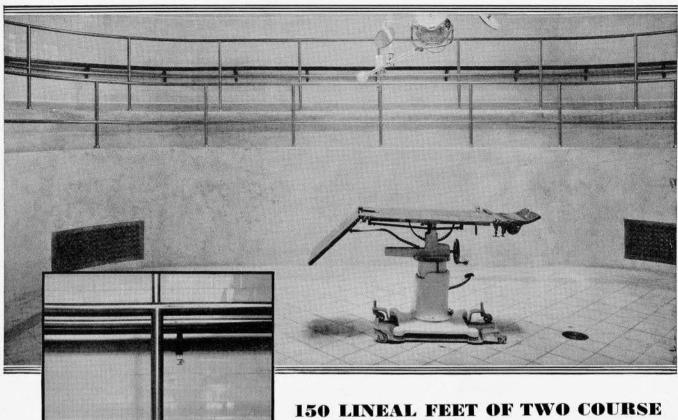
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## THE JOURNAL

### ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 88

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### CONTENTS

BANK OF MONTREAL BUILDING, OTTAWA FRONTISF	PIECE
ARCHITECTURE AND THE STUDENT, BY MILTON S. OSBORNE, B. ARCH., M. SC. (ARCH.)	259
A REVIEW OF THE R.A.I.C. EXHIBITION, BY E. R. ARTHUR	261
THE RESULTS OF THE IMPERIAL ECONOMIC CONFERENCE, AS THEY AFFECT THE	
CONSTRUCTION INDUSTRY IN CANADA, BY HERBERT E. MOORE, F.R.A.I.C	270
THE NEED FOR A NATIONAL CONFERENCE ON CONSTRUCTION	270
DEPARTMENT OF ART, SCIENCE AND RESEARCH	271
ROYAL CANADIAN ACADEMY OF ARTS	272
ACTIVITIES OF PROVINCIAL ASSOCIATIONS	272
NOTES	273
OBITUARY	274
COMPETITIONS	274
BOOKS REVIEWED	274
INDEX TO VOLUME IX	275

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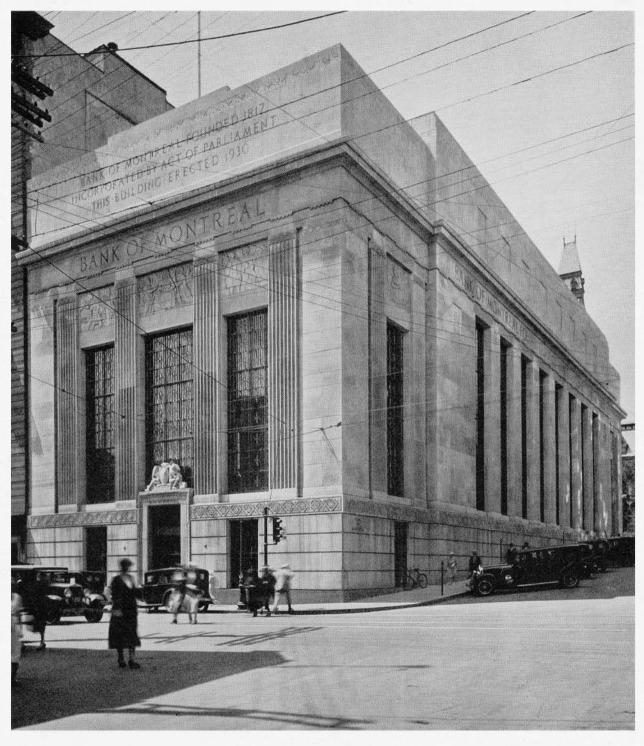
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### ARCHITECTURE AND THE STUDENT

BY MILTON S. OSBORNE, B. ARCH., M. Sc. (ARCH.)
UNIVERSITY OF MANITOBA

The heads of the recognized schools of architecture in Canada have been invited to define in the columns of The Journal their conception of what is both essential and desirable in the training of students in architecture. The views of Professor Ramsay Traquair of McGill University were expressed in an article entitled "The Education of the Architect" which appeared in the last issue of The Journal, and we are now privileged to present in the following article the viewpoint of Professor M. S. Osborne of the University of Manitoba. Professor C. H. C. Wright of the School of Architecture, University of Toronto will give his opinion on the subject in the next issue.—EDITOR.

E ARE all critics of architecture. Whether our opinion is an expert one or not is of little matter, for the layman has as much right to an expression of opinion on this highly specialized subject of architecture as the master himself. We are led to wonder upon what basis of judgment or by what rules of ethics we may sit as jurymen on the architecture of this modern age. Has the advent of new materials and new methods of construction altered the fundamental rules upon which we may judge as to whether or not a building may be classed as "good architecture"? I believe not. I doubt if it is either necessary or possible for us to discard our tried and true principles that relate to proportion, unity, mass and the other essentials of good architecture.

I shall always remember Professor Charles St. J. Chubb's three requisites for correct design as he gave them to us in our student days. They were beauty, logic, and function. Beauty came first in his definition, and well it should if architecture is to take its place as the greatest of the fine arts. If we care to take Webster's definition for logic, we find it to be "the science and art of exact reasoning," and again, "something that tends to convince as completely as reasoning." This would mean, when applied to architecture, sound and convincing construction. Whatever is functional is fulfilling its purpose for existence, and it must not be overlooked that true functionalism is the fulfilment of physical requirements in an economic manner.

Vitruvius, in his "De Architectura," defines architecture as "a science involving much discipline, or mental training, as well as a deep knowledge of various kinds." He goes on to say that it "springs from two elements, a practical knowledge of building work and the application thereto of reasoning. The true architect needs both native talent and the readiness to learn, for neither genius without discipline nor discipline without genius will make the perfect artist." This "discipline" includes skill in drawing, a knowledge of the mechanics, a wide acquaintance with history and a diligent study of philosophy. There must be also a knowledge of

the building crafts, directed by reason and study,
—in other words, practice supported and guided
by theory.

The application of the principles underlying perfect design, whether it be of a building, a chair, or a vase, has been apparent in all the past ages. (These principles do not change, for they present themselves continually in nature on every hand.) The duty of the teacher of architecture is to point out the application of these principles in what has been done in the past, to direct the student's mind into the correct channels of thinking. Even with what Vitruvius calls "native talent" or natural ability, the eye is not yet trained to differentiate between the good and the bad, or between the good and that which is not quite so good. The laws of proportion are subtle and elusive, the shading often finely drawn, and it is only through the development of the aesthetic sense to the place where it becomes highly sensitive and discriminative that we fully appreciate them. While these rules may not be set down as mathematical formulae, they are, nevertheless, as definite and concise. They are difficult to explain in so many words, but easy to demonstrate in the architect's graphic mode of expression—the sketch and the photograph. If we studied tradition only to profit by the mistakes of those who came before us, it would be profitable, but we are fortunate enough to have access to the best work done in the past as our inspiration.

It goes without saying that the architect must know the materials with which he is working. It would be as foolish for the musician to master the theory of music without bothering about his finger exercises, or for the artist to learn his pigments without practicing the art of their application, as for the architectural student to have nothing but designs on paper, without a thought of their construction. Theory and practice must go together; but in the student's training he must learn first of all to express himself, to convey his thoughts to someone else, and for that reason he must learn to draw. The builder needs only the idea and the materials at hand to put the idea into concrete

form, but the architect is seldom the builder, so he must be able to explain to someone else by concise and definite drawings what he has in his mind. Drawing is his means of self-expression the means by which he sells his services.

While building materials may be considered the architect's alphabet, he must also have a vocabulary of ideas if he is to express himself graphically. The student builds up this vocabulary through the study of photographs, through sketches, by the careful drawing of architectural details, and the careful analysis of present buildings. Sketching is invaluable, for once the object is studied sufficiently that it can be reproduced in sketch form, it has become a part of him. In other words, that object has been added to his architectural vocabulary. In much the same way, the writer uses words and phrases in various combination to convey his thoughts to his readers. This vocabulary should be developed through every problem of design or construction, by every lecture in the classroom, and by every photograph that has a bearing on his chosen profession. The student suddenly comes to the realization that he has looked at buildings for years without seeing them-he begins to look carefully and with a new understanding. He sees, architecturally, for the first time, and his impressions become a storehouse of material to be drawn upon in the solution of future problems.

The language of architecture has changed surprisingly little through the ages. We try vainly to discard the old forms, convincing ourselves that modern problems demand something new and different. So we conceive a fresh motive—the conventionalization of a flower pattern, or the working out of a geometric design in some unusual combination of angles and curves, only to find to our chagrin that the Romanesque architects had done the same thing, perhaps a little better. We are almost prepared to believe that there is nothing new under the sun. The Assyrian handled his plain wall surfaces in a most modern way and the bas-reliefs of the Egyptians and Archaic Greeks might easily have been done in the Twentieth Century.

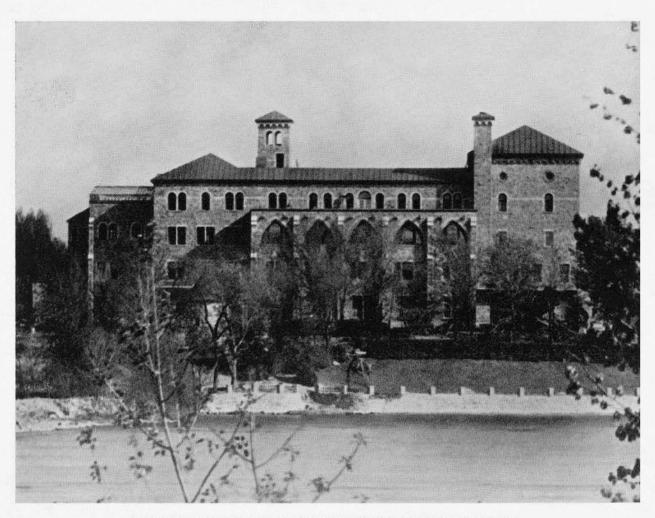
Our problem is that of enclosing space, of sheltering it from the weather—the problem the architect has been called upon to solve in every age. If there are rooms, there must still be provision for light and communication, even though that communication may be vertical rather than horizontal. Walls are still necessary, with windows for light and ventilation and the pleasure of looking out on sky and trees and flowers. Roofs we must have, and floors, stairs, and partitions. How do our problems differ from those with which the Egyptian, the Greek and the Renaissance architects had to deal? Our problems are complicated by the introduction of mechanical equipment, but

the basic principles of the organization of the plan and the proper relationship of its elements remain much the same. The student may add much to his architectural vocabulary by investigating the manner in which his problems have been solved by others before him.

No one realizes better than the teacher of architecture how much remains for the student to discover about his chosen profession after his graduation from the university course. Even though the course may be a full five years in extent, so much time must be spent in developing a background or foundation on which to plant concrete ideas that much in the way of practical work is impossible. It is an open question as to whether or not a practical problem should be attempted in the course of an architectural education. It is true that the time at the instructor's disposal for teaching design might easily be devoted to covering as great a variety of subjects as possible without carrying any of them to the working drawing stage. It is also true that the thousand and one questions arising in the development of working drawings might be answered more easily in the office than in the classroom or laboratory. There is the answering argument, however, that the student will probably clarify many points in design and construction in the preparation of working drawings in the laboratory with which he would hesitate to bother a fellow-draftsman or his employer in an office. The self-confidence which he should acquire, as well as the thorough knowledge of the process necessary to the solution of an actual problem should be of inestimable value to him later, and should be well worth the time it takes. I feel that at least one problem should be carried through to the preparation of complete plans, sections and elevations, with as many structual details as possible. This conclusion has been reached after careful study of several methods of teaching architectural design.

The preparation of working drawings should be supplemented by the writing of specifications, and this should be the student's opportunity to acquaint himself with materials. New materials and new building methods are opening fields with unlimited possibilities for the man who thinks clearly and logically and who has a discernment for true values.

The architectural student may sometime be called upon to fill an extremely important place in his community. He would be expected to speak with some authority on matters of public interest, such as town planning, housing and civic improvements, and to be versatile enough to criticise a work of art or to act as technical advisor on the construction of a building. If he has a genuine interest in public welfare, the community will welcome his new ideas and fresh enthusiasm with open arms.



ST. JOSEPH NOVITIATE, ST. GENEVIEVE DE PIERRE FONDS, P.Q.

Lucien Parent, Architect

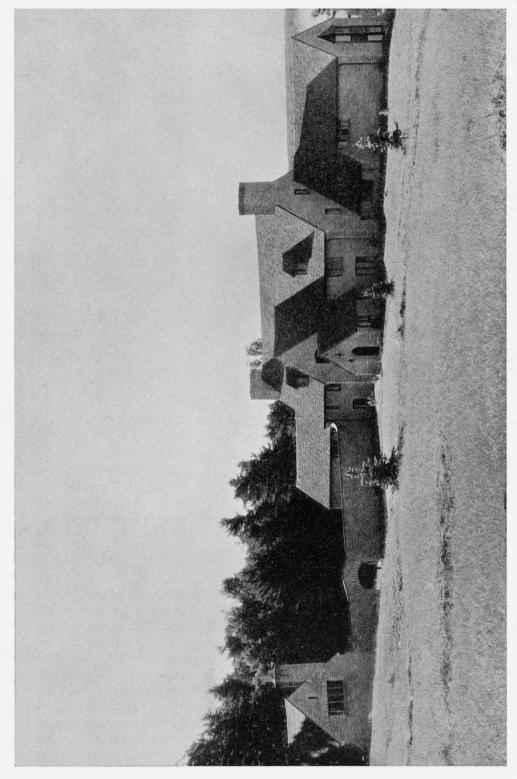
FIRST AWARD-EDUCATIONAL BUILDINGS

### A REVIEW OF THE R.A.I.C. EXHIBITION

BY E. R. ARTHUR

T THE present moment I haven't much enthusiasm for my task of writing one thousand words on the exhibition of photographs of the Royal Architectural Institute of Canada. I went to the opening night, and was pushed hither and thither by hundreds of "first nighters" most of whose backs were to the pictures. I mislaid my wife, and ultimately found myself in the freer, if cooler, air of the architectural room. It was like coming out of a Piccadilly tube at five o'clock. (For the sake of my argument Piccadilly would be deserted.) As a matter of fact Mr. Roper Gouinlock was in the room. We discussed Corinthian caps on the Hamilton Mausoleum -they were too good to be true. I went again burdened by the weight of my unwritten article on a Friday afternoon. There might have been

twenty people looking at pictures, but I looked in vain for Mr. Gouinlock or anyone else in the architectural gallery. The Mistress Art and I were alone, and we were both equally depressed. She was talkative, though black frames and loneliness had played on her nerves. She quite agreed with me, however, that an architectural show must stand or fall by itself. It blooms surrounded by models (of which here there was none) with pictures and sculpture labelled and suppressed as "Allied Arts." It can but wilt as the appendage of the Royal Canadian Academy. A college of art boy yet in his teens with a "Barn and Chickens" can make the Bank of Montreal in Ottawa, look like nothing at all. I stoutly resist the temptation in this austere journal to say "five cents." I do not blame the painters, whose guests we seem to be,



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P. Roy Wilson, Architect
HONOURABLE MENTION—RESIDENTIAL BUILDINGS

RESIDENCE OF HOWARD BANKS, ESQ., WESTMOUNT, P.Q.

Perry & Luke, Architects

HONOURABLE MENTION—RESIDENTIAL BUILDINGS

but I think the combined show is fundamentally wrong and does us, as a profession, more harm than good.

I finally persuaded the Mistress Art to come and see Dorothy Stevens' "Nude" and Randolph Hewton's "Benedicta" which we both thought the finest things in the show, magnificent painting and superb draughtsmanship. So much for the preamble for which I wasn't asked. I have to write a review of the exhibition. The dictionary does not give much assistance. It is apparently like reviewing troops—one gives a few salutes, notes the shining buttons, but ignores the unshaven chin and soiled rifle barrel. The editor could do that, and I am afraid that I shall have to invest myself with the powers of a critic. And so, with some timidity, for the real business of this article.

Toronto shows up badly beside Montreal. I make no excuses for my brethren here because, though they were told that buildings shown at the R.A.I.C. could not be exhibited in the Toronto Chapter Exhibition in February 1933, they should not have submitted inferior stuff, and the hanging committee might have done a better job. Selection seems to be but an ill defined side line of the hanging committee. We are sensitive folk.

But if the hanging committee showed no judgement, I think the judges are to be congratulated on their main awards. One cannot give high enough praise to Messrs. Barott and Blackader for their Bank of Montreal in Ottawa, which won the Medal of Honour. I have only two criticisms to make. The band of ornament might have been omitted at the base. The levels are such that the building takes a dive into the side-walk on the corner, and gives an impression of a basement storey, unseen, but beautifully finished in limestone. I have seen this building and I don't think the photographs do it justice. They might have been much better on grounds of light, arrangement and viewpoint.

In the domestic class I imagine the judges had a difficult problem. I like Mr. Galt Durnford's house for Mr. H. C. MacDougall immensely. In its style, for which I admit a personal preference, I don't know of a better in Canada. I don't like the front of Mr. Cormier's house\* at all, but there are things about his house which would demand the attention of any competent judges. The treatment of the garden and the studio are as masculine and original as the main elevation to my mind is thin and mechanical. The studio is a splendid room. The scale is perfect, and the furniture, which echoes the general treatment of the room so well, shows another side of the architect's ability which is rare in our profession. It is to be found in Sweden, but otherwise, I thought it died with that ingenious family, the brothers Adam. Architects

\*Illustrated in the July, 1932 issue of The Journal.

are notoriously unable to design houses for themselves as good as those which they design for other people, and I congratulate Mr. Cormier on having destroyed that unhappy tradition.

I liked very much Messrs. Perry and Luke's house for Mr. Jas. Wilson, which did not gain a prize. Messrs. Perry and Luke's work shows great study and knowledge of period (Sir Edwin's Lutyens' doorway on Mr. Howard Banks' house perhaps excepted), but they lack that absolute familiarity with style and material which give Mr. Durnford's work such distinction. Though he is very young, he works with the confidence of Lutyens or Pope, and already his achievements are not inferior to the smaller domestic work of those masters.

I hope I may be pardoned for mentioning some other exhibits that struck me as outstanding, without reference to their class. There seems to be even a greater lack of unity in design in Montreal than Toronto. Whether it is that we are more conservative in Toronto, or that we had a Georgian tradition here with which we seem well satisfied, I don't know.

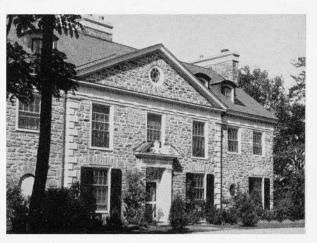
At any rate one sees a single aim in the designs of the University Club, the Provincial Pulp & Paper building, the Burnside house and scores of other buildings which, for reasons I gave before, were not shown. We have "modern" work no worse and no better than that shown from Montreal. The pity is that it comes from the United States rather than from Sweden or Germany, where it had its origin and still flourishes. Commercial catalogues like Terra Cotta, in which ornament is restricted to the many forms which lightning takes and rams horns caught in stellar thickets, are the stock in trade of our unenlightened modernists in both Capitals. The Ecole Cherrier by Mr. Eugene Larose, in the modern style, seemed to stand out head and shoulders above its fellows in that manner.

As an important national building, the Research Laboratories in Ottawa cannot be ignored. If you set an architectural student such a problem, he would think immediately of those mighty factories of Erich Mendelsohn in Berlin. He would think of light and power and the majesty of science. Messrs. Sproatt and Rolph have been concerned only with the majesty of the state. The Doric order takes care of that for you; the other requires a kind of genius of which this building shows little evidence. Its great façade suggests nothing but the civil service; of myriads of clerks in myriad offices, each with his little job. If the building had been done well, even in so archaic a style, no more need be said. Externally, however, the great colonnade is broken by a paltry little pavilion scarcely bigger than those which flank it. It seems hardly necessary to say that such a device in composition must invariably split the composition in two. The wings compared with the Roman



RESIDENCE OF JAS. WILSON, ESQ., WESTMOUNT, P.Q.

Perry & Luke, Architects



RESIDENCE OF H. C. MACDOUGALL, ESQ., CARTIERVILLE, P.Q.
A. T. Galt Durnford. Architect



ECOLE CHERRIER, MONTREAL

Eugene Larose, Architect

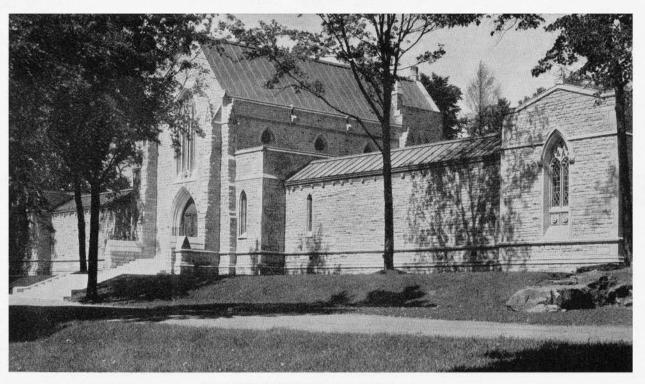


STAIRWAY—NATIONAL RESEARCH BUILDING Sproatt & Rolph, FF.R.A.I.C., Architects



NATIONAL RESEARCH BUILDING OTTAWA

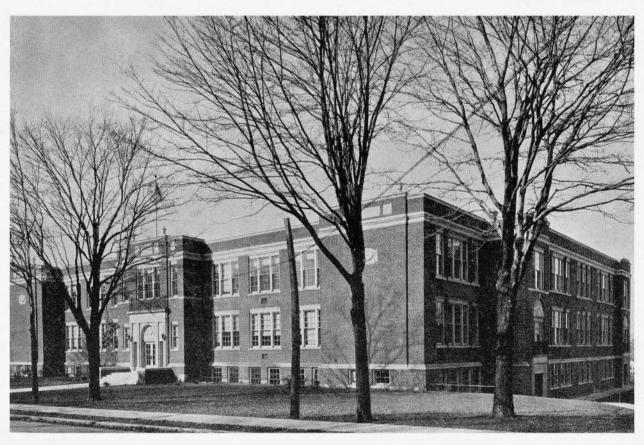
Sproatt & Rolph, FF.R.A.I.C., Architects



OTTAWA MAUSOLEUM, OTTAWA, ONT.

Wm. Ralston, Architect

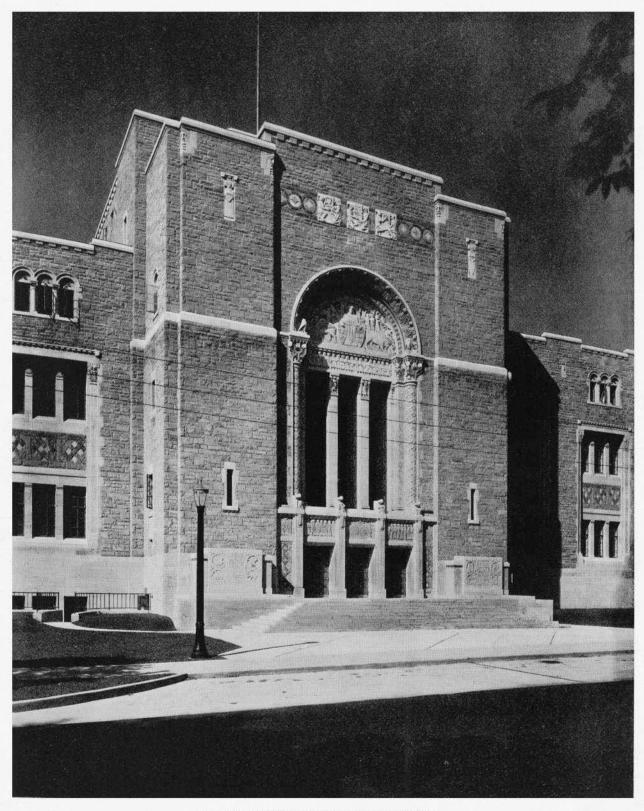
HONOURABLE MENTION—ECCLESIASTICAL BUILDINGS



BROCKVILLE COLLEGIATE INSTITUTE, BROCKVILLE, ONT.

G. Roper Gouinlock, Architect

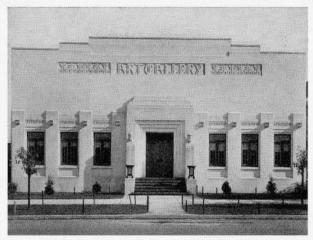
HONOURABLE MENTION—EDUCATIONAL BUILDINGS



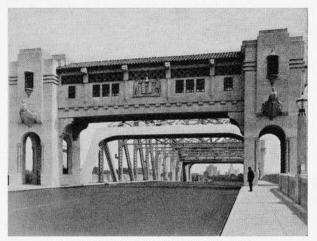
ROYAL ONTARIO MUSEUM, TORONTO

Chapman & Oxley, Architects

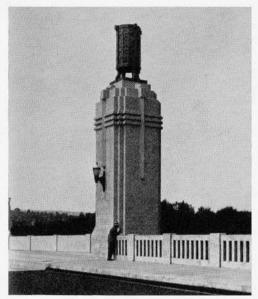
HONOURABLE MENTION—PUBLIC BUILDINGS



VANCOUVER ART GALLERY, VANCOUVER, B.C.
Sharp & Thompson, Architects

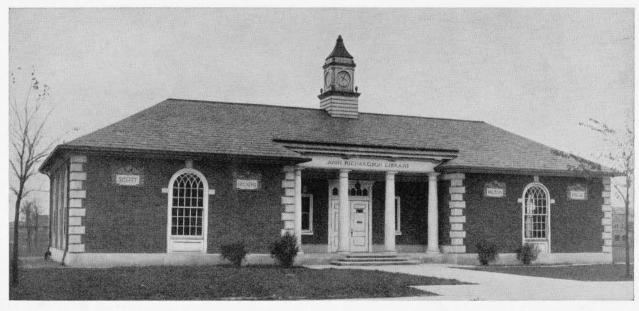


BURRARD BRIDGE, VANCOUVER, B.C.
Sharp & Thompson, Architects



PYLON—BURRARD BRIDGE, VANCOUVER, B.C.

Sharp & Thompson, Architects



JOHN RICHARDSON LIBRARY, SANDWICH ONT.  ${\it Cameron~ \it G~Ralston~ Architects}$ 

grandeur of the central portion, are so thin in their reveals that they look like stucco. The interior can be judged only from the great staircase. It is as heavy as the Palais de Justice in Brussels, without the life of the latter. The handrails strike the pier at different levels, and the climax is reached in a rotunda of great delicacy, crowned by a blue dome and gold stars.

One wonders what made Mr. Sproatt hitch his Gothic waggon to a 19th century classic star. Hart House is, I think, superior to any modern "medieval" building, not excluding work in the American Universities. What Sir Reginald Blomfield said of Sir John Vanbrugh may, by substituting "Medieval Architecture" for "Literature," be applied with some truth to Mr. Sproatt. "For the first 35 years of his life he devoted himself to Medieval Architecture with brilliant success, and acquired a distinguished reputation which holds to this day. He then, for reasons unknown, suddenly transferred his exuberant energy to the practice of another art, and astonished the world by a series of portentous buildings without parallel in modern architecture."

On the whole, I think the Royal Ontario Museum is a good building. The photographs give a softness to the carving which is lacking in the original and the quilt work in the spandrels of the windows is less noticeable. Time will probably do what photography has done so rapidly. There is a noble scale in the central portion, though one would like to have seen the string courses continued to give a greater unity with the rest of the building. The end wings are weak and inadequate.

The church of St. Andrew and St. Paul,\* by Mr. Fetherstonaugh, has already been illustrated

\*Illustrated in the November, 1932 issue of THE JOURNAL.

and was a worthy 1st prize. The John Richardson Library by Messrs. Cameron and Ralston was, in the opinion of this reviewer, one of the nice things in the exhibition.

Vancouver is represented by two buildings, both by Messrs. Sharp and Thompson, the Burrard Bridge and the Vancouver Art Gallery. The Bridge is a huge affair and begins very well with two pylons which are large in scale and well handled. The surprise comes in the middle of the Bridge where there are two triumphal structures spanning the roadway. I cannot see the object of the well lit room overhead, nor how it is reached. It is the more mysterious because the whole thing has a faint suspicion of the east, of joss sticks and chop suey. It may be that under our very eyes we are seeing an architecture, like ancient Egypt and Assyria, influenced by trade with the Orient. Banister Fletcher becomes a much more intelligible book.

In the art gallery the scale and character is well preserved if the great wall over the lower windows can be justified. Many are interested today in bringing "art into the home" and Vancouver has a bright idea. Over the windows you will see P. P. Rubens (to distinguish him from his brothers J. F. and W. P.) and Al Durer might be an Elk. At any rate he is so much more lovable than the remote Albrecht.

I should like in conclusion to leave the suggestion that the Royal Architectural Institute of Canada stand in future on its own feet, and take the trouble which the Toronto chapter takes in its biennial exhibition. In two successive exhibitions 60,000 came to see the show and that is a record only exceeded in the realm of sport.

# THE RESULTS OF THE IMPERIAL ECONOMIC CONFERENCE AS THEY AFFECT THE CONSTRUCTION INDUSTRY IN CANADA

BY HERBERT E. MOORE, F.R.A.I.C.

II. SHEET AND PLATE GLASS

The glass industry is one that is not indigenous to Canada due principally to a lack of high grade silica sand, and judging from past experience, the making of glass in this country has not been a profitable business.

Under the old duties on sheet glass, namely 12½% on foreign and 7½% on British, about 96% of our total sheet glass imports were from Belgium and Czecho-Slovakia principally, and some from Germany and other European countries. England, though a traditional glass country, was practically off the Canadian sheet glass market partly because six days a week operation of her furnaces under higher labour costs, made it impossible to successfully compete under tariff conditions with the traditional glass countries, Belgium and Czecho-Slovakia, where furnaces operate continually for seven days a week with efficient yet lower labour costs.

Under the new conditions created by tariff readjustment following the Imperial Economic Conference, whereby the duty on foreign sheet glass has been increased from  $12\frac{1}{2}\%$  to 15%, while British sheet, which originally carried a duty of  $7\frac{1}{2}\%$ , has been placed on the free list, it is likely that Canada, with the advantage of exchange rates, will import a great deal more British glass than heretofore.

On plate glass, the United States has had a goodly share of Canadian business, and last year of the total plate imports, about 55% were from the United States and about 28% from Great Britain, this under a tariff that was, comparatively speaking, not altogether unfavourable to foreign import.

Under the new tariff, British plate up to the size of twenty-five square feet will be on the free list, while foreign plate will carry a duty of 25%. On sizes over twenty-five square feet, there will be a duty of 20% on British plate, 30% on Belgium plate, and 35% on United States plate.

In these circumstances, it is likely that Canada will import a greater proportion of British plate, though there is no indication that prices will be materially affected.

# THE NEED FOR A NATIONAL CONFERENCE ON CONSTRUCTION

Efforts are being made in many countries to bring together the component parts of the construction industry for the purpose of giving consideration to matters of vital interest to the industry, and also to present a united front in dealing with matters of public interest. In view of the possibility of such a conference taking place in Canada, it is of interest to note that the American Institute of Architects, recognizing the need for co-ordinated effort on the part of all interests directly or indirectly connected with the construction industry, has taken the leadership in bringing about the formation of a permanent body to deal with the internal and external problems of the industry.

This has resulted in the organization of the Construction League of the United States of which body Mr. Robert D. Kohn, past president of the American Institute of Architects, has been elected chairman.

That the formation of this important body is receiving the attention of those outside the industry is amply shown in the following excerpt from an editorial which appeared in a recent issue of *The Business Week* entitled "Building Men at Last Begin to Knit Together an Industry:"

"That great, sprawling congeries of professions, trades, and businesses engaged in the thousand and one activities that converge upon the single construction job is beginning, after all these centuries, to crystalize into something like a co-operative body.

"It is just a beginning, but the trend seems unmistakable. It is possible that 'the construction industry' may become something more than a figure of speech; signs are apparent of a consciousness of common problems, and of co-operation to solve these problems.

"In Washington met during the same week the Construction League of the United States, the National Conference on Construction, and the Associated General Contractors.

"The Construction League of the United States is some eighteen months old. Headed by Robert D. Kohn, New York architect, it gathers together in rather a compact organization, engineers, architects, contractors, materials supply interests, and machinery men. It has, during its brief existence, made considerable strides toward arousing in these groups a new consciousness that they have common problems and common interests."

### DEPARTMENT OF ART, SCIENCE AND RESEARCH

CONDUCTED BY B. EVAN PARRY, F.R.A.I.C.

The August issue of the Canadian Journal of Research, issued by the National Research Council of Canada, covers the method of testing fibre board insulation. A description is given in detail of the hot-plate apparatus which has been installed at the National Research Laboratories at Ottawa, primarily with a view to ascertaining the cause of the inconsistency in results obtained by different investigators on insulating wall board. Fibre boards composed either of bagasse or wood fibre were tested, and a migration of moisture from the hot to the cold side was found to occur. The conductivity of a board with a fairly high moisture content was found to decrease enormously during a long period of testing. The work indicates that the conductivity-density relation is essentially linear, but should be represented as a band rather than a line to allow for the effect of the structure of the board on the conductivity. Most members of the profession realize that the determination of the heat conductivity of fibre board has become a problem of considerable interest in connection with the heat insulation of houses. Therefore this monograph is strongly recommended for the perusal of architects in Canada.

A brochure has come before the notice of this committee under the caption of The Progress of Building Research, issued under aegis of the British Department of Scientific and Industrial Research. The exhaustive findings contained in this report are well worthy of the attention of the members of the profession in Canada. Inter-alia it includes: Survey of Building Stone Resources, Contamination of Building Stones by Chlorides, Atmospheric Pollution, Preservatives, Tests, etc., Asphalts and Bitumens, Cements, Crazing of Concrete Products, The Carbonation of Concrete, Staining and Efflorescence, Moisture Movement of Sandstone, Waterproofers, Calcium Sulphate Plasters, Physics of Plastering, Adhesion of Cement Renderings to Brickwork, The Durability of Bricks Underground, Structures and Strength of Materials, Effect of Weather Conditions upon the Heat Requirements of a House, The Heating of School-rooms by Radiant Heat, The Exclusion of Solar Heat, Acoustics of Buildings, Fire Resistance, Paint and Distempers, Waterproofing Preparations, etc.

This excellent report is accompanied with appendix and report of the Building Research Board for the year 1931, it contains 158 pages, 39 figures and diagrams, price three shillings, net. Copies may be obtained from Wm. Dawson Subscription Service Limited, 70 King Street East, Toronto, Imperial News Company Limited, 235 Fort Street, Winnipeg, 517 Burrard Street, Vancouver, or His Majesty's Stationery Office, Adastral House, Kingsway, W.C.2, London, England.

The committee has received the regular bulletin of the Foreign Construction Division of the Department of Conmerce, Washington.

Of interest to architects are the descriptive notes on the Chicago Stadium and a windowless factory in Fitchburg, Mass. The latter building is designed on lines claimed to assure conditions conducive to the physical comfort, mental serenity and good health of the workers. To this end, lighting, colour, sound, humidity and temperature are all subject to control.

Doubtless this experiment will be watched with interest, but one can not help feeling some regret that the passing glimpse of a bit of blue sky, or the smell of wet earth after a rain shower are apparently denied to the workers in this windowless Utopia.

Of interest to all architects is the comment on the economic waste caused by obsolete building codes. It is suggested by this committee that the present time is most opportune for local chapters or association of architects to give intensive study to their own codes.

This committee will be glad to act as a clearing house for any information of interest in this connection.

The following publications have been issued by the National Bureau of Standards under the aegis of the United States Department of Commerce. They vary in price from 5 cents to 15 cents, and copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C.

RP292. VARIATIONS CAUSED IN HEATING CURVES OF GLASS BY HEAT TREATMENT. A. Q. TOOL and C. G. EICHLIN.

This paper shows some of the variations found in the heating curves of a glass when it is chilled or annealed in varying degrees. A discussion is included which is designed to explain the relation of these variations to certain assumed changes in the physico-chemical condition of glass as its "effective" annealing temperature is varied. The relation which these changes in condition bear to the properties of a glass and to some phases of the problem of annealing is also considered. It is evident from both the experimental results and these discussions that annealing procedures may be so manipulated that certain properties may often be made either more desirable or more nearly coincident with standards of requirement than they would be if a fixed (or indefinite) schedule were always followed for a given type of glass.

### H15. X-RAY PROTECTION.

Recommendations by the Advisory Committee on X-Ray and Radium Protection for electrical and X-ray protection are given. The report includes: I. Protection from X-rays; II. Electrical protection; III. Installation of X-ray equipment in anaesthetic rooms; IV. Storage of X-ray film; and V. Operating rules.

### R61-30. CLAY TILES FOR FLOORS AND WALLS.

This is a revised draft of the recommendation originally adopted by the industry in 1927. The new edition contains text and tables showing dimensional simplification, uniform grade nomenclature for all floor and wall tiles, and recommended methods of grade marking. It explains the certification of grades, and the terms used in grade specifications. The publication also contains a history of the project, report of the general, and first revision conferences, and outlines the purpose and duties of the industry's standing committee.

RP321. VOLUME CHANGES IN BRICK MASONRY MATERIALS, L. A. PALMER.

This publication covers a study of 21 cements (both Portland and masonry), 7 limes and 8 makes of brick; shrinkage of mortars during hardening, etc.

### ROYAL CANADIAN ACADEMY OF ARTS

The General Assembly of the Royal Canadian Academy of Arts was held at the Art Gallery of Toronto on Saturday, November 5th, 1932. The following officers were elected for the ensuing year:

E. Wyly Grier, Toronto, president; W. S. Maxwell, Montreal, vice-president; C. W. Simpson, Montreal, treasurer; and E. Dyonnet, Montreal, secretary. Council (one year): Maurice Cullen, Montreal; Hugh G. Jones, Montreal; E. Dyonnet, Montreal; Percy E. Nobbs, Montreal; F. S. Challener, Toronto; Hugh Vallance, Montreal. (Two years): C. W. Simpson, Montreal; John M. Lyle, Toronto; A. Y.

Jackson, Toronto; G. Horne Russell, Montreal; E. Fosbery, Ottawa; Emanuel Hahn, Toronto.

Mr. Adrien Hebert, Montreal, was elected an associate painter.

The Fifty-third Annual Exhibition of the Royal Canadian Academy was officially opened by the Hon. Rev. H. J. Cody, president of the University of Toronto, on Friday evening, November 4th, at the Art Gallery of Toronto, and remained open until November 30th. Over thirteen hundred people attended the opening. A review of the exhibition will be published in the January issue of The Journal.

### ACTIVITIES OF PROVINCIAL ASSOCIATIONS

### MANITOBA ASSOCIATION OF ARCHITECTS

At the last meeting of the council, consideration was given to a letter from the Royal Institute of British Architects regarding the possibility of reciprocal registration.

It was decided to send a copy of The Journal to certain building supply firms in Winnipeg advising them that advertisements appearing therein were given consideration by architects.

Mr. C. N. Blankstein, of Winnipeg, a graduate of the Manitoba University, was accepted as a member licensed to practice architecture in Manitoba.

A luncheon was tendered by the Manitoba Association on October 28th to Professor A. A. Stoughton who had been in charge of the architectural course at the university for many years. Professor Stoughton intends leaving Winnipeg permanently for residence in New York.

### MARITIME ASSOCIATION OF ARCHITECTS

A meeting of the New Brunswick Council of the Maritime Association of Architects was held on October 21st, 1932, at the office of the honorary secretary-treasurer, Saint John, N.B.

In view of the fact that the members in Nova Scotia had been successful in obtaining legislation to regulate the practice of architecture in their province, it was decided that efforts should also be made to obtain an architects' act in the Province of New Brunswick. It was the feeling of the meeting that the New Brunswick Government would probably look with favour on the request for legislation at this time, as practically all the other provinces had granted legislation governing the practice of architecture.

### ONTARIO ASSOCIATION OF ARCHITECTS

New by-laws made necessary by the passing of the Architects' Act, 1931, have been finally adopted by the council and will come into force on January 1st, 1933. The new by-laws call for an increase in the entrance fee from \$10.00 to \$50.00 for practising architects, and from \$10.00 to \$25.00 for employed architects. The qualifications for membership in the association have also been raised.

In view of the difficult times through which architects are passing, the council has decided to reduce the annual membership fee for 1933 from \$25.00 to \$5.00, the latter amount being necessary to cover the pro rata contribution to the Royal Architectural Institute of Canada.

### PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS

At a recent meeting of the P.Q.A.A., Mr. Milton Ellasoph was elected to membership in the association.

Examinations for admission to the study of architecture and registration in the Province of Quebec were held on the 14th of November, 1932.

A general meeting of the Province of Quebec Association of Architects will be held in the rooms of the association, 627 Dorchester Street West, Montreal, on Friday, January 13th, 1933, at 7.30 p.m., to discuss and approve the revised by-laws of the association.

The annual meeting of the Province of Quebec Association of Architects will take place at Quebec on Saturday, January 28th, 1933.

### SASKATCHEWAN ASSOCIATION OF ARCHITECTS

The annual meeting of the Saskatchewan Association of Architects was held in the Parliament Buildings, Regina, on October 19th, 1932.

The following officers were elected for the ensuing year: president, Harold Dawson, Regina; first vice-president, Joseph Warburton, Regina; second vice-president, David Webster, Saskatoon; secretary-treasurer, E. J. Gilbert, Saskatoon; members of council, Prof. A. R. Greig, Saskatoon, W. G. Van-Egmond and F. H. Portnall, Regina; library board, Prof. A. R. Greig, chairman, Francis B. Reilly, Regina, and Frank J. Martin, Saskatoon.

The examination board reported that three candidates had tried examinations during the past year, one taking the final and the other two the intermediate examinations. Mr. Frank J. Martin of Saskatoon, who successfully passed the final examination, was registered in June.

Mr. Portnall, a member of the Public Relations Committee of the R.A.I.C., advised the meeting of the activities of this committee. As a result of the discussion which followed, it was decided to endeavour through the various Town Planning Commissions in Saskatchewan, to get the city authorities to encourage the erection of well-designed buildings by offering prizes for the most attractive buildings erected during the year in various price classes. It was suggested that these prizes might take the form of remission of a portion of the taxes for the year.

A resolution was passed requesting the provincial government to pass a public buildings act requiring plans of all buildings, where public safety is involved, to be prepared by a registered architect, also requiring an architect's supervision on all buildings during their construction. This action was taken as a result of the collapse of a large building in Saskatchewan during the past year.

W. R. Pottruff, of Winnipeg, read a paper dealing with painting problems which was well received.

It was decided to hold the next annual meeting at Saskatoon.

Following the conclusion of the meeting a banquet was held in the Hotel Champlain, after which various interesting subjects connected with architecture were discussed by members and guests.

### NOTES

A meeting of the executive committee of the council of the Royal Architectural Institute of Canada was held in Toronto on December 7th, 1932.

\* \* \* \*

Mr. Harold Dawson (M), of Regina, was elected president of the Saskatchewan Association of Architects at the annual meeting of that body held in the Parliament Buildings, Regina, on October 19th, 1932.

Mr. B. Evan Parry (F) has been advised by the president of the International Hospital Association of his election as a member extraordinary of that association. The honour

conferred on Mr. Parry is in recognition of the service he has rendered as chairman of the Canadian Committee.

\* \* \* \*

The editor and management of The Architectural Review (England) are to be congratulated on the manner in which they have produced their November issue. It is a double number devoted to concrete and steel, and in addition to articles by such outstanding men as Sir Edwin Lutyens, Sir E. Owen Williams, Wells Coates, and P. Morton Shand, it contains over two hundred illustrations of almost every conceivable type of steel and concrete construction from many parts of the world. The issue is so interesting and informative in its subject matter that we do not hesitate to commend it to members of the profession in Canada.

Dr. John A. Pearson (F) returned

\* \* \*

to Toronto on November 25th after spending the past two months in England. While in London, Dr. Pearson represented the Institute at the Wren Tercentenary Celebrations, in connection with which he laid a wreath during the Memorial Service at St. Paul's Cathedral on behalf of the architects of the Dominion of Canada, and "To the glorious memory of Sir Christopher Wren, in deep gratitude for the flame of inspiration which he has passed on to all peoples of the Empire."

The Toronto Chapter of the Ontario Association of Architects has recently announced that their next biennial exhibition of architecture and allied arts will be held during the month of February, 1933, at the Art Gallery of Toronto.

\* \* \* \*

Mr. Philip J. Turner (F), of Montreal, delivered an illustrated lecture on "The Romance of the Old English Inn" at a meeting of the Royal Empire Society held on October 18th at the Sun Life Building, Montreal.

\* \* \* \*

Mr. Sylvio Brassard (M), announces the removal of his residence and business from Chicoutimi, Quebec, to Room 334, Chateau Champlain, Quebec, Que.

\* \* \* \*

After a period of nineteen years of teaching and practice in Winnipeg, Professor Arthur A. Stoughton, formerly head of the Department of Architecture at the University of Manitoba, will leave shortly for New York where he will resume practice with his brother, Mr. Charles W. Stoughton, at 250 East 43rd Street, New York City.

An article by B. Evan Parry (F), entitled "The Economics of Hospital Planning" appeared in the September issue of the Canadian Hospital.

Mr. Hubert Savage (M), of the firm of James and Savage, architects of Victoria, B.C., has returned from an extended trip to England.

A large number of architects and engineers attended a meeting at Hart House, Toronto, on the evening of December 1st to hear Mr. G. Earl Miller and Mr. Hugo Filippi, engineers of Chicago, deliver addresses on the subject of Reinforced

Brick Masonry. The addresses were illustrated by motion pictures which showed the great advance made in this newly developed type of construction. A similar meeting was held at the Royal York Hotel on the afternoon of December 2nd for the benefit of those who were unable to attend the evening meeting. Both meetings were sponsored by the Brick Manufacturers Association of which body Mr. Walter R. McCaffray, B.A.SC., is engineer and manager.

Mr. A. Leslie Perry (M), of the firm of Perry and Luke, architects, Montreal, addressed a luncheon meeting of the Rotary Club of Westmount on November 23rd. Mr. Perry, in his address, outlined the work and responsibilities of the modern architect.

Kenneth K. Forbes, A.R.C.A., was awarded the Thomas R. Proctor

Prize for his portrait of Captain Melville Millar which he exhibited at the current exhibition of the United States Academy of Design.

The award, which is given annually for the best portrait exhibited, carries with it a cash prize of \$200.00, and is the only award made by the academy which is not restricted to United States artists.

A copy of the 1932-33 edition of the American School and University has been received at the office of the Institute, in which is contained much useful information on the design, construction and equipment of educational buildings. The volume also contains a list of architects in the United States and Canada who have designed three or more school or college buildings costing over fifty thousand dollars each.

Mr. Douglas C. Winter (M), of Windsor, Ontario, has recently been elected a member of the Province of Quebec Association of Architects.

### INDEX TO VOLUME IX

This issue contains the index to The Journal for 1932. Care has been taken in its compilation to make the finding of any article or illustration comparatively easy. A feature of the index is the enumeration of both issue and page so that both those who bind The Journal and those who keep the monthly issues separate will have a means of locating the desired reference.

### THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA

### Twenty-Sixth General Annual Meeting

Toronto, Ontario 17th and 18th February 1933

The Twenty-sixth General Annual Meeting of The Royal Architectural Institute of Canada will be held at the King Edward Hotel, Toronto, Ontario, on Friday and Saturday, the 17th and 18th February, 1933.

ALCIDE CHAUSSE, Honorary Secretary

NOTE: The full programme for this meeting will be published in the next issue of The Journal.

Page 273

### NOTES-Continued

Professor Ramsay Traquair of McGill University delivered an illustrated lecture on the "Old Houses of the Province of Quebec" at the Mechanics Institute, Montreal, on November 17th.

Mr. Philip J. Turner (F), delivered an illustrated address on Glastonbury Abbey before a meeting of the Women's Art Society on October 25th, at Stevenson Hall, Montreal.

### OBITUARY

J. E. H. MACDONALD, R.C.A., O.S.A.

We regret to record the death on November 26th of Mr. J. E. H. Macdonald of Toronto, principal of the Ontario College of Art, and a prominent member of the "Group of ' Mr. Macdonald's paintings have been shown at nearly all important Canadian exhibitions, and at the time of his death three of his canvases were being exhibited at the Royal Canadian Academy Exhibition.

Mr. Macdonald was born in Durham, England, in 1874, and came to Canada at the age of thirteen. He first took up the study of art at the Hamilton Art School, and then at the Ontario School of Art in Toronto. He was elected a member of the Ontario Society of Artists in 1909, an Associate of the Royal Canadian Academy in 1912, and a full Academician in 1931. He is represented by nine canvases in the National Gallery at Ottawa.

Mr. Macdonald had a very wide circle of friends and was admired by all who knew him.

### COMPETITIONS

COMPETITION FOR A POSTER ANNOUNCING THE TORONTO CHAPTER ARCHITECTURAL EXHIBITION

The Toronto Chapter, O.A.A., announces a competition for a design for a poster to be shown in offices, store windows, street cars, etc., setting forth the following announcement: ARCHITECTURAL EXHIBITION, TORONTO CHAPTER, O.A.A.

THE ART GALLERY OF TORONTO

February 4th to 28th

The words "Architectural Exhibition" being the most important, should be fairly large. The poster may be executed on a coloured or white background, and one other colour only or black. How this subject may be best illustrated is left entirely in the hands of the competitors, as is also the colours to be used. The size of the card should be 14 in. wide by 22 in. in height.

The competition is open to anyone resident in Toronto and suburbs. Only one design is to be submitted by a competitor.

A board of assessors has been appointed as follows: J. E. Sampson, artist, John M. Lyle, architect, and Murray Brown architect.

A prize of \$25.00 will be awarded to the author of the design placed first by the assessors.

Designs must be submitted to Professor E. R. Arthur, A.R.I.B.A., Department of Architecture, University of Toronto, not later than December 27th, 1932.

The design must bear no mark, device, handwriting or other means of identification of authorship. With each design there is to be enclosed a blank sealed envelope containing the name of the author, and a statement that the design submitted is original and the personal work of the author.

The promoter reserves the right to publicly exhibit all designs submitted with the names of the authors marked thereon, and also to make any changes they deem necessary to the accepted design.

### BOOKS REVIEWED

PUBLISHER'S NOTE-We wish to remind our readers that any books reviewed in these columns, as well as any other architectural book, can be secured through THE JOURNAL of the R.A.I.C. at the published price, carriage and customs duties prepaid.

MASTERPIECES OF ARCHITECTURE IN THE UNITED STATES. By Edward W. Hoak and Willis H. Church. Published by Charles Scribner's Sons, New Price \$20.00.

The eighteen buildings illustrated in this volume represent the highest achievement of contemporary American architecture in the opinion of a jury composed of Messrs. Chester H. Aldrich, Harvey Wiley Corbett, Ralph Adams Cram, Paul P. Cret, Raymond M. Hood, William Mitchell Kendall, H. VanBuren Magonigle, Harry Sternfeld, the late William Rutherford Mead and the late Milton B. Medary. A list of the buildings selected for illustration may be of interest to readers of THE JOURNAL; they are as follows: The Lincoln Memorial, Washington, D.C.; The Liberty Memorial, Kansas City, Missouri; The Detroit Institute of Arts, Detroit, Michigan; The Building for the Freer Collection, Washington, D.C.; The Boston Public Library, Boston, Massachusetts; The Public Library Building, Indianapolis, Indiana; The Detroit Public Library, Detroit, Michigan; The Church of St. Vincent Ferrer, New York City, New York; The Madison Square Presbyterian Church, New York City, New York; The Nebraska State Capitol, Lincoln, Nebraska; The Pan-American Union Building, Washington, D.C.; The Temple of the Scottish Rite, Washington, D.C.; The Shelton Hotel, New York City, New York; The Hotel Traymore, Atlantic City, New Jersey; The Barclay-Vesey Building, New York City, New York; The Bush Building, New York City, New York; The Tribune Tower, Chicago, Illinois, and The Woolworth Building, New York City, New York.

While we may not all agree with the selection made by the jury, we believe it can be said without fear of contradiction that the buildings chosen for illustration are beautifully reproduced and admirably presented. The value of the book is greatly enhanced by the inclusion of plans and detailed drawings which may themselves be considered masterpieces in draftsmanship. Both the authors and the publishers of this book are to be complimented on the production of such a

magnificent volume.

The size of the book is 131/2" x 171/2" and contains 225 pages including a brief description of each building illustrated.

THE STORY OF ARCHITECTURE IN ENGLAND, PART II. By Walter H. Godfrey, F.R.I.B.A. Published by B. T. Batsford Limited, London.

This volume completes the cycle of the story of English architecture begun in Mr. Godfrey's first volume which dealt with the pre-Reformation period from Roman times to the Dawn of the Sixteenth Century. Part II deals with the Renaissance phase beginning with the Tudor style, then with the Elizabethan and Jacobean, Stuart, Palladian and Georgian architecture, ending with the Classic Revival, the brothers Adam and the neo-Greek style of the Regency.

Mr. Godfrey writes in an easy and interesting style which should appeal to the reader.

The book is 5½" x 8½" in size, contains 160 pages including 152 illustrations from photographs, drawings, etc.

# THE JOURNAL ROYAL ARCHITECTURAL INSTITUTE OF CANADA

### INDEX

### VOLUME IX, 1932

Month and Page	Month and Page
Abroad With a Camera, by Woodruff K. Aykroyd Feb. p. 51; Apr. p. 107; July p. 173	Layman's Criticism of an Architectural Exhibition
Acacia Grove—Colonial Architecture in the Maritimes, by Arthur W. Wallace	Layman's Impression of Canadian ArchitectureJuly p. 175
Activities of the Institute	Manufacturers Publications Reviewed
Activities of Provincial Associations—	Need for a National Conference on Construction
Alberta	Notes Jan. p. 26; Feb. p. 54; Mar. p. 86; Apr. p. 111; May p. 133; June p. 156; July p. 178; Aug. p. 198; Sept. p. 216; Oct. p. 236; Dec. p. 273
British Columbia	Nova Scotia Architects Act
Manitoba Feb. p. 52; May p. 133; Dec. p. 272	
Maritime Provinces	Obituary—Frank P. Martin, Jan. p. 26; Zotique Trudel, Jan. p. 26; M. Z. Blankstein, Feb. p. 54; James L. Beattie, Feb. p. 54; Joseph A. H. Lapierre, Apr. p. 112;
Ontario	George W. Gouinlock, Apr. p. 112; James Foulis, May p. 134; James Henderson, May p. 134; F. McGillivray Knowles, May p. 134; James P. Anglin, June p. 156; J. Melrose Morrison, Sept. p. 216; J. E. H. MacDonald, Dec. p. 274
Toronto Chapter	One Plus Grand Parti, by Harold R. Little
QuebecJan. p. 25; Feb. p. 53; Apr. p. 111; May p. 133; Dec. p. 272	Pearson, John A., Honoured by University of Toronto June p. 143
Saskatchewan	Popularizing the Profession
Adventures in Architecture, by Louis GoldingFeb. p. 40	Practice of Architecture Regulated in Nova Scotia
Architectural Details	Presentation to the Hon. Secretary of the Institute
Architectural Sculpture, by Emanuel Hahn	President's Message Jan. p. 3
Architect's Conception of Design	n 1 (1 ) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Architecture and the Student, by Milton S. Osborne	Results of the Imperial Economic Conference as They Affect the Construction Industry, by Herbert E. Moore—
Awards at Third Annual Exhibition of the R.A.I.C	I. Structural Steel
Awards in R.A.I.C. Competitions	II. Sheet and Plate Glass
Awards in R.I.B.A. New Premises CompetitionJune p. 144	Review of the Arts, Canadian National Exhibition-
Awards at School of Architecture, University of Toronto June p. 155	By F. H. Brigden Oct. p. 230
Bank of Montreal Building, OttawaSept. p. 201	By Bertram Brooker
Bank of Nova Scotia Building, HalifaxJan. p. 5	Review of the Recent Exhibition of Hospital Architecture Held in Toronto, by B. Evan Parry
Beyond Four Walls, by H. B. Dunington-GrubbOet. p. 219	Review of the R.A.I.C. Exhibition, by E. R. Arthur Dec. p. 261
Books Reviewed	Royal Architectural Institute of Canada—
Canadian Decorative Forms, by John M. Lyle	Officers and Members of Council for 1932
Challenge to the Architectural Profession	Proceedings of the Twenty-Fifth Annual Meeting
Church of St. Andrew and St. Paul, Montreal	Meetings of Executive Committee and Council
Church of Ste. Jeanne Françoise de Chantal, Quebec by Ramsay Traquair, and E. R. Adair	List of Members
Civic Beautification, by Joseph M. PigottJuly p. 164	Fifty-Second Annual Exhibition
Competitions	Meeting of the Council
Cormier, Ernest, Residence of	Fifty-Third Annual Exhibition Oct. p. 236
Current Architecture in Other Countries	Annual Meeting
Department of Art, Science and Research	St. Matthews Presbyterian Church, Montreal
May p. 123; June p. 153; July p. 178; Sept. p. 215; Dec. p. 271	Saint Thomas' Day Feb. p. 40
Dominion Oilcloth and Linoleum Building, Montreal Feb. p. 45	Sculpture on the Bank of Montreal Building, Ottawa Oct. p. 226 Shakespeare Memorial Theatre, Stratford-on-Avon
Editorial—	Speculative Builders, Loan Companies and Architects
The Twenty-Fifth Annual Meeting of the Institute Feb. p. 33	Standardization of Building Materials
The Journal	Toronto's Heritage of Ugliness, by P. W. Thompson. Sept. p. 212
Education of the Architect, by Ramsay Traquair	Trend in Design of Public Buildings, by J. Burn Helme. Feb. p. 34
Emmanuel College and Residences, Toronto, by C. B. Sproatt	
	Whitney Hall, University of Toronto
Is our Domestic Architecture Mediocre, by W. L. SomervilleApr. p. 97	Why the Interior Decorator, by W. L. SomervilleJune p. 138

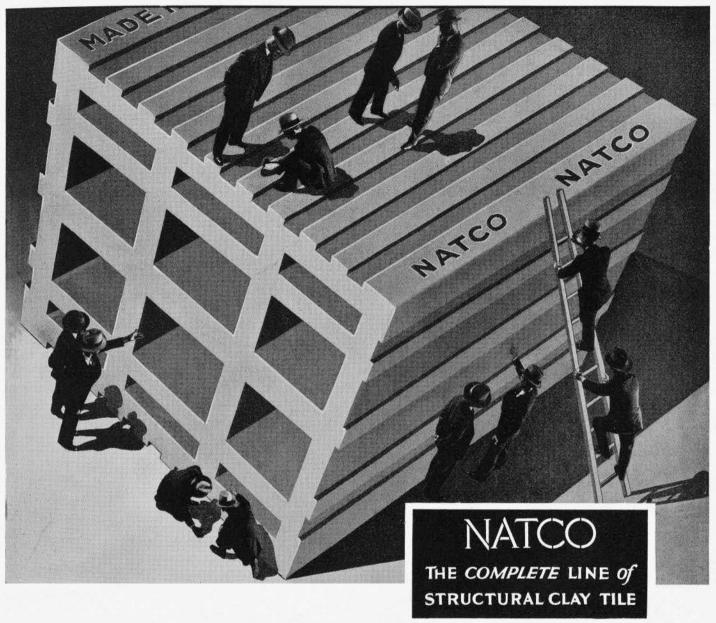
### ${\tt WORK\ ILLUSTRATED-ARCHITECTURE}$

Acacia Grove, Starrs Point, N.S. Sept. pp. 208-211 Awards in R.A.I.C. Competitions. Mar. pp. 59-64	Bank of Nova Scotia Building, Halifax, John M. Lyle, Architect, Andrew R. Cobb, Associate Jan. pp. 2, 5-13; Mar. pp. 66, 69
Bank of Montreal Building, Ottawa Baratt and Blackader	Belgian Congo Building, Henry Lacoste, Architect
Sent nn 200-207. Det nn 226-229 Dec n 258	Brockville Collegiate Institute, Brockville, Ont.,
Bank of Nova Scotia, Calgary, Window Grille, John M. Lyle, Architect Mar. p. 65	G. Roper Gouinlock, Architect Dec. p. 266

### INDEX (1932) Continued

Month and Page	Month and Page
Bronze Urns, Gardens of Versailles Apr. pp. 107, 108; July pp. 173, 174	Residence of Arthur F. White, Esq., Toronto, Fireplace in Entrance Hall, Mathers and Haldenby, ArchitectsJune p. 136
Burrard Bridge, Vancouver, B.C., Sharp and Thompson, ArchitectsDec. p. 269	Residence of M. J. Mitchell, Esq., Sherbrooke, P.Q., Dining Room,
Canadian Bank of Commerce, Toronto, Memorial Screen in Banking Room, Darling and Pearson, Architects	Perry and Luke, Architects
Church of St. Andrew and St. Paul, Montreal, H. L. Fetherstonhaugh, Architect	Perry and Luke, Architects
Church of Ste. Jeanne Françoise de Chantal, Quebec	P. Roy Wilson, Architect
Decorative Panel in Church, Munich, Germany	Perry and Luke, Architects
Dominion Bank, Yonge and Gerrard Branch, Toronto, Bronze Entrance Doors, John M. Lyle, Architect	Residence of H. C. MacDougall, Esq., Cartierville, P.Q., A. T. Galt Durnford, Architect
D D 1 4 D 1D 1 T C. I	Residence of T. M. Hutchison, Esq., Westmount, P.Q., David R. Brown, Architect, Fred G. Robb, Associate
John M. Lyle, Architect	Residence of Dr. D. King Smith, Toronto, Entrance Detail, John M. Lyle, Architect
Hutchison and Wood, Architects	Residence in Forest Hill Village, Entrance Detail, Wm. L. Somerville, Architect
Ecole Cherrier, Montreal, Eugene Larose, Architect	Residence of Forsey P. Page, Esq., Toronto, Entrance Detail, Forsey Page and Steele, Architects
Sproatt and Rolph, Architects	Richardson, John, Library, Sandwich, Ont.,
English Road and Inn Signs	Cameron and Ralston, Architects
"Great Fosters," Surrey, The Terrace	R.I.B.A. New Premises Competition, Winning Design June pp. 144-146  Royal Ontario Museum, Toronto, Chapman & Oxley, Architects Dec. p. 267
"Marshcourt," Hampshire, Entrance CourtOct. p. 221	
Masonie Temple, Montreal, J. S. Archibald, Architect	St. Joseph Novitiate, St. Genevieve de Pierre Fonds, P.Q., Lucient Parent, Architect
National Research Building, Ottawa, Sproatt and Rolph, ArchitectsDec. p. 265	St. Luke Hospital, Montreal, Raoul Gariepy, ArchitectFeb. p. 36
Ottawa Mausoleum, Ottawa, Wm. Ralston, Architect	St. Matthews Presbyterian Church, Montreal, Maxwell and Pitts, Architects
"Parkwood," Oshawa, Ont., The Terrace Oct. p. 223	St. Michael's General Hospital, Lethbridge, Alta., H. Wm. Meech, Architect, Benzie and Bow, Associates Feb. pp. 38, 39
Residence of N. A. Timmins, Esq., Westmount, P.Q., Detail in Living Room, John S. Archibald, Architect	St. Paul's Hospital, Surgical Wing Addition, Vancouver, Floor Plans, Gardiner and Mercer, Architects
Residence of H. C. Walker, Esq., Marani, Lawson and Paisley, Architects	"Shadowbrooke," Toronto, The South Garden
Residence of Mrs. A. B. Colville, St. Henri De Mascouche, P.Q. Barott and Blackader, Architects	Shakespeare Memorial Theatre, Stratford-on-Avon, Scott, Chesterton and Shepherd, ArchitectsJuly pp. 167-169
Residence, Shediac, N.B., A. T. G. Durnford, Architect	Small Downtown Garden, Hamilton, OntOct. p. 222
Residence of C. W. Webster, Esq., Westmount, P.Q., H. L. Fetherstonhaugh, Architect. Apr. p. 98	State Capitol at Lincoln, Nebraska, Bertram Grosvenor Goodhue, Architect
Residence, Toronto, MacKenzie Waters, Architect	Swimming Pool, Seigniory Club, Lucerne-in-Quebec, Lawson and Little, Architects
Residence of Mrs. J. S. Burnside, Toronto, Henry J. Burden and G. Roper Gouinlock, Architects	
Residence of Ernest Cormier, Esq., Montreal, Ernest Cormier, Architect	U.S. Legation Bldg., Ottawa, Cass Gilbert, Architect
Residence of J. Beverley Nalle, Esq., Jacksonville, Florida,	Georg Staehelin, Architects
Forsey Page and Steele, Architects	Uplanus, 10tonto
Mathers and Haldenby, Architects	Vancouver Art Gallery, Sharp and Thompson, Architects
John M. Lyle, Architect	Whitney Hall, Toronto, Mathers & Haldenby, ArchitectsMay pp. 114-120
PAINTINGS, SKETCH	ES, ETCHINGS, ETC.
Cameron, Professor Irving H., by E. Wyly Grier	Portrait Study, by Frederick H. Varley
Chuhaldin, by Chas, F. Comfort	Rushing River, by Walter J. Phillips
Herring Cove, Nova Scotia, by Mrs. Florence M. Pipon	Sailors Sand Bar, by J. W. G. MacDonald
Noon, by F. S. Coburn. Jan. p. 15	Where the Red Gods Live, by Arthur Heming
On The Ottawa, by L. A. C. Panton Oct. p. 230	Wren, Sir Christopher, House of, by Richard JackJan. p. 15
SCULP	TURE
Commerce in the 16th Century, Carl Milles, SculptorAug. p. 192	Glazed Terra-Cotta Panels Over Entrance Gates of Apartment Houses in Vienna,
Fragments of the James Mitchell Memorial Fountain, Sherbrooke, P.Q.	Austria, Ferdinand Opitz, Sculptor
G. W. Hill, Sculptor	Study for Apollo, Antoine Bourdelle, Sculptor

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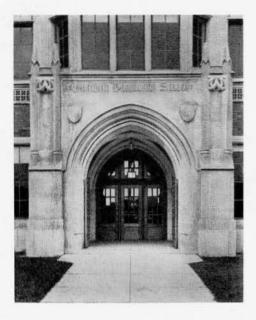
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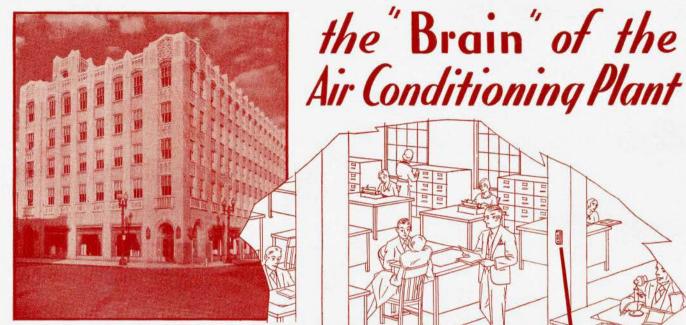
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