## The Journal

## Royal Architectural Institute of Canada

Volume 2	TORONTO, MARCH-APRIL, 1925										Nu	Number 2		
		C	ONT	ENT	S									
												P	AGE	
Desc							•	-	0				43	
By-Laws of the Royal Architectural Institute of Canada								• •		(*)	44			
THE BUILDINGS OF McGILL UNIVERSITY, by Prof. Ramsay Traquair, M.A., F.R.I.B.A.									3		105	45		
Some Impressions of Canada—No. IV. St. Anne de Beaupre, by Prof. C. H. Reilly										+	1	+-	65	
BRITISH DRAMA LEAG	UE-DESIGN FOR M	VATIO	ONAL '	Тнеат	RE	*	*	*		*		4	66	
University Education	IN ARCHITECTURE	by	Prof.	Percy	Ε. Λ	Tobbs,	M.A.,	F.R.	I.B.A.	, R.C	.A.	3.	68	
STRUCTURAL SERVICE													72	
Annual Meeting of		URAL	INST	ITUTE	of (	CANAD	À						74	
ACTIVITIES OF PROVING					1								75	
NATIONAL COMMEMORA				en	ů.	-						×	XVI	
								•				X	XVII	
Manufacturers' Pub								3	141		4	XX	VII	
		P1.	re Illi	ustrati.	738									
IN NOTRE DAME STRE	OTRE DAME STREET, THREE RIVERS, P.Q.							4	Frontispiece					
THE REDPATH MUSEUM, McGILL UNIVERSITY, MONTREAL, 1880.								-1-					57	
										,		- ^	59	
									(5)		H			
ENTRANCE HALL, McGILL UNIVERSITY, MONTREAL, 1905												61		
EXTENSION TO KEDPAT	TH LIBRARY, McGI	LL U	NIVER	RSITY,	Mon	TREAL	, 192	3	•		14	-	63	

PUBLISHED EVERY ALTERNATE MONTH BY THE

## Royal Architectural Institute of Canada

#### EDITORIAL BOARD

Chairman—J. P. HYNES (Ontario Association of Architects)
A. BEAUGRAND-CHAMPAGNE (Province of Quebec Association of Architects)
FRANK P. MARTIN (Saskatchewan Association of Architects)
L. H. JORDAN (Manitoba Association of Architects)
W. G. BLAKEY (Alberta Association of Architects)
A. L. MERCER (Architectural Institute of British Columbia)

PUBLICATION OFFICE
160 Richmond Street West, Toronto

EDITORIAL OFFICE
73 King Street West, Toronto

Two Dollars Per Year-Fifty Cents Per Copy

# Glass Gardens



## Our Blanket Greenhouse Contract

IT COVERS everything from turning the first shovel of dirt, to turning on the heat in the full dirt, to turning on the heat in the fully equipped house.

It solves the labor problem for you and your client.

If preferred, we will erect only the greenhouse superstruc-

Or furnish complete materials and equipment, and you arrange for the erecting.

The house shown is 25 x 50 with connecting house 8' 6" x 16' 8".

Prompt shipments.

Quick erections.

### limited ord & Burnham 6. of Canada

**Builders of Greenhouses and Conservatories** 

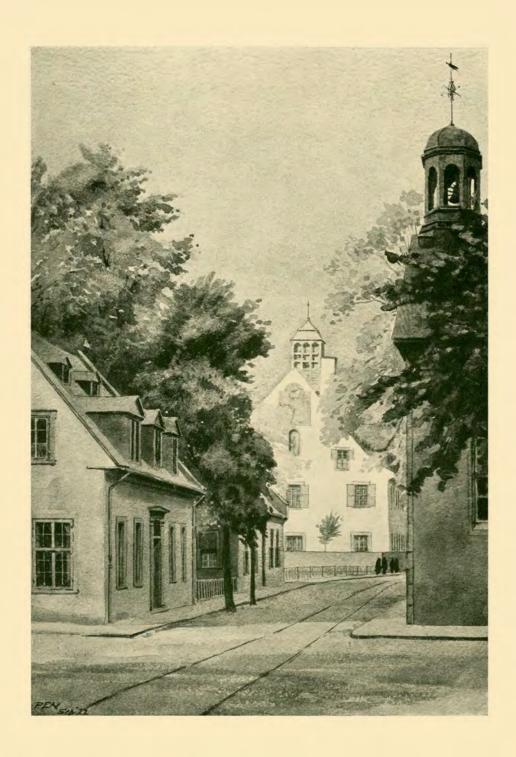
CHIEF SALES OFFICE:

Harbor Commission Building,

Toronto

Montreal-124 Stanley Street

Factory: St. Catharines, Ontario



IN NOTRE DAME STREET, THREE RIVERS, P. Q.

From Water Colour Sketch By Percy E. Nobbs, M.A., R.C.A., F.R.I.B.A., R.A.I.C.

## The Iournal Royal Architectural Institute of Canada

Volume 2

TORONTO, MARCH-APRIL, 1925

Number 2

### Editorial

#### OUR FRONTISPIECE

THE frontispiece in this issue, showing Notre Dame Street in Three Rivers, Que., is the second we have published of Mr. Percy E. Nobbs' beautiful water color restorations of old buildings in Quebec. Our only regret is that we cannot present this in its original colors.

#### FEATURE ARTICLE

In the feature article of this issue Professor Ramsay Traquair describes the buildings of the Mc-Gill University. This is the second article in our series describing the Universities of Canada. The first, in our last issue, on the University of Toronto, has met with a most gratifying reception, and further articles on this subject will be published as the matter for them can be collected. When these are completed they will prove of value to architects in comparing the different types of buildings as well as their grouping.

#### MR. SOMERVILLE'S DESIGN FOR A NATIONAL THEATRE

In this issue appears Mr. W. M. Somerville's design which received the first award in the competition for a National Theatre in London, England. This competition was one of the most noted in recent years, both on account of the subject and the number of noted architects who competed. It might be well to point out that the photographs received from England are rather disappointing and do not do justice to Mr. Somerville's very excellent drawings. We feel very proud of the fact that the award for the winning design was given to one of our members. It should augur well for his future. May we express the hope that the building of the theatre will not be long delayed.

#### BY-LAWS OF THE INSTITUTE

In this issue will be found the by-laws of the Royal Architectural Institute of Canada as amended at the Seventeenth General Annual Assembly which was held in Toronto in September of 1924. The by-laws now call for the Annual Meeting of the Institute to take place in the third week of February in order to bring the Institute in line with the Annual Meetings of the Provincial Associations. The first Annual Meeting under the new by-laws was held in Montreal on February 20th, of which a brief report is given in this issue. A complete list of the members of the Institute will be included in the next issue of the Journal.

#### CORRESPONDENCE

It had long been a regret in the profession that there was no means of communicating any ideas which a member might wish to broadcast among his fellow practitioners. The JOURNAL is here to meet this need, and it is sincerely hoped that it will be frequently used by those wishing to express

themselves. Most members have something to say when we meet them and often say it emphatically. We would like to get their personal expressions over to our membership at large. The letter written by Mr. A. Frank Wickson, which is printed in this issue, deals with a subject that is of the utmost importance to both the young and older members of the profession. We are inclined to agree with Mr. Wickson when he suggests that the best way for a young architect to build up his practice is "by following the precedent of those architects who have placed themselves in an honorable position in the community by working up a good practice from modest beginnings." We extend an invitation to the younger members of our profession, as well as others, to take advantage of the Correspondence Columns to air their opinions on this subject.

#### THE ALLIED ARTS

Suggestions have been received pertaining to the publishing of articles in the Journal dealing with the "allied arts". Realizing the advisability of broadening the scope of the Journal, we are arranging for a series of articles in future issues to meet this suggestion. The first of these articles will be published in the May-June issue of the Journal and will deal with the decorations of St. Ann's Church, Toronto, by Mr. J. E. H. MacDonald, A.R.C.A., O.S.A., and a corps of enthusiastic assistants under the architectural supervision of Mr. William Rae. There will also be an article on wrought iron work as executed by Mr. Paul Beau.

#### PROFESSIONAL PRACTICE

It is one of the difficulties of our practice that it does not bring us into personal contact with each other, especially when contrasting our situation in this regard with the lawyers and doctors. It is therefore necessary to take what means we can to get more and more in touch with each other and develop that professional esprit de corps which is so necessary if we are to attain a status commensurate with the other professions and thus avoid the constant humiliation of boards composed of estimable citizens offering propositions and competitions which are invariably of the "getting all they can for nothing" type.

Too often architects who take part in these "competitions" excuse themselves to their confréres by saying "well I thought so many others were doing it that I did not see how I could get a chance unless I did the same." Can we not get together so that we can absolutely refuse to be in any way connected with these propositions which disgrace the profession? We must not be made to appear before the public as being on the same basis as race track gambling, where "something for nothing" is the practice. Let us make it clear that such methods

are not acceptable in our profession.

## By-Laws of the Royal Architectural Institute of Canada

(Adopted 5th September, 1924)

#### GOVERNMENT

1. The administration of the Royal Architectural Institute of Canada is vested in the Council. (See Charter, Section 6.)

#### MEMBERSHIP

2. There are two classes of members: (a) those who are members in good standing in any one of the federated provincial associations of architects; and (b) those who are not on the roll of membership of any one of the federated provincial associations of architects.

#### OFFICERS

3. A President, two Vice-Presidents, an Honorary Secretary and an Honorary Treasurer shall be elected at the first meeting of the Council after the Annual Meeting.

#### EXECUTIVE COMMITTEE

4. The President, the Honorary Secretary, the Honorary Treasurer and those members of the Council residing in the same Province as the President then in office shall constitute the Executive Committee. The Executive Committee shall have power to administer the affairs of the Royal Institute as directed by the Council, the quorum of the meetings of the Executive Committee to consist of three (3) members present. The Executive Committee shall meet at the call of the President as often as the business of the Royal Institute may require and shall report its proceedings to the Council. The President of the Royal Institute is the Chairman of the Executive Committee.

#### MANAGEMENT

5. (a) The Council shall meet at the call of the President, one (1) month's notice to be given to all members by letter. Five (5) members present shall constitute a quorum;

(b) Proxies properly certified by the Secretary of any Provincial association may be given their representative attending any meeting of the Council to cast a number of votes equal to the legal representation of their Association as provided for in the Charter:

(c) At all meetings, the President, or in his absence, one of the Vice-Presidents, or in their absence, one of the members of the Council shall preside.

(d) The Honorary Secretary shall keep an accurate record of all the transactions of the Council, conduct the correspondence, give notice of all meetings, supervise printing and under the direction of the Council edit the transactions of the Royal Institute:

(e) The Honorary Treasurer shall have charge of all the funds of the Royal Institute, shall receive all moneys and pay all accounts approved by the Honorary Secretary. With the approval of the Council he shall deposit and invest the funds of the Royal Institute in its name. All accounts exceeding ten dollars (\$10.00) shall be paid by cheques signed by the Honorary Treasurer. The Honorary Treasurer shall present a report of the finances of the Royal Institute verified by the Auditor, at the Annual Meeting of the Royal Institute;

(f) The Honorary Treasurer is authorized to pay the travelling expenses of the President, the Honorary Secretary and of the Honorary Treasurer attending meetings of the Council, of the Executive Committee and General Meetings of the Royal Institute;

(g) A Chartered Accountant shall be appointed for the ensuing year at the Annual Meeting of the Royal Institute.

#### ANNUAL CONTRIBUTION

6. The annual contribution from the Provincial associations for the ensuing year shall be fixed by the Council at its first meeting following immediately the Annual General Meeting of the Royal Institute, and shall be payable on or before the first day of

August each year.

The annual contribution of those members who are not members of any of the federated Provincial associations of architects shall be twenty-five dollars (\$25.00) payable on or before the first day of August each year. Any member who does not belong to one of the federated provincial associations of architects and who fails to pay his annual contribution, will cease to be a member of the Royal Institute after having been notified by registered letter from the Honorary Secretary.

#### ANNUAL MEETINGS

7. (a) The Annual Meeting of the Royal Institute shall be held in the third week of February, at such place as the members of the Council may select. The Council shall lay before this meeting a report on the standing of the Royal Institute; a statement by the Honorary Treasurer verified by the Auditor of the receipts and disbursements during the year ended on the 30th December preceding. Ten (10) members present shall constitute a quorum;

(b) The notice calling this meeting shall be sent to all members at least one (1) month before the

date fixed by the Council;

(c) The business of the Annual Meeting shall be transacted in the following order:

 Reading of the minutes of the last Annual Meeting and special meetings.

ii .-- Business arising out of the minutes.

iii.-Reports.

iv.—Amendments to By-Laws. y.—Appointing an Auditor.

vi.—New business.

#### SPECIAL MEETINGS

8. Special meetings of the Royal Institute may be held at such time and in such places as the Council may deem wise, notice of such meetings and the business to be transacted at same, to be sent to all members at least one (1) month before the date fixed by the Council.

#### AMENDMENT TO BY-LAWS

9. New by-laws and amendments or modifications of existing by-laws can only be made on the initiative of the Council of the Royal Institute or of a Provincial association of architects duly authorized by resolution of its Council. Notification of the proposed changes shall be sent to the Honorary Secretary of the Royal Institute at least two (2) months before the date of the Annual Meeting. The Honorary Secretary shall send to all Provincial associations and to all members a copy of the proposed change or changes with the notice calling the meeting. Two-thirds (2/3) of the votes cast must be in favor of the change before it can become effective.



McGILL UNIVERSITY, MONTREAL, IN 1852, FROM THE MOUNTAIN

## The Building of McGill University

By PROF. RAMSAY TRAQUAIR, M. A. (HON.) F. R. I. B. A.

N 1813 the Honourable James McGill died, leaving to the Royal Institution for the Advancement of Learning his Burnside estate of forty-six acres and the sum of £10,000. Attached to the bequest were three important conditions: that a university should be established within ten years, that the buildings should be "upon the said last-mentioned tract or parcel of land" and that one of the colleges in the new university should be called "McGill College."

Montreal was at this time a city of only some twelve to fifteen thousand inhabitants with but small trade or business. The West was not yet opened up and the flood of grain, which has created the present great port, had not commenced to flow. It was a small place and apparently not a very rich one. Yet the desirability of providing an education for its English citizens had been considered for many years and James McGill's bequest was the fulfilment of much previous thought and work.

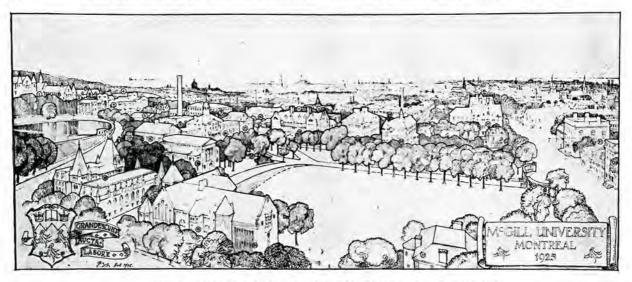
The estate of Burnside extended from the site of the present Arts building on the first slopes of the mountain to Dorchester Street, then only a country road, whilst the present Sherbrooke Street was

From the beginning serious obstacles were met with. The Royal Institution for the Advancement of Learning, despite its title and its charter, was hardly more than a name; it had no trustees and no money. The heirs of James McGill were in possession of the estate, and declined to give it up. The lawsuits and disputes which threatened to wreck the donor's intention are fully described in Professor Macmillan's history\*, and more than once it must have seemed to those, who were working on behalf of the infant University, that their efforts would fail and that the bequest would lapse.

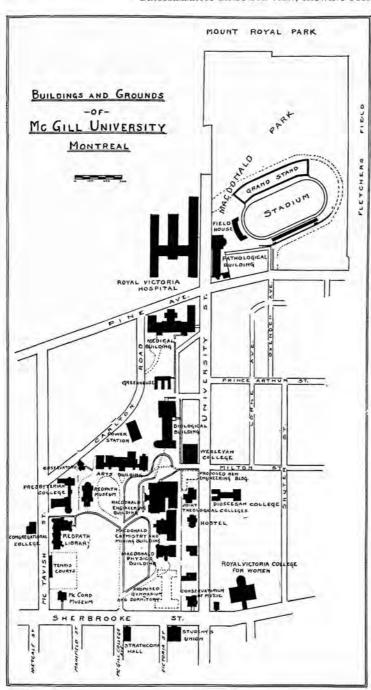
At last, in 1821, a charter was granted creating the University. In 1824 a principal and four pro-

little more than a path across the fields. Burnside House, McGill's residence, stood on the present street of that name, a little west of McGill College Avenue. It served for many years as the principal's residence and was pulled down in 1860, when the land was sold for building. The estate lay quite outside the city, a point of importance in considering the difficulties which arose later in establishing a college upon it. Especially in winter, when the snow lay deep upon the unmade roads, it must have been difficult of access from the city.

<sup>\* &</sup>quot;McGill and Its Story." Cyrus Macmillan. To which acknowledgement must be made for information in this article.



DIAGRAMMATIC BIRDS-EYE VIEW, SHOWING POSITION OF THE BUILDINGS



- 1. ROYAL VICTORIA HOSPITAL
- 2. PATHOLOGICAL BUILDING
- 3. STRATHCONA MEDICAL BUILDING
- 4. MOLSON STADIUM
- 5. FACULTY CLUB
- 6. GREENHOUSES AND BOTANNICAL LABORATORY
- 7. OLD MEDICAL BUILDING
- 8. POWER HOUSE
- 9. BIOLOGICAL BUILDING
- 10. WESLYAN COLLEGE
- 11. WORKMAN BUILDING
- 12. DIOCESAN COLLEGE
- 13. EAST WING OF ARTS BUILDING
- 14. CENTRE BLOCK, ARTS BUILDING
- 15. MOLSON HALL
- 16. REDPATH MUSEUM
- 17. OBSERVATORY
- 18. PRESBYTERIAN COLLEGE
- 19. REDPATH LIBRARY
- 20. ADDITIONAL STACKS TO REDPATH LIBRARY
- 21. McGILL'S TOMB
- 22. MACDONALD ENGINEERING BUILDING
- 23. MACDONALD CHEMISTRY AND MINING BUILDING
- 24. MACDONALD PHYSICS BUILDING
- 25. ROYAL VICTORIA COLLEGE
- 26. CONSERVATORY OF MUSIC
- 27. THE UNION
- 28. STRATHCONA HALL
- 29. HIGH SCHOOL OF MONTREAL
- 30. RODDICK MEMORIAL GATES
- 31. McCORD NATIONAL MUSEUM



THE ARTS BUILDING, McGILL UNIVERSITY, MONTREAL



THE REDPATH LIBRARY, McGILL UNIVERSITY, MONTREAL, 1891  $\textit{Taylor} \ \textit{Gordon Architects}.$ 



THE MacDONALD PHYSICS BUILDING, McGILL UNIVERSITY, MONTREAL, 1890

Taylor, Hogle and Davis, Architects

fessors, with no duties, were appointed. On June 24th, 1829, possession was obtained of the estate and McGill University was formally opened in Burnside House.

Even this was but a phantom university. There were no college buildings, no system of general education and no endowment, for the legacy was not paid over until 1837. It was evident that actual teaching should be conducted by the University if full legal rights were to be obtained. Accordingly, immediately after the formal opening of the University, the Montreal Medical Association was incorporated into McGill University as its Faculty of Medicine. This association had been established in 1824 by the staff of the Montreal General Hospital, but had been unable to obtain incorporation or to confer degrees. These privileges it now obtained, its teachers were named as the first professors and in 1833 the first degree of McGill University was conferred upon a medical graduate.

In 1836 the first definite proposals



THE MacDONALD CHEMISTRY BUILDING, McGILL UNIVERSITY, 1896

Taylor, Hogle and Davis, Architects.





THE MACDONALD ENGINEERING BUILDING, McGILL UNIVERSITY, MONTREAL, 1907

Percy E. Nobbs, Architect.

for buildings were put forward. These were to accommodate forty students and two professors at a cost of between £4,000 and £5,000. But the acting principal, Dr. Bethune, had larger ideas and in 1838 submitted proposals for what he considered necessary. These included accommodation for one hundred students, each of whom was to have a bedroom, with a sitting-room shared between two, residence for the principal, the vice-principal and four professors, a college hall for lectures and meetings, a library, a chapel and a stewards' house.

These proposals were rejected as too ambitious by the Royal Institution, who again announced their inability to pay more than some £5,000, but eventually in August, 1838, a competition for architects was announced for the buildings and the layout of the grounds. The accommodation required fol-Jowed closely Dr. Bethune's proposals, but a note was added that only a portion of the buildings would be built for the present at a cost of £5,000. The residential part was to be added later and accommodation was to be provided for one hundred nonresidential students. "The sum of fifty pounds currency will be paid for the plan which shall be accepted by the board as the best plan; and twentyfive pounds for the plan which shall be adjudged as second best." Apparently the plans were to be bought outright at these prices.

Plans were submitted, two of which will be found reproduced in Professor Macmillan's History, but it is evident that there was a hopeless cleavage between the desires of the Principal and the finances at the disposal of the Institute. The plans were all rejected as too expensive and nothing seems to have come of the competition.

Yet the Board considered it urgently necessary that buildings should be erected on the estate and teaching commenced in them. Accordingly in 1840 plans were approved and by 1843 the east wing and centre block of the present Arts building had been finished. The original plans have not survived, but it seems probable that a west wing and connecting corridors were contemplated from the beginning. But even for the part built the cost largely exceeded the estimates and it was found necessary to offer for sale as building lots that part of the estate lying below Sherbrooke Street and including the old Mc-Gill House. This action has often been regretted, yet it is difficult to see what other steps could have been taken at the time to provide the necessary funds.

So, in 1843, the buildings were opened for teaching with twenty students.

Although the competition had been addressed to architects, yet it seems probable that no architect was formally employed upon the first McGill build-



THE ROYAL VICTORIA COLLEGE, McGILL UNIVERSITY, 1899

Bruce Price, Architect.

ings. It was indeed the common practice of the time for contractors to prepare the designs even for the elaborate dwelling houses which were now springing up in the western suburbs of the city. Their design and detail show clearly the hands of English draughtsmen, trained in the contemporary Greek revival school, but the names of the designers are lost. The McGill buildings are of a refined late Georgian type, with Greek influence, and are probably from the hand of some capable contractors' architect.

The centre building is surmounted by a very graceful octagonal cupola, the oldest landmark of McGill. It is in three storeys, the lowest rusticated, with a centre bay of two pilasters supporting a low pediment. The accent of the last phases of English traditional classic is quite unmistakable. The present wooden porch of four Greek doric columns was added between 1860 and 1875. In 1853 a sum of £75 was voted by the governors for the erection of a porch, but in 1860 it had not yet been built. Photographs of 1876 show it crowned by a low balustrade and balcony of much more pleasing appearance than the present flat pediment.

The east wing is treated with pilasters and a strong roof cornice. It was originally covered by a plain hipped roof, and the present large semi-circular dormer windows date from 1888, when the upper storey was converted into "a large and commodious drawing-room" for the young Faculty of Applied Science.

The two buildings stood unconnected until 1861, when Mr. William Molson built the hall which still bears his name and the connecting corridors "according to the original design", as is expressly stated in the letter of gift.

But before this first donation the University had seventeen stormy and difficult years to pass through.

As has already been mentioned the buildings were still too far from the city for a non-residential college. To add to the tale of misfortune, the city in 1852 began blasting for the reservoir behind the property and large stones fell through the roof of the main building, already in poor repair. So for the time it had to be abandoned; the Principal and the secretary, or one of the professors, lived in the east wing, eking out their salaries by a kitchen garden, and classes were conducted in Burnside Hall,

the building now occupied by the Fraser Institute on Dorchester Street. By 1857 the centre block had evidently been repaired, for it was now occupied by the Professor of French, who announces in the Prospectus that he will take undergraduates and High School pupils as boarders at £50 a year, and will supervise their studies, conduct and religious interests.

By 1860, however, the number of students had increased to over one hundred and the classes were at last established in the college buildings; the main avenue was laid out and Principal Dawson's tree planting was well under way. The beauty of McGill campus to-day owes much to the care with which Dr. Dawson selected every tree and arranged its placing.

The first desperate struggle was now over: McGill commenced to grow. In 1861-2 the western wing and the connecting corridors were added, by Mr. William Molson, containing a Convocation Hall and library, with, in the corridors, a museum, chemical classrooms and laboratory. An extra storey was added to these corridors at a later date, probably about 1880, much to the detriment of the building.

In 1863 the college observatory was established, and 1872 the old Medical building was erected to accommodate the Medical Faculty, who now moved from their city quarters in Coté Street to the University grounds. There could be no clearer proof than this that the city was growing nearer to McGill.



OSLER MEMORIAL BUILDING McGILL UNIVERSITY, 1923

Nobbs and Hyde, Architects.



McGILL UNIVERSITY UNION, 1905.

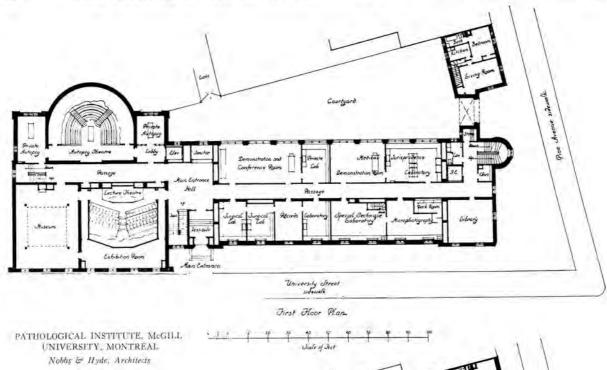
Percy E. Nobbs, Architect.

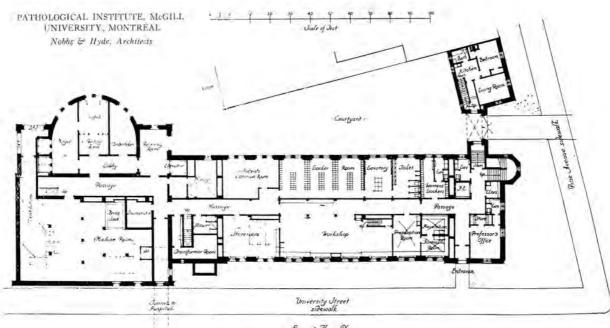
Hutchinson and Wood, Associate Architects.

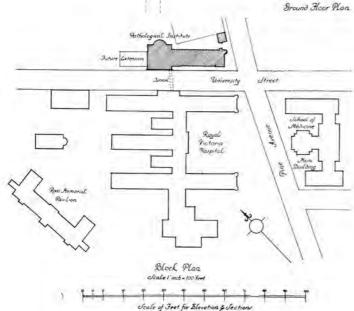
The building was of a simple classic character, harmonizing well with the older buildings. Additions were made to it in 1885, 1894 and 1900, and the front part was burned in 1907. Of the old building only the rear, built in 1894 by Messrs. Taylor and Gordon, now remains as part of the Biological building erected in 1921 from designs by Messrs. Ross and Macdonald. A spirit of over-rigid economy seems to have dogged the progress of these buildings from the first addition.

The steady growth of the University in another direction was shown by the opening of the Peter Redpath Museum in 1880, to hold the natural history and geological collections. It was designed by Messrs. Hutchison and Steel in a somewhat romantic version of Greek Revival and seems to have aroused considerable interest at the time, for it was illustrated in Ferguson's History of Modern Architure. The general mass and proportion are fine, even if the two columns of the front are a little garish and the entablature a little overpowering and out of scale. A plan, now in Ottawa, shows a similar building symmetrically placed on the opposite side of the campus, but this never seems to have been more than a suggestion. The Peter Redpath Museum is the first building whose architects are

Ten years later, in 1890-91, Mr. Redpath gave the present Library building, of which the archi-







tects were Messrs. Taylor, Hogle and Davis. This is quite a good example of the "Richardsonian Romanesque", of which the prototype was the well-known Trinity Church at Boston, and of which Mr. Price's C.P.R. offices on Windsor Street are a well-known example. It is a vigorous design of a type which to-day is purely historical, for the effort failed to create a national American style by a reconstruction of Romanesque and Byzantine forms. The stack space of the library has been added to twice since it was originally built. The latest addition, by Messrs. Nobbs and Hyde in 1921, is a successful variation from the original theme.

The year 1890 saw also the beginning

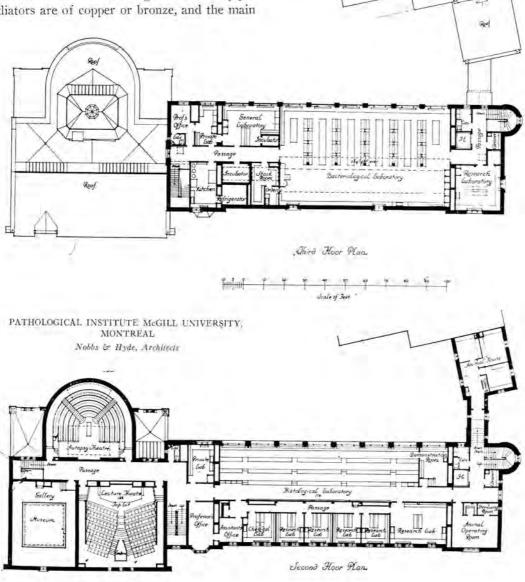
of the Thomas Workman building for Mechanical Engineering, the Macdonald Engineering building, and the Macdonald Physics building.

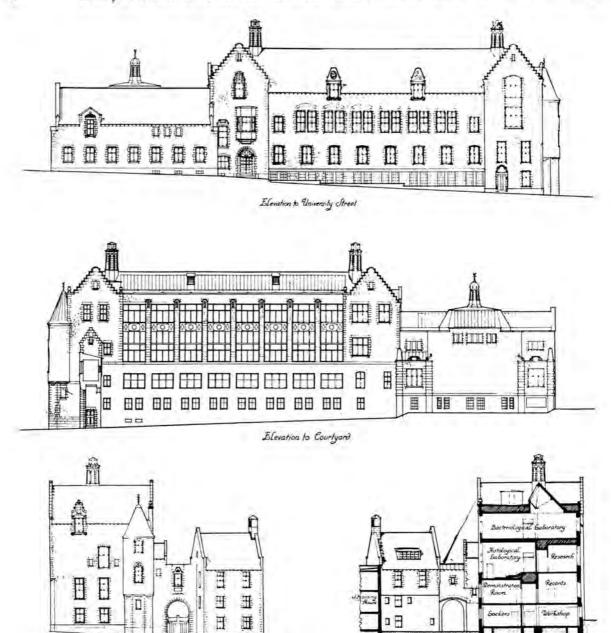
In the donations for the year 1886 is an item of \$2,000 given by Mr. W. C. Macdonald, one of the Governors, for fittings and apparatus in the new laboratory. This was the first of those great donations by Sir William Macdonald which were to raise McGill to the status of a first-class scientific school, and which amounted to over twelve million dollars. They include the old and the new Engineering buildings, the Chemistry building, the Physics building, the Agricultural College at St. Anne's, the McGill Union, a tract of land upon the summit of Westmount Mountain, and the Macdonald Park, a tract of land to the north of the campus on which stands the Stadium and which provides space for future extension.

The Physics building, by Messrs. Taylor, Hogle and Davis, follows the type used by the same architects in the Redpath Library. In order to avoid magnetic interference no iron or steel was used in the construction of this building. Even the pipes and radiators are of copper or bronze, and the main

construction is of very heavy brick arching with wood beams. I am told by the present Director of the building, Dr. Eve, that the rule against iron has been slightly relaxed of recent years, apparently without bad effects. It was designed for 250 students, engaged mainly in research, and it was here that Sir Ernest Rutherford's investigations into radio-activity were made. At present, owing to the growth of Physics as a subject of general education and to the resulting changes in curriculum, the building is called upon to accommodate some 800 students, mainly elementary. Somewhat the same change has overtaken the Chemistry building. This is a good illustration of the change in ideals of education which has taken place in the last twenty-five or thirty years, and of the extreme difficulty of designing buildings to meet such conditions.

The Chemistry building, by the Architects of the Library and Physics buildings, was commenced in 1896. It is of a more Italian type and seems to

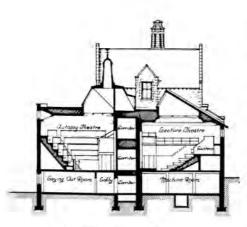




Elevation to Pine Avenue

PATHOLOGICAL INSTITUTE, McGILL UNIVERSITY, MONTREAL

Nobbs and Hyde, Architects.



Grandection through Theatre Wing

mark the close of the Richardsonian phase in McGill building.

So, by 1899, the campus had assumed very much the appearance which it has to-day. The buildings had grown up naturally about the square central space without too much formality or too exact a symmetry. The campus owes much of its beauty to-day to Principal Dawson's tree planting and to the fine grey color of the Montreal limestone which has been used in all the buildings. This has unified the otherwise individual buildings in a very satisfactory way, and it is to be hoped that no other material will ever be admitted to the grounds.

In 1899 Lord Strathcona, who had for long interested himself in the education of women, built the Royal Victoria College, from the designs of Mr. Bruce Price. The building stands on Sherbrooke Street just to the west of the



ROYAL VICTORIA HOSPITAL, MONTREAL, 1887 Saxon Snell, Architect.

campus and provides both residence and classrooms for its students. The design, with its strongly pronounced gables and shallow bay windows, shows clearly the influence of the contemporary English work of Mr. Norman Shaw.

The same architectural influence may be seen in the McGill Union, by Messrs. P. E. Nobbs, Hutchison and Wood, which was given in 1905 by Sir William Macdonald. This building provides very

fully for the social activities of the students.

The year 1906 saw the foundation of Macdonald College at St. Anne de Bellevue, some twenty miles south of Montreal at the extremity of the island, for the training of agricultural students and elementary school teachers. This group of buildings, the largest single gift of Sir William Macdonald, was designed by Messrs. Hutchison, Wood and Miller. The college forms the Agricultural Faculty of the University.

In 1907 McGill suffered the loss by fire of the old Medical building and of the Macdonald Engineering building, with its entire equipment. The latter was at once replaced by the present building from the designs of Mr. P. E. Nobbs. Here we can see, even more distinctly than in the last two buildings mentioned, the influence of Norman Shaw. So from Mr. Price's Royal Victoria College in 1899 the architecture of McGill has shown a very definite trend towards national and English tradition, adapted to Canadian conditions. We may regard this as a return from the American

> influences, shown in the Library and the Physics building, to the Georgian type of the first buildings.

In the same year the new Medical buildings, the gift of Lord Strathcona, were designed by Messrs. Brown and Vallance. They were placed at the uppermost limit of the University grounds so as to be near the Royal Victoria Hospital. Architecturally they are a nearer approach to "Collegiate Gothic" than any other McGill buildings excepting the allied Theological Colleges. The accommodation is for classes of 120 students each for five years, a number which has been considerably exceeded.



THE PATHOLOGICAL INSTITUTE, McGILL UNIVERSITY, 1923

Nobbs and Hyde, Architects.

The Royal Victoria Hospital is not strictly a University building, but it has been from the beginning closely connected with the Medical Faculty and forms a part of the architectural group constituting the University. It was built from donations by Lord Strathcona and Lord Mountstephen by Mr. Saxon Snell in 1887 to 1893. The building was modelled upon Edinburgh Infirmary and shows in its external appearance the very Scottish sentiment of the Medical Faculty of that time. In 1923 the Pathological building, in a similar type, by Messrs. Nobbs and Hyde, was built upon the adjoining McGill property. It is interesting to compare the variation in treatment of a similar theme between 1887 and 1923. In the same year, and also by Messrs. Nobbs and Hyde, the Osler Memorial Library was fitted up in the Medical building in memory of Mc-Gill's most famous medical graduate.

The buildings now demanded some unified system of lighting, heating and ventilation, as the instructional power plant of the Engineering building was no longer able to cope with the increasing requirements. The Power building was accordingly erected in 1910 by Mr. P. E. Nobbs on a central site to the rear of the Arts building.

The Stadium in Macdonald Park, in memory of Captain Percival Molson, was opened in 1920. Cut into the hillside overlooking the city and the river, in the manner of a classic Greek stadium, it is possibly the most beautifully placed athletic field in America.

The latest gift, of entrance gates in memory of Sir Thomas Roddick, has just been completed from designs by Mr. Grattan Thompson. It will eventually form part of a Sherbrooke Street front, which a future generation may see completed.

There is still much prospective building. Even if the number of students should not increase in the next few years (and there is much to be said for a policy of limitation), yet McGill needs a Convocation Hall, a Gymnasium and Drill Hall and resi-



PATHOLOGICAL INSTITUTE, McGILL UNIVERSITY, MONTREAL Nobbs & Hyde, Architects

dences both for students and staff. It is intended very shortly to remodel the Arts building which to-day, as the result of repeated small alterations, is quite unsuited to its purpose. Care is being taken to preserve the exterior at any rate of the old buildings for, to all McGill men, the Arts building will always be McGill to which all other buildings, however impressive, are additions. We may not forget with what struggles these buildings were begun in 1840—through what troublesome years they passed until with Mr. Molson's first gift in 1860 McGill commenced her onward march.

In front of the Arts building stands an old-fashioned monument crowned by an urn. It is the tomb of the Honourable James McGill, and on the base is the inscription:

"This monument, and the remains which it covers, were removed from the old Protestant Cemetery, Dorchester Street, and placed here in grateful remembrance of the Founder of this University, 23rd June, 1875."

So James McGill lies in the University which he founded a hundred years ago.

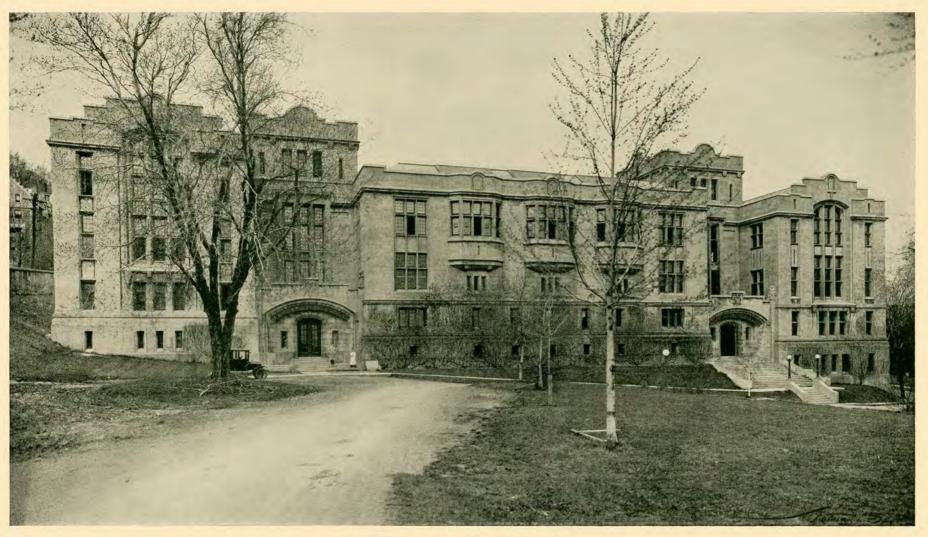




THE REDPATH MUSEUM, McGILL UNIVERSITY, MONTREAL, 1880

Hutchison and Steele, Architects.

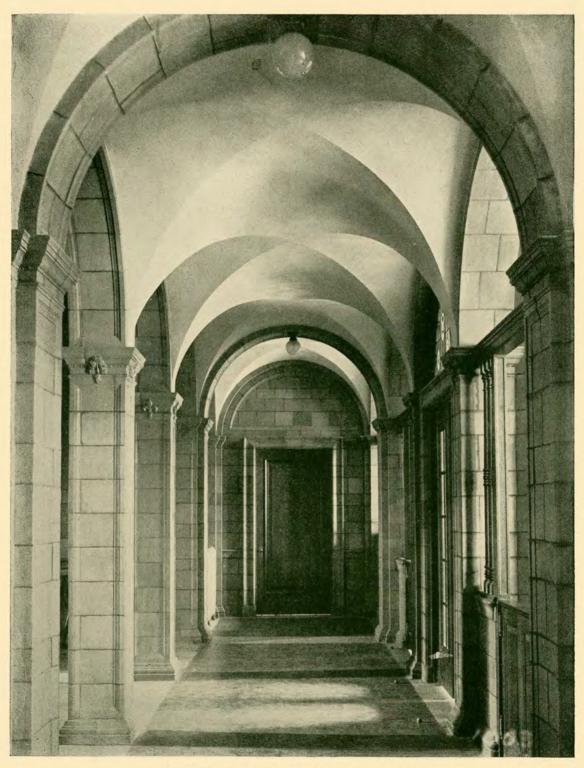
Page 57. The Journal, Royal Architectural Institute of Canada, Mar.-April, 1925.



THE STRATHCONA MEDICAL BUILDING, 1907

Brown and Vallance, Architects.

Page 59. The Journal, Royal Architectural Institute of Canada, Mar.-April, 1925.



ENTRANCE HALL, McGILL UNIVERSITY, MONTREAL, 1905

Percy E. Nobbs, Architect.

Page 61. The Journal, Royal Architectural Institute of Canada, Mar.-April, 1925.



EXTENSION TO REDPATH LIBRARY, McGILL UNIVERSITY, MONTREAL, 1923

Nobbs and Hyde, Architects.

## Some Impressions of Canadian Towns

By PROFESSOR C. H. REILLY

School of Architecture, University of Liverpool, England

EDITOR'S NOTE: This is the fourth and concluding article of the series by Prof. Reilly. Previous articles will be found in the second, third and fourth issues of 1924.

#### IV.—ST, ANNE DE BEAUPRE

ANADA has her Lourdes, and deserves it. The fact may come as a surprise to an ignorant Englishman like myself. He probably thinks of Canada, and in the main rightly enough, as a land of illimitable distances involving enormous train journeys, of mushroom towns with giant hotels, of tracks over which only a Ford car can bump with safety. He never thinks of it, I am sure, as a land of mystery and romance, with ancient wonder-working shrines. If his mind sees further details, he imagines little wooden houses scattered among woods, and sees these either as log cabins or ugly match-boarded structures with corrugated iron roofs. In these latter details, however, he would be hopelessly wrong, especially in the Province of Quebec. houses there are, and many have existed for 200 years and more-a space of time which takes one back to an era long before railroads, when the menace of Indians meant something real. It meant, too, houses of simple shape, easily defendable, and answering to simple needs, with no gimcrackery, fashionable or merely vulgar, to spoil them. The old wooden fort at Toronto, which still exists as a curiosity in a city of high buildings, was such a structure. But in the Province of Quebec such buildings are not curiosities. They serve their original purpose, and, whether in wood or stone, still house a population of hard-working cultivators of the soil. Their general shape is a plain rectangle with one main storey, raised a little to be out of the snow and to provide space beneath for storage, and with a great single-ridged roof above, running down back and front with wide overhanging eaves, and containing within it the whole bedroom scheme, as proved by the dormer windows.

#### THE RIGHT ATMOSPHERE

It is through a long, straggling stream of such houses, stretching some twenty miles out of Quebec along the banks of the St. Lawrence, that one reaches St. Anne de Beauprè, the Lourdes of Canada. It is a fitting approach, for one soon leaves the street cars behind, and finds oneself in something as near a country road as I have yet seen. It is only right, however, to state that there is also a special street car route on a lower level nearer the river, running direct to the shrine, and that it is by the cars on this route that the pilgrims in the main arrive. Devout believers see no incongruity in this. It is we sentimentalists who are so anxious that the right atmosphere, or what we consider to be the right atmosphere, should be maintained. Those to whom miracles are as real as the fluctuations of the stock market-indeed much more so-obviously feel that such events are nearly always divorced from modern matter and progress. They would see no harm, therefore, in approaching St. Anne's by street car or charabanc, in arranging excursions to it, or even in advertising, as I noticed was done in the basilica

itself, that the pilgrimage season extended from the 1st of June to the 1st of October. Still, I must admit with my own faith, less than a grain of mustard seed, though I trust with the same potentiality, I was glad to approach it quietly by the twenty miles of old highway, lined with sedate old houses and occasional churches and shrines.

#### THE SPIRIT OF THE BELIEVERS

St. Anne's itself is pleasantly situated at a turn in the road. One comes upon it suddenly on a steep hillside overlooking the great river and the end of the Isle d'Orleans. It is a village with one main street of four-storey hotels and lodging-houses, each storey with its verandah or balcony. These verandahs and the shops under them, full of what in England would be called "presents from St. Anne's," but which are here holy ornaments and tokens, give it a very cheerful air. The place breathes a holiday, even an excursion spirit, and indeed why should it not when so many happy events occur there? miracle to an unbeliever is a terrifying, even a worldshaking affair, the scene of which should be approached in a spirit of grave inquiry and solemnity. To the happy believer, on the other hand, it is just an ordinary occurrence showing like the rising of the sun, but a little more clearly, that God's in his heaven and all's right with the world. Why, therefore, not make its happening an occasion for family rejoicings? Why not have, even if a miracle does not happen every day, little luncheon parties on the balconies and afterwards buy mementoes of the scene? Why not picnic in the woods and enjoy the bounty of nature when even its ills can be removed in the basilica close by? So this mixture of picnicking and religion, of holiday-making and solemn prayer, which seems so strange to us is strange only because of our own limitations. To the happy French-Canadian the incongruity, I am sure, does not exist. Let us go then to the basilica for a few minutes and see what, at any rate, can be seen with mere physical eyes.

#### INSIDE THE CHURCH

The great church stands with one flank to the main road and the other to the special tramway platform where the mass of pilgrims arrives. The front is to a garden full of fine flowers and trees and an occasional statue. The present structure is a big nineteenth-century classical church, but it stands on the site of several earlier churches. Indeed, the fine eighteenth-century doorways of the last are embedded in its front wall. Above rise twin renaissance towers, as in most French-Canadian churches bright with silver aluminium paint. Between the towers, on the apex of the nave gable, is a large gilt figure of St. Anne. The brightness of the silver and the gilt is not so bizarre as one might think. It harmonizes with the clearness of the air and the brilliance of the sky, with the gaiety of the whitewashed houses, the greenness of the trees, and the general air of happiness which pervades the little town. However when one pushes open the centre door the scene within is sufficiently solemn. A great order of grey columns runs completely round the church, making a semi-circular apse behind the high altar, white with masses of the lilies of St. Anne. In front of you, in the middle distance, is the miracle-working statue of the saint, standing high on a pedestal in the centre of the aisle. It is a life-size gilt figure with the baby Virgin on its right arm, impressive enough, but made more mysterious by a decoration of gilded rays of light which surrounds it. latter seemed to contain small electric light bulbs for lighting effects. Being sentimentally inclined, I did The true believer, of course, not visit it closely. would have no such scruple. If half hidden electric lights helped to produce the right effect—if they added like the golden rays to the glory of the miraculous statue-why should they not be used? There at its base were the latest crutches, evidence enough of its power; while in the gloom of the narthex, where I stood, were endless piles of such implements, tier upon tier, each with its certifying label attached.

#### THE FEELING OF EXPECTANCY

Indeed, one looked into the church under a veritable portico of discarded crutches, and gazing at the kneeling crowd through these tangible evidences of real faith, it was difficult enough not to believe that at any time a miracle might happen. The difficulty rather was to maintain one's ordinary habit of mind. I found the same thing everywhere in St. Anne de Beauprè, the same mysteriously expectant feeling. The gaiety of the bazaars, the huckstering of the old women over the cost of a rosary, did little to destroy it. It was near to disappearing once, however, when, in a building containing a grotto on

the ground floor, I found above a large high apartment filled entirely with a broad modern pitch-pine staircase, up which a group of men and women, in ordinary clothes carrying their sticks and umbrellas, were ascending on their knees. One had seen the same thing in Rome, but there the stair was ancient, long, and toilsome. Here it was new swept and varnished. Why that should make so much difference I cannot say, but it did. One turned from this so-called "holy stair" to the ancient chapel alongside with relief. It is a simple room, like that of a Quaker meeting-house, but with three altars at one end, and with walls covered with old paintings of the sea-explorers who founded the original shrine as a votive offering. It is a place to rest in, especially the open arcaded porch overlooking the little town and the great river beyond. Seated there one could contemplate the perpetual miracle of existence, and let the lesser ones of St. Anne take their proper, if undoubted, place.

The drive back to Quebec held for us a slight incident which perhaps the charm of St. Anne de Beaupre helped to bring about. My friend and I wandered into the woods half way home to see the famous Montmorency Falls, where the river plunges down a rocky cliff steeper and taller than that at Niagara. As we were standing looking down on the abyss of foam and water at our feet we saw close at hand a handsome Canadian girl collecting some crimson berries from a tree. She came forward with a smile, and fetching a handful from her bosom, held them out to us. We looked at them and saw that they appeared to be something between apples and cherries. She told us they were called "pommettes" and were good to eat. We ate the strange fruit the woman offered us and no harm has so far come to us.

## The British Drama Ceague Competition

DESIGN FOR NATIONAL THEATRE

THE British Drama League, a federation of societies and other organizations working for the development of the drama, instituted with the assistance of the publishers of "Country Life" an Architectural Competition for the selection of a design for a National Theatre to also serve as a national memorial to Shakespeare in Empire's greatest city.

The competition was conducted in accordance with the regulations of the Royal Institute of British Architects and was open to all British born Architects. The Jury of Award consisted of Mr. J. Alfred Gotch, President R.I.B.A.; Sir Edwin Lutyens, R.A., F.R.I.B.A.; Sir Lawrence Weaver, K.B.E., F.S.A.; Professor C. H. Reilly, F.R.I.B.A.; Professor Hubert Worthington, A.R.I.B.A.; Mr. Grenville-Barker, and Mr. Albert Rutherston, with Mr. Geofrey Whitworth as Secretary.

The prizes were presented at the conclusion of the annual meeting of the British Drama League held in one of the Conference Halls, British Empire Exhibition, on June 27th, 1924.

Mr. J. Alfred Gotch in addressing the meeting said he esteemed it a privilege, as President of the Royal Institute of British Architects and one of the assessors in the competition, to be allowed to present the prizes.

It was a very happy thought of those concerned to institute the competition at a time when the idea of establishing a National Theatre was "in the air". A considerable number of designs were received, and as he was addressing an audience more or less acquainted with details of acting and theatrical affairs, it would probably be of interest to recite the conditions which had been observed in the competition. These conditions were drawn up by experts in theatrical matters.

A brief summary of the conditions is appended:-

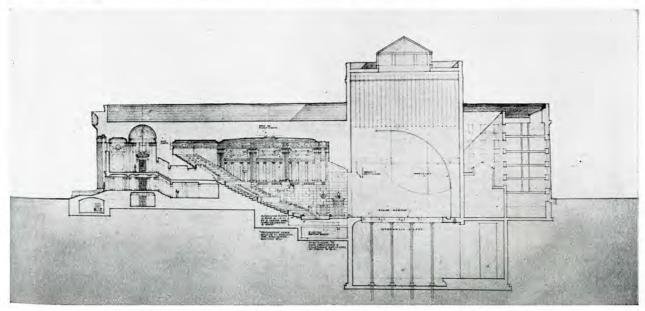
- For the sake of a practical approach to the problem, and so that the theatre designed may be such as could be built on a typical London site, Park Square, Maryletone Road, on the south side of Regent's Park, and at the head of Portland Place, has been selected for this purpose.
- The theatre must contain two auditoria, the larger with a seating capacity of 1800-2000, the smaller 800-1000.
- 3. The larger auditorium to be equipped as follows:



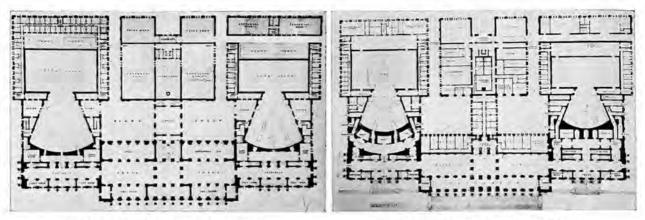
FIRST PRIZE DESIGN FOR NATIONAL THEATRE BY MR. W. L. SOMERVILLE, TORONTO

- (a) Procenium opening 40 ft. If contractible to 34 ft., so much the better.
- (b) Stage area 100 ft. wide by 75 ft. deep.
- (c) A flat stage.
- (d) Mechanism for adding an "apron" stage, 10-12 ft. deep, accessible from two extra procenium openings.
- (e) A part of the floor of the auditorium, not less than 30 ft. in diameter, to be capable of use as the "orchestra" of a Greek theatre.
- 4. The smaller auditorium to be equipped as follows:—
  - (a) Procenium opening 26-30 ft.
  - (b) Stage area at least 60 ft. wide by 40 ft. deep.
  - (c) A flat stage.
  - (d) Mechanism for apron stage and extra-procenium openings.
- 5. The orchestra—commonly so-called—may, but need not be placed in the usual position in front of the stages.

- 6. (a) Cellar room beneath the stages is important, and should extend at least the full width of stage.
  - (b) The "Grid" should be three times the height above stage of the practicable procenium.
- Scene docks, easily accessible from the stages, are to accommodate roughly ten productions for each stage.
- 8. Five rehearsal rooms are to be provided.
- 9. A wardrobe to accommodate 3,000 costumes.
- 10. Dressing-rooms for 500 performers (400 for large auditorium, 100 for smaller) and suitable bathroom accommodation.
- A library (accessible from back and front of theatre) capable of accommodating 100 readers.
- 12. A board-room (probably best placed at the front of the theatre).
- A director's, producer's and other offices (not less than 20) accessible from front and back of theatre.



FIRST PRIZE DESIGN—SECTION, SHOWING LARGE AUDITORIUM—BY MR. W. L. SOMERVILLE, TORONTO



ENTRANCE FLOOR PLAN-STREET LEVEL

AUDITORIUM FLOOR PLAN-FLOOR LEVEL

- A "foyer". This to be common to both auditoria. But—
- To render all essential parts of the theatre sound-proof is a great part of the whole problem.
- 16. It is manifestly desirable that any theatre which might be erected on the scale proposed should be equipped with the necessary work-shops wherein all the needs of the theatre production, both mechanical and artistic, could be satisfied.
- The taking up and setting down of cabs and cars is an important matter. This problem ranges from auditorium to entrance hall and beyond.
- Ordinary features of a theatre, such as refreshment bars, lavatories, ticket offices, etc., are to be provided at the discretion of the competitors.

Continuing Mr. Gotch said the assessors had not the slightest idea of the identity of the competitors, and when the sealed envelope containing the name of the successful number (which by the way was 13) was opened, it was found that the design was by Mr. W. L. Somerville of Toronto.

They were all extremely pleased that an architect from England's overseas dominions had been successful. "Mind you," said Mr. Gotch, "I am not prepared to say that we have not architects in

our country who would have given Mr. Somerville a good run for his money, but things being as they are we felt extremely pleased and gratified to find that an architect from one of our children states had been successful."

The second prize was awarded to Mr. W. J. H. Gregory, A.R.I.B.A., of London.

Since the competition was inaugurated a vacant site on Whitehall has been suggested as a suitable location. This received considerable discussion in the press. Nothing definite has been decided as yet. The Council of the Drama League are opposed to it as it would mean a much smaller building than

the one contemplated under the conditions of the competition.

Mr. Granville-Barker, in addressing a meeting in Liverpool on October 25th, said regarding the National Theatre: "When I asked the prize-winning architect how much a national theatre based on his designs would cost he said he thought it could probably be done for a million pounds. He (the speaker) told him he would be sorry to see one penny less spent on it." Continuing Mr. Granville-Barker said: "I do not think it will be built to-morrow, but frankly I do believe it will be built one day, possibly sooner than we think, and I am very glad that there should be a fine and practical design for a theatre which can be turned to when the occasion arises."

## University Education in Architecture

By PERCY E. NOBBS, M.A., F.R.I.B.A., R.C.A.
MacDonald Professor in Architecture, McGill University 1903-1912.
Professor in Charge of Design Since 1912

ARCHITECTURAL Education having for many years past been a question; and lately become a vexed one, it is in order that any who would venture to discourse thereon should first make his position clear. A confession of faith is thus due as to the natures both of architecture and modern practice. Without it, what has to be put briefly in the allotted space might, for lack of a touchstone, add to, instead of subtracting from, the confusion which besets the subject.

#### I. PRACTICE OF ARCHITECTURE

First, let us consider practice as it is. This throws some light upon those duties of organized architectural teaching designed to equip young persons mentally with respect to a means of livelihood. In old, established, care-free communities—such as existed in pre-war England and are beginning to exist in certain social strata in the United States—architects have occasionally achieved success in virtue of artistic power being enlisted in the service of an aristocracy

primarily interested in the very fine art of living, a discriminating clientele. The belief that architects can make a living or gain recognition by sheer artistic facility or felicity in the world at large is, however, an illusion. In ninety-nine cases out of a hundred architects give their services and the public gives remuneration, with or without a benediction, on a perfectly different basis. The position may be summarized as follows:-

The architect, in his quality as artist, is impelled to seek control of the vast and expensive raw materials and energies he requires, but cannot buy, or borrow-acres, brick-stacks, quarries, labour, power. This forces his dependence on a client in a way the sculptor may faintly appreciate, but the poet and the painter wot not of. Furthermore, paper design is not architecture. The A B C of that art must be apprehended out of doors in contact with operations and ruins. The architect may seek consolation in a drawing; but cannot find full satisfaction in creating anything he cannot walk around, or walk into. The profession is founded on a series of polite illusions and patent paradoxes, the chief among them being that architects are remunerated for spiritual values emanating from their accomplished work

The architect, before the law, is an agent engaged in the economic improvement of real estate-the contrivance of adequately lighted floor area is his main business. For such service he is adequately remunerated, but for the production of works of art his rewards are on all fours with those for virtue. Æsthetic value is something he gives, and gives gladly if he has it in him, and sometimes buys from an assistant, or steals from a rival, that he may have the credit of the gift. The reward of a large practice has little or nothing to do with having this thing to give, or the giving of it. Integrity, charm of manner, family connection, or religiosity are the potent factors in a professional success. This being so, an architect's architecture is something between himself and the general public, rather than his client, on whom he inflicts or bestows it. The immediate client, as he pays nothing for the architecture-if he did, he would pay at higher rates for the better kinds, as he does where pictures or wine are concerned—has very little right to an opin-ion on the matter. Large commissions are often regarded as involving reward at a higher rate. They are more remunerative, but largeness and excellence have nothing to do with each other. The master and the monster draw the same commission on a like expenditure for a given purpose, and the master probably makes the less profit. Masterpieces, old and new, are pulled down every day to make way for less worthy structures of greater content. We are not complaining, or arguing that this should not be so; we point out that it is so, and consideration must be taken of the fact.

It may be urged that competitions are embarked upon and entrusted to assessors by a public confessedly incapable of recognizing merit in architecture still disembodied in drawings, but desirous of adorning and enriching its corporate existence by means of fine building. The opinion of many experienced assessors disparages the view that the public is greatly interested in anything but accommodation. Public bodies meet the profession more than half-way in delegating the responsibility of

selection less from cultural aspiration than from political sagacity in the avoidance of responsibility, and finally, assessors are derelict in their duty if they base their awards on spiritual values and emotional contents. To their employers, and the competitors, they owe decisions based on cost, cubage, and convenience. Using the word "plan" in a wide, organic sense, there can only be one best plan for a given problem. For any plan in the present state of our traditionless art, a myriad equally good exterior treatments are possible. The bond of a tradition between artist and public will be referred to later. As things are, the architecture a man produces is his own affair, so long as it does not interfere with practicalities. Poets and portrait painters are not readily stimulated to meritorious artistic production by competitive zest, and neither are architects in their quality as artists. As hungerers for opportunity they may, in competition, achieve prodigies of ingenuity, sagacity or finesse.

The bearing of this review of the professional situation on the educational problem is this: that any system worthy of the name must frankly recognize the nature of the game involved and equip every potential artist it produces with such science as he can exchange in the world's mart for a live-

lihood and his æsthetic opportunities.

It is not proposed, in what follows, to enlarge much on instruction in the practical beyond thus pointing out that no student or school can afford to run the risk of æsthetic stultification by ignoring instruction in such matters as hygiene, law, economics, mechanics and administration, to say nothing of reading, writing and arithmetic. The architect must be a good agent before he acquires the right to exercise æsthetic activity-that is, presume to use other men's land, stone and labour to express his personal outlook on life.

#### II. ARCHITECTURE AS ART

We now turn to that part of the confession of faith which touches architecture as art. We have stated how the occasion, excuse or opportunity becomes available as an element in the reward negotiated for practical services. For what and how does the artist use it? Recent philosophy is rather apt to identify, and possibly to confuse, this "what" and "how"; we shall, however, consider them apart.

The "vague knowledge" of the 'sixties became in turn the "feeling," the "emotional content," and last the "intuition" of to-day—words which have meant very much the same thing referred to above as "personal outlook on life." This is sometimes spoken of as sentiment, and the shortest word is mood. when we would speak in a nutshell of the funda-mental all that art is concerned with. That is our

answer to the "What?"

As to "How" mood is communicated, the principle is identical in all the arts in that the physical is enlisted as a bridge between spirit and spirit, artist and public, and used as a means of evoking what is, in the last analysis, rhythmic stimulation of The word "arrangement" can be used to connote at once the physical and conventional basis of artistic technique.

Without sight there is void, with it a universe of form and colour-a universe in which the artist is privileged to interfere, arranging matter and energy to generate specific mood. The creation, representation and perception of the unrhythmic is ever out-

side the realm of æsthetic activity.

Æsthetic has been stretched of late to embrace all expression necessitating the admission of a subcategory of "what is generally called art." The identity of æsthetic and linguistic seems to break down if thereby the map of Sicily and the Sistine frescoes are made to differ only in degree. We are content that architecture find a place in this sub-category. Between calling for beer in a pewter, and chanting "Gae, bring to me a pint of wine and put it in a silver tassie," there is a difference beyond that between pewter and silver, brew and ferment, quenching thirst and offering libation. The one informs of a requirement; the other invites participation in an emotion, by images which would be not less but differently potential if changed in sequence and bereft of scansion.

#### III. SOME PROBLEMS OF THE UNIVERSITY COURSE

Our view has now been sufficiently defined as to the dual aspect of the vocation for which Architectural Education seeks to prepare those who subject themselves to it—the economic improvement of real estate and the opportunities for æsthetic activity incidental thereto. The question of a curriculum is now to be considered.

A degree in Arts (B.A. or M.A.) followed by pupilage under a competent master is an affair of seven years. Provided the degree is broadly based, and the master able, honest, and a teacher to boot, this cannot be improved upon. The problem is to assure such instruction and economize in time, if possible. The assumptions are made in what follows that five years are available and that a university is better able to find instructors with the requisite degree of ability, honesty and pedagogic flair than the ordinary parent or guardian.

Apprenticeship—a device for the over-recruitment of draughtsmen—has proved abundantly futile. Draughtsmen can be trained to higher attainment in less time by almost any other conceivable method. Of course, architects and highly competent assistants have emerged in spite of this system. It is not a question for education but for professional organization that the door should ever be kept open to those who attain ability outside the recognized academic channels of professional training.

Our business is with the training of architects. Incidentally, at a certain stage in their careers, they must be draughtsmen of ability, or practical experience in the technique and the business of building will be denied them. The university course is, from the nature of things, unable to provide much direct contact with these matters, so it must turn out reasonably useful draughtsmen. There is nothing easier, however, than the sacrifice of the future architect to the immediate draughtsman. Against this temptation university teaching has not always been proof.

The university course, then, is to be considered as a compromise to furnish the advantages of an Arts course and a pupilage. All compromises have their disadvantages; such as are here involved may be very fully counterbalanced by the opportunities afforded regarding two matters the Arts course and the pupilage barely touch. These are the scientific aspect of construction and the training in the solution of problems in design at an earlier stage in the student's

career than would otherwise be possible, and under highly stimulating conditions of companionship and competition. The university course is, of course, built round this last-mentioned element of the curriculum, Design. The tendency in English architectural education for the last century has been to approach design through history. The object of the present writing is to suggest that the time has come when science and philosophy should claim at least equal importance as avenues of approach to the problems involved in the discovery of form.

Before taking up the various elements of a curriculum in order and succession, a few words on the views current in the profession at large on the problem of architectural education may, even if irritant, serve to clarify our position. Members of the profession who do not teach commonly hold the most extraordinary views on the function and efficiency of the schools. They want competent assistants and they do not greatly desire young persons who, by virtue of a superior education and training, will progress rapidly, from strength to strength, unless it happens that they are, besides being members of the profession, the fathers of matriculated students. Such are apt to expect of the schools a full-fledged, potential partner on graduation.

One of the vices of our age, specialization, may encourage a tendency in the school of architecture attached to a university to be over self-contained, and thereby occasion waste of energy, opportunity and endowment. Architecture is a profession of the widest scope, and the several faculties and departments of any university worthy of the name offer it much besides a mere rounding off of the general education with physical sciences, classics, history and the like. The medical faculty can provide instruction in hygiene, the engineering faculty instruction in construction and mechanics, now become so important an element of the building problem, and the faculty of law can deal with agency and contracts. Apart from the authoritative teaching thus obtainable, the architect in the making comes thus in contact with lawyers, engineers and doctors in the making-a liberalizing experience for anyone. Against such ramification of the course it may be urged that "Life is short and Art long." Five years spent with one group of associates, under one coterie of instructors, digesting one set of ideas, however, is long enough to make prigs and pedants-the negation of the university ideal.

To the disappointed expectation that blames the architectural education of the universities for not producing more genius, we might say that if these schools do not destroy such genius as may honour their portals, they do very well. They exist to enlighten such as enter on the principles of art in general and of architecture in particular, and set them on their way with a reasonable technical equipment for earning a living in the world as it is, and in numbers not in excess of the demand. It is also the function of the university school of architecture to discourage the inadequately gifted. On the other hand, the sacrifice of the interest of the general body of students to the few of marked talent is not in the competence of the university school. Institutions consecrated to such a purpose do exist outside the universities, and the world is the better for them.

In passing from the cultural and technological elements of a curriculum a word is due on the diffi-

cult subject of the standard in mathematics. Architecture has never involved problems which engineering regards as other than elementary. Generations of practitioners have thriven and achieved fame in ancient and modern times with nothing more in the way of a mathematical equipment than simple arithmetic and enough of a geometrical sense to visualize with assurance the interpenetration of figures. phenomenon of the student unable to do anything with an examination paper in mathematics, yet very highly accomplished in geometry, as long as it pre-sents itself in concrete ideas—roofs, piers, vaults, or even shadows-is not uncommon. A high standard in pure mathematics is, in many obvious ways, very desirable, but provision is required for exemption in the case of any exceptionally gifted in architectural subjects who can besides achieve some alternative equivalent such as philosophy or natural science.

#### IV. THE HISTORY OF ARCHITECTURE

We turn now to the History of Architecture, which throughout last century furnished the main introduction to professional instruction in the English-speaking world. That century has witnessed the destruction of a uniform and abundantly consistent tradition, and this calamity must either be laid at the door of historical research itself or of the spirit in which the fruit of this research has been presented. We interpret the situation in the latter sense. On the authority of publishers the "crib" value of the illustrations is the selling factor of any book on architecture in our language.

It has been the delight of English architectural scholarship to make laborious compilations better adapted to be the solace of the retired practitioner than the inspiration of youth. These are the products of a period of unstable thinking on the fundamentals of æsthetic and fantastic application of such loose thinking as there was to the problems of design involved in the material reviewed. This, of course, is pure accident, and no blame attaches anywhere.

Our architectural historians have been full of zeal, like those gun-pulling reformers who shoot first and think afterwards, if at all. We have to confess ourselves in their debt, at least for a preliminary survey of the work of the past-the premises-on which the thinking is now a little overdue. Meantime, we, the victims of the historical method, will continue for the rest of our lives to suffer that derangement whose symptom litters our streets with fragments of the undigested past. Until this thinking has been attempted more seriously than heretofore, the uninitiated who approach architecture, history book in hand, are assailed with a myriad manifestations selected to exemplify what is typical within the lesser groups. The evidence for the deduction of first principles is thus unduly obscured. The amazing "Gothic" elasticity in Greek hands of those Doric forms so rigidly manipulated by revivalists is never hinted at. The truly "Greek" disrespect for the logic of origins manifested in the evolution of mediæval building forms is strangely disregarded. The broad result has been a stressing of immaterial differences. Very little reliance should therefore be put upon the many general histories and the still more numerous histories of this period or of that, until the student has apprehended first principles.

A copious review of lantern slides, supported by the dissertations of instructors with first-hand experience of archæological research and the historical sense that gives interpretation to form, should precede serious reading.

The most important chapter in the history of architecture for future architects must ever be that of the last fifty years; all else is valuable just in so far as it can serve as interpretation and explanation of that. What the student of design requires is such a review of the evolution of past traditions in his art as will enable him to realize that the good in architecture is the result of the application of certain principles to design-the same for Phile, Nike-Apteros, Prior Crawden's Chapel and Mr. Pierpont Morgan's library. Two results might be anticipated from such a teaching of the history of architecture, neither of which, it will be readily admitted, has followed the current approach. Firstly, the student would realize that, in all periods, there has been a great deal of worthless and inconsequent design in building; and secondly, that he is enlisting himself in an evolutionary process, majestic and relentlessthat form is ever a synthesis of purpose, material, process, environment, economy, culture and social organization. The continuous reinforcement through archæological studies of our present multiform historical traditions is in reality detrimental to that evolutionary process which we conceive to be the natural matrix of architectural ideas. That historical teaching is misconceived which sends the student forth appreciatively convinced, as is too often the case, that a pure "Ionic" volute or "Decorated" archmould is legal tender in modern currency. It does both him and his generation a disservice.

#### V. THEORY

Long contact with a Faculty of Applied Science may have engendered in the writer an undue faith in underlying sciences. As physics is prerequisite to the study of engineering, so æsthetic may have its applications to architecture. Of course, the philosophers will not admit this, preferring to regard architecture as phenomenon for æsthetical research. There is, however, a sense in which all sciences can be "applied." Now, our archæological friends are a little apt to offer their categories of information with the assurance that all the artist needs to know is there for the finding; but they are apt to forget that it is only to themselves that all ancient things are beautiful and that artists are concerned with new things. Natural scientists are inclined to side with the philosophers out of contempt for the artistic intellect, as fit only for empirical instruction. All readily unite in pointing out that in the epochs of the great artists, and in the epochs of finest general taste and highest craftsmanship, neither artists nor public cared much for æsthetic, and what they knew is now become most manifestly and demonstrably erroneous.

We would observe, in the first place, that Greeks, Italians, Middle-Englishmen and Frenchmen of the seventeenth century all had the advantage of living and working in times when æsthetic controversy was negligible; when public and artists were united in the profession of such erroneous æsthetic faith as there was. Æsthetic science can contribute considerably to the technique of art, æsthetic controversy can destroy its very possibility. They were free of controversy; we are not.

(TO BE CONTINUED)

## Structural Service Department

#### EDITED BY FRANK P. MARTIN

Member Saskatchewan Association of Architects

#### WALL INSULATION

By B. R. GREIG, B.Sc.

Professor of Mechanical Engineering Member of the Royal Architectural Institute of Canada

(Continued from page 37, Jan.-Feb.)

#### HOUSE NO. 4

Construction:  $\frac{1}{2}$ " stucco, 4" brick,  $\frac{1}{2}$ " lime plaster; total thickness 5".

This house was built by contract at a cost of \$215.00 or 99½ cents per square foot of inside wall surface.

From November 22, 1921, to April 12, 1922, with the heat input constant over long periods, the average value of K = 0.762.

insulating material was placed on the warm side of the wall instead of on the cold side as in the previous test.

#### HOUSE NO. 5

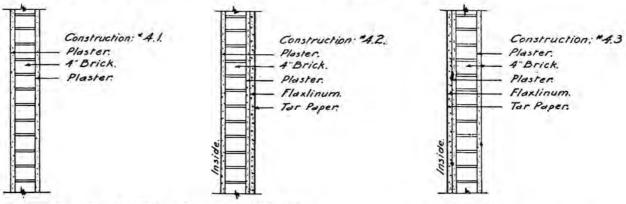
Construction: ½" cement stucco, 8" hollow tile, ½" lime plaster; total thickness 9".

This house was built by contract at a cost of

This house was built by contract at a cost of \$254.00 or \$1.18 per square foot of inside wall surface.

From November 22, 1921, to April 12, 1922, with the heat input constant over long periods, the average value of K = 0.446.

From January 11 to 23, 1923, with the inside temperature kept constant at  $68.5^{\circ}$  F., the average value of K = 0.485.



From December 26, 1922, to January 8, 1923, with the inside temperature constant at  $68.5^{\circ}$  F. and the heat input varied, the average value of K = 0.708.

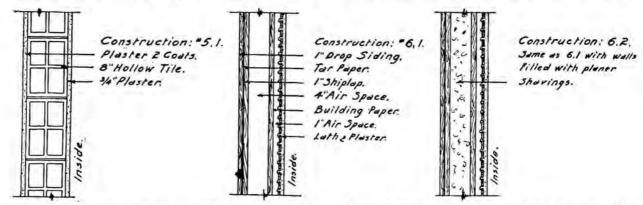
Between January 8 and 11, one layer of Flax-linum, covered with one ply of tar paper, was placed on the outside of this building, and from January 11 to 23, 1923, with the inside temperature kept constant at 68.5° F., the average value of K = 0.307,

HOUSE NO. 6

Construction: Drop siding, tar paper, 7-8" shiplap, 2 x 4" studs, at 16" centres, 7-8" shiplap, building paper, 1 x 2" wooden strapping at 16" centres, wooden lath and lime plaster; total thickness 8".

This house was built by contract at a cost of \$258.00 or \$1.19 per square foot of inside surface,

From November 22, 1921, to January 18, 1922,



showing a saving of 56.6% over the previous value, due to the Flaxlinum and tar paper.

The Flaxlinum and tar paper were then removed from the outside and placed on the inside surface of the walls, and from February 2 to 16, 1923, with the inside temperature kept constant at  $68.5^{\circ}$  F., the average value of K=0.232. This shows a saving of 24.4% over the previous test, with exactly the same materials, the only difference being that the

with the heat input constant over long periods, the average value for K = 0.194.

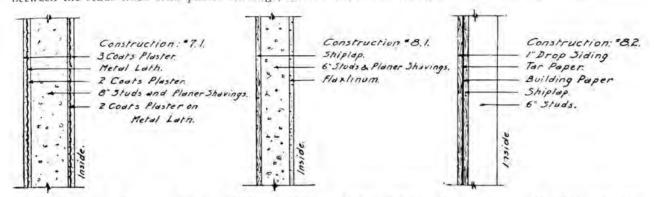
From March 1 to April 12, 1922, under the same conditions, except that the space between the studs was filled with planer shavings, the average value for K = 0.1119.

The planer shavings were fairly coarse and were packed down. The saving due to the space being filled, and being practically a dead air space, equalled 42%. This shows the great advantage gained by having the convection currents stopped. Sawdust is not recommended as it is more subject to rotting if moisture should get into it.

From January 11 to 23, 1923, with the inside temperature constant at 68.5° F., with the wall spaces between the studs filled with planer shavings, as in

with the heat input constant over long periods, the average value of K = 0.170.

Test 8-2.—During this test the walls were built on 2 x 6" studs at 16" centres, and on the outside 1" shiplap, one ply building paper, one ply tar paper, and drop siding, and with nothing on the inside or between the studs.



the previous test, the average value of K = 0.1106, or a saving of 43% over the original figure.

#### HOUSE NO. 7

Construction: This house had a framework of  $2 \times 8''$  studs at 12'' centres, on the outside face of the studs a 3-8'' wrought iron rod was stapled, metal lath was then stapled over the 3-8'' rods and cement plaster and stucco applied on the outside and a heavy coat on the inside between the studs. On the inside of the studs, wire lath was fastened and given two coats of lime plaster; the space between the studs was filled with planer shavings.

This house was built by contract at a cost of \$270.00 or \$1.25 per square foot of inside surface.

From November 22, 1921, to April 12, 1922, with the heat input constant over long periods, the average value of K = 0.151.

From January 11 to 23, 1923, with the inside temperature constant at  $68.5^{\circ}$  F., the average value of K = 0.1314.

#### HOUSE NO. 8

This house consisted of a framework of 6 x 6" wooden timbers placed 6' 0" apart in each direction,

From January 29 to February 9, 1922, with the heat input constant over long periods, the average value of K = 0.368.

Test 8-3.—During this test the walls were built on  $2 \times 6''$  studs at 16'' centres, and on the outside 1'' shiplap, one ply of building paper, one ply of tar paper, and drop siding, and on the inside 1'' shiplap and nothing between the studs.

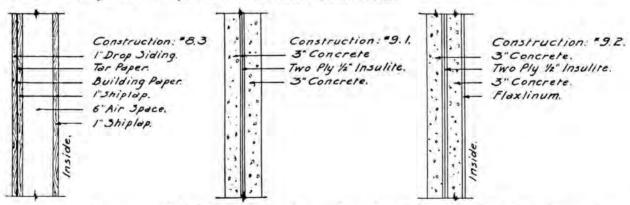
From February 1 to 18, 1922, with the heat input constant over long periods, the average value of K = 0.268.

Test 8-4.—During this test the walls were built as for Test 8-3, but the space between the studs filled with planer shavings.

From February 25, to March 10, 1922, with the heat input constant over long periods, the average value of K = 0.149.

This shows a saving of 44% over Test 8-3, which tallies very closely with the results obtained with House No. 6.

Test 8-5.—During this test the walls were as in Test 8-4, with the addition of one ply of Seal-O-Felt on the inside.



so as to form the corners of the house, it being the intention to make six panels, 6' 0" x 6' 0", of the materials to be tested to fill the spaces.

This house was constructed by day labor.

Test 8-1.—During this test the walls were built on 2 x 6" studs at 16" centres with shiplap on the outside and Flaxlinum on the inside and the space between the studs filled with planer shavings.

From December 19, 1921, to January 8, 1922,

From March 15 to 23, 1922, with the heat input constant over long periods, the average value of K = 0.132, showing an improvement of 11.4% due to the Seal-O-Felt.

Test 8-6.—During this test the walls were as in Test 8-4, with the addition of one ply of plaster board on the inside wall directly on the shiplap.

From January 25 to March 2, 1923, with the heat input constant over long periods, the average value

of K = 0.097, showing a saving of 34.9% over the Test 8-4 due to the plaster board.

HOUSE NO. 9

Construction: A 7" concrete wall with 2 ply of ½". Insulite in the centre; reinforcing rods ¼" diameter, at 13" centres, were placed opposite one another 1" in from both inside and outside faces of the walls. These rods were wired at intervals, the wires going through the Insulite.

This house was built by day labor.

Test 9-1.—From November 22, 1921, to February 17, 1922, with the heat input constant over long periods, the average value of K=0.344. This is a saving of about 56% over a 7" solid concrete wall.

Test 9-2.—The walls were the same as in Test 9-1, with the addition of one ply of Flaxlinum on the

inside walls.

From March 6 to 10, 1922, with the heat input constant over long periods, the average value of K = 0.158, a saving of 54% due to the addition of the Flaxlinum.

Test 9-3.—The walls were as in Test 9-1, with the addition of one ply of Cel-O-Tex on the inside walls. From March 15 to 23, 1922, with the heat input constant over long periods, the average value of K = 0.177, showing a saving due to the Cel-O-Tex of 48.5%.

Test 9-4.—The walls were the same as in Test 9-3, but with one coat of cement floor paint on the outside.

From January 11 to 23, 1923, with the inside temperature constant at  $68.5^{\circ}$  F., the average value of K = 0.162, a saving of 8.4% due to the painting.

Test 9-5.—The walls were as in Test 9-1, with the coat of cement floor paint on the outside and one ply of Johns-Manville's hair felt on the inside.

From February 2 to March 2, 1923, with the inside temperature constant at  $68.5^{\circ}$  F., the average value of K = 0.151, showing a saving of 56% due to the hair felt and the paint.

(To be continued)

## Eighteenth General Annual Meeting of the Royal Architectural Institute of Canada

Montreal, Que., 20th February, 1925

THE Eighteenth General Meeting of The Royal Architectural Institute of Canada was held at Montreal, in the rooms of the Royal Institute, on Friday, the 20th February, last. This was the first meeting held according to the new by-laws adopted at Toronto last September.

Among those present were: Messrs. Geo. W. Gouinlock, I. Markus, Jules F. Wegman, V. D. Horsborough, C. B. Cleveland, from Toronto; D. W. F. Nichols, from Windsor, Ont.; John S. Archibald, A. Beaugrand-Champagne, Percy E. Nobbs, Alcide Chaussé, David R. Brown, Hugh Vallance, G. A. Monette (President P.Q.A.A.), H. S. Labelle, Ramsay Traquair, P. Henderson, A. J. C. Paine, from Montreal.

The delegates elected by the various provincial associations to form the 1925 Council of the Royal Institute are:

Alberta Association of Architects: Messrs. W. G. Blakey and George Fordyce.

Manitoba Association of Architects: Messrs. J. Manuel and J. H. G. Russell.

Ontario Association of Architects: Messrs, L. Gordon Bridgman, J. P. Hynes, Stanley T. J. Fryer, D. W. F. Nichols, Walter Moorhouse and Forsey P. Page.

Province of Quebec Association of Architects: Messrs. John S. Archibald, A. Beaugrand-Champagne, Alcide Chaussé, J. Cecil McDougall, Percy E. Nobbs and Eugène Payette.

Saskatchewan Association of Architects: Messrs. W. G. Van Egmond, F. H. Portnall and Prof. A. R. Greig,

The Architectural Institute of British Columbia: Messrs, S. M. Eveleigh and Andrew L. Mercer.

The meeting was held under the presidency of Mr. John S. Archibald. The reports of the Honorary Secretary, of the Honorary Treasurer, and of the Auditor were read and approved.

The report of Mr. Percy E. Nobbs, chairman of the Educational Committee, which was very interesting, was read and approved.

After disposing of various routine matters, the

meeting was adjourned.

At a meeting of the new Council held immediately after the Annual Meeting, the following officers were re-elected: President, Mr. John S. Archibald; Vice-Presidents, Messrs. J. P. Hynes and W. G. Blakey; Honorary Secretary, Mr. Alcide Chaussé; Honorary Treasurer, Mr. A. Beaugrand-Champagne.

It was decided to discontinue the publication of the "R.A.I.C. Year Book" and that the matter which had been published in that annual will in the future

be found in "The Journal-R.A.I.C."

The President being a resident of the Province of Quebec, the Executive Committee, according to the new by-laws, will, for 1925, be composed of the members of the Council residing in that province, and will be as follows: John S. Archibald, Chairman; Alcide Chaussé, Secretary; A. Beaugrand-Champagne, J. Cecil McDougall, Percy E. Nobbs and Eugène Payette.

It was decided to leave to the Executive Committee to decide when and where the Nineteenth General Annual Meeting of the Royal Institute will be held.

The chairmen of committees were appointed as follows: Legislation, Mr. Percy E. Nobbs, chairman. Research, Prof. A. R. Greig. Publicity, Mr. J. P. Hynes. Education, Mr. Percy E. Nobbs.

It was decided that efforts be made towards the formation of an association of architects of the provinces of Nova Scotia, New Brunswick and Prince Edward Island. A member of the Council will probably visit these provinces in the near future

and will meet the architects of the Maritime Provinces and discuss this important matter.

The R.A.I.C. medal design submitted by Mr. J. P. Hynes was approved, and it was decided to have a die made for the striking of this medal.

It was decided that the Royal Institute will send exhibits to the coming Architectural Exhibition which will be held in New York early this spring.

A special committee has been appointed composed

of Mr. Percy E. Nobbs, convenor, and Messrs. John S. Archibald, A. Beaugrand-Champagne, J. M. Lyle and Henry Sproatt.

It was decided to publish in the coming issue of "The Journal—R.A.I.C." the by-laws of the Royal Institute which were adopted at the last Toronto Annual Meeting, and to ask the printers to keep this matter standing in order to print 200 booklets with the by-laws.

## Reports on Activities of Provincial Associations

#### EDITOR'S NOTE

Secretaries of Provincial Associations and Ontario Chapters will pleased be advised that all reports of their activities to be inserted in the next issue of the R.A.I.C. Journal must be mailed to the office of publication, 160 Richmond St. West, Toronto, not later than April 15th, 1925.

### The Alberta Association of Architects

Secretary

E. Underwood, Canada Permanent Building, Edmonton

THE Annual General Meeting of the Alberta Association of Architects was held on January 30th, 1925, in the Civic Building, Edmonton.

The retiring President, Mr. W. G. Blakey, gave the following report:—

Gentlemen: In presenting my report as retiring President I wish first to thank the members of Council for their aid and courtesy in helping me to fulfil my duties.

I hoped when elected to the office last year that I would be able to congratulate you all at the end of my term on a very successful past year. For obvious reasons I cannot do this and can only hope that my successor will be able to. It is useless for me to tell you that conditions are improving and that we are on the eve of prosperity; you have all read and heard of this too often and are no doubt in as good a position as myself to think what you like about it.

Getting down to the activities of the Association, there is not very much of real interest to report. We have lost rather than gained in membership, and no doubt the Secretary will give you exact figures in his report.

There have been one or two applications for membership, but none have been accepted. At this point it would be well to mention that we have had trouble with one applicant who, on finding that the Council of this Association did not think that he was a proper person to accept without first showing his capabilities by passing an examination, tried devious means of forcing membership, even going to the length of interviewing the Premier of this province with the story that this Association was preventing him from earning his livelihood by the practice of his chosen profession. I do not quite know how he expected to make a livelihood by becoming a member of this Association-but at any rate he caused a good deal of trouble to everyone he interviewed which might very well have been avoided. This is not by any means the only case of a similar nature which has occurred.

It is hardly necessary to state that primarily the registration of members of our profession is for the protection of the public, and this cannot be any too strongly stressed. All this is preparatory to something that has been on my mind for some time past and which I wish to speak of more fully a little later in my report.

In the beginning of September last I attended the General Meeting of the R.A.I.C. in Toronto as your delegate. This meeting was of interest to me your delegate. personally in that I met a number of the members of the profession whom previously I had only known by name. Whether my presence was of value to this Association or to the R.A.I.C. is largely a matter of conjecture. Although I feel very different about expressing myself on the subject of the R.A. I.C., it appears to me the Institute is so constituted at the present time that it is in name the parent body of architecture in the Dominion, but has in fact absolutely no power as a governing body and exercises very little, if any, influence at all upon architecture from an educative or other standpoint. Two or three years ago a number of committees were appointed to investigate matters of interest and some of great importance to the profession, but up to the present time, excepting in a few cases, these committees have failed to function. Even if they had functioned to their limit the length of time given at the General Meeting to receive the reports was of insufficient length to more than give cursory consideration to them. Another point that might be mentioned is that no one other than members of Provincial Associations may be members of R. A.I.C., so that members of our profession who are practising in provinces which have no Provincial Association cannot ally themselves with the R.A.I.C., and conversely all members of Provincial Associations, no matter what standard of qualification is exacted, are willy nilly members of the R.A.I.C. Altogether it appears that the R.A.I.C. as at present constituted is rather an expensive luxury.

In the early part of my report I attempted to

show one of the drawbacks of provincial registration. There are others which no doubt you are all well aware of, particularly the trouble of attempting any disciplinary measures and also the fact that our Legislature has from time to time seen fit to

curtail the power of the Association.

I feel that the time is fast approaching when the R.A.I.C. should become the real governing body of the profession in the Dominion; that it should set a standard of admission; be an educative force and that the P. A. should be subservient to it. Whether or not Dominion-wide registration could be obtained is, I think, a matter of very little importance. Rather am I inclined to believe that the profession would prosper better without registration. In time membership in the R.A.I.C. would mean something to the profession and also to the public. At present membership of any Association means little or nothing to anyone.

I realize that there are many points of serious importance that I have not touched upon. Time will not permit, nor your patience survive everything that I could say on the subject, and these suggestions are put forward with the hope that you will

freely discuss them.

#### PRESIDENT'S REPORT

On opening the discussion on the President's report, the following resolution was moved: "It is desirable in order to improve the status of architects and architecture in Canada (or Alberta) that one corporate body (the R.A.I.C.) be the sole governing

and examining body of which the Provincial Associations (chartered or otherwise) be chapters."

An amendment was moved that the matter be referred to the Council for further consideration. The amendment on being put to the meeting was carried.

#### LIBRARY

In order that the library in the possession of the Association be made more accessible to members it was decided that arrangements be made with the Edmonton Public Library to take charge of the books for the use of members and that members outside of the city be permitted to borrow books

for one month upon payment of postage.

The following officers were elected for the year 1925: President, W. G. Blakey; 1st Vice-President, G. Fordyce; 2nd Vice-President, J. M. Stevenson; Honorary Secretary, E. Underwood; Honorary Treasurer, R. P. Blakey; Representative on the Senate of the University of Alberta, G. S. Burgess; Honorary Auditor, J. Martland; Honorary Librarian, G. H. Macdonald; Members of Council, A. M. Calderon, J. Henderson, E. Wright.

#### PLACE OF NEXT ANNUAL MEETING

The selection of the place for the next Annual General Meeting was left in the hands of the Council.

#### DELEGATES TO R.A.I.C.

The President, Mr. W. G. Blakey, and the 1st Vice-President, G. Fordyce, were appointed delegates to the R.A.I.C.

### The British Columbia Association of Architects

Secretary

Fred L. Townley, 325 Homer Street, Vancouver

At the Annual Meeting of the Architectural Institute of British Columbia, of which a report was given in the last issue of the Journal, the following officers were elected for 1925: President, G. L. Thornton Sharp; Council,

J. C. M. Keith (Vice-President), James A. Benzie, S. M. Eveleigh, Professor William E. Duckering; Honorary Secretary, Fred L. Townley; Honorary Treasurer, Andrew L. Mercer.

### Ontario Association of Architects

Secretary

R. B. Wolsey, 96 King Street W., Toronto

The following applications for membership in the Association have been granted: Alfred J. Rowley, Toronto; R. A. V. Nicholson, Ottawa.

For Associateship membership: Bruce H. Wright,

Toronto; Maurice Champagne, Ottawa.

The following Bill amending the present Ontario Architects' Act was presented to the Provincial Legislature and received its first reading on March 4th, 1925.

THE ONTARIO ARCHITECTS' AMENDMENT ACT

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

- 1. This Act may be cited as The Ontario Architects' Amendment Act, 1925.
- 2. Section 4 of the Ontario Architects' Act is amended by adding after the word "Act" in the third

line of the said section the words "and no others".

Section 15 of the Ontario Architects' Act is repealed.

4. Section 19 of the Ontario Architects' Act is repealed and the following substituted therefor:—

19. The Council may pass by-laws not inconsistent with the provisions of this Act for:—

(a) The appointment of a Board of Examiners for the purpose of ascertaining and reporting upon the qualifications of candidates for membership.

(b) Prescribing the scope of examinations to be held by the Board of Examiners and the evidence to be furnished by candidates as to their previous training, experience and good character.

(c) The admission to membership of candidates possessing the training, experience and good character required, who have passed the prescribed

qualifying examinations.

(d) Fixing, levying and collecting fees to be paid by candidates upon application and annual fees to

be paid by members.

(e) The creation of qualified classes of membership for Associates and Honorary Members prescribing the qualifications for and the rights of each of such classes.

(f) The government and discipline of the mem-

bers.

(g) All such other purposes as may be deemed necessary or convenient for the management of the Association in the conduct of its business.

5. Section 20 of The Ontario Architects' Act is

repealed.

6. Section 21 of The Ontario Architects' Act is repealed and the following substituted therefor:

21. The Association may admit to membership any person being at least 21 years of age who shall

have furnished such evidence as the Council may by by-law require as to training, experience and good character and shall have passed the prescribed qualifying examinations.

7. Section 22 of The Ontario Architects' Act is repealed and the following substituted therefor:

22. All candidates for membership shall be presented by a member of the Council and shall cause their full names to be entered with the Registrar and shall pay such fees and submit to such examinations as shall be prescribed.

8. Section 23 of The Ontario Architects' Act is

8. Section 23 of The Ontario Architects' Act is hereby amended by striking out the following words in the second and third lines of the said Section, "persons entitled to be registered under this Act" and substituting therefor the word "members".

This Act shall come into force on the day upon

which it receives the Royal assent.

#### HAMILTON CHAPTER

Secretary

R. E. McDonnell, 48 Home Bank Bldg., Hamilton, Ont.

This chapter held its third monthly luncheon on Jan. 21st, at which a very interesting paper on "Winter Construction" was given by Mr. Van Scovoc.

This subject is receiving the earnest attention of both architects and contractors all over the country in an endeavor to stabilize the building industry and to some extent remedy, if possible, the seasonal slackness which has been usual in the winter months.

Mr. Van Scoyoc, in his paper, pointed out the advantages and disadvantages of such work and showed that it was quite feasible and practicable to carry on reinforced concrete work during the cold weather, provided certain essential safeguards and

precautions are taken.

His figures and statistics secured by the Federated American Engineering Societies showed to what extent time was lost by building trade mechanics under present conditions. It was shown that of possible working time the plasterers lose 33%, carpenters 29%, bricklayers 34%, and in a total of twenty-seven trades an average of 31% of the possible effective working time was found to be lost. This, no doubt, is a rather serious situation and should receive the earnest consideration of all those connected with the building trades.

The increased cost of winter construction was shown to be much less than one would naturally be led to believe. Actual figures for a million dollar reinforced concrete building in Quebec with temperature as low as 20° below zero being only 2.57% greater than under normal conditions. The percentage increases somewhat in relation to the cost of

the size of the building.

Some of the advantages and disadvantages are interesting:

1. Cream of labor obtainable through the employment of the men in the various trades at a time when the supply exceeds demand.

Reduction in amount of poor work by incompetent men.

3. Labor more anxious to hold job in times of unemployment, and hence more efficient.

 Seasonal price fluctuations in material prices by which most material can be bought cheaper when needed for winter use.

5. Contractors willing to figure on closer margin to get business.

6. Three to six months time often saved in interest on capital tied up.

7. Less freight congestion resulting usually in better material deliveries.

8. No lassitude of workmen due to extreme heat of summer.

Disadvantages:

1. Extra cost of winter protection 1 to 5 per cent. of total cost.

Fewer possible working days due to snow or extreme cold weather, tying up capital for larger period.

More difficult working conditions for some rades.

4. Occasional snowstorms that temporarily tie up traffic.

Mr. Van Scoyoc's recommendations on the protection of concrete work during the cold weather was of great interest, not only to the members of our chapter, but also to the general contractors who had expressed a wish to attend our luncheon and hear this very interesting address.

#### TORONTO CHAPTER O. A. A.

Secretary

I. Markus, 223 Howard Park Ave.

Executive meetings of the chapter were held on January 16th and February 6th.

It was decided to write the Mayor favoring the appointment of a Civic Centre Commission and requesting that in the event of the appointment of such a commission that there should be among the members one who appreciates the value of good architecture.

Considerable discussion took place as to the advisability of members of the Association using the letters R.A.I.C. after their names, and a resolution was forwarded to the Ontario Association of Architects requesting them to give this matter their consider-

The Bloor Street widening scheme was discussed, and it was decided to send a letter to the Ctiv Council pointing out the disadvantages of a 66-ft, street as a thoroughfare and advocating the widening of Bloor Street to 86 ft. as originally planned.

The question of building height limitation was again brought before the chapter, and as a result a special luncheon was held on Friday, March 6th, at

which representatives were invited from the Downtown Association, Board of Trade, Toronto Real Estate Board, Town Planning Institute. Onfario Motor League, Building Owners' and Managers' Association and the Civic Guild, and after considerable exchange of opinions on this important subject. both pro and con, it was finally decided to form a special committee consisting of the executive of the Toronto Chapter and representatives of each of the above-mentioned organizations to go into this matter thoroughly, so that a proposal satisfactory to all parties interested can be mutually agreed upon and submitted to the City Council for consideration.

### The Province of Quebec Association of Architects

Secretary

Ludger Venne, 85 Osborne Street, Montreal

Notes on the 34th Annual Meeting of the Province of Quebec Association of Architects held in Mont-

real on January 26th, 1925.

The following officers were elected for 1925: G. A. Monette, President; J. C. McDougall, 1st Vice-President; Jean Julien Perrault, 2nd Vice-President; Ludger Venne, Secretary; Philip J. Turner, Treasurer; P. E. Nobbs, Past President; David R. Brown, Ernest Cormier, J. O. Marchand, R. H. MacDonald, Oscar Beaulé, Councillors.

#### EXAMINATIONS AND MEMBERSHIP

During the year examinations were held in Montreal in January and July; also in January, 1925.

At the January, 1924, examination the following

were admitted for registration:

Messrs. (1) J. A. Currie, (2) James Kennedy, (3) J. C. Meadowcroft, (4) A. J. C. Paine, (5) J. E. Turcotte.

And at the July, 1924, examination:

Messrs. (1) J. Aimé Poulin and (2) A. J. King were admitted to registration, and Mr. Charles Jean to the study of the profession. At the January, 1925, examinations:

Messrs. Morley C. Luke, Frank W. Graves and Geo. F. Drummond qualified for registration, and Messrs. (1) J. G. Milot, (2) R. A. Simard, and (3) E. Larose were admitted on the strength of the diploma of the Ecole Polytechnique of Montreal.

Mr. E. Clerk, a member of the American Institute of Architects, was admitted on the strength of his being qualified in a chapter of the A.I.A., in which examinations for admission parallel to our own are

This brings the membership in good standing up

to 221, an increase of 7 over last year,

For the better interpretation of the Charter with respect to professional bodies of "equal standing" whose members may seek admission without examination, an amendment to Sec. IX of the by-laws is placed before you at this meeting.

#### SCHOLARSHIPS

The Travelling Scholarships for 1924 were awarded to Messrs. L. Parent and A. I. Macduff.

These students were instructed to survey the Church of the Visitation at Sault aux Recollets built in 1749, with a front dating from 1851 by Ostell. The altar carvings and decorative woodwork is by Quevillon. Drawings, photographs and an historical

account of the Church were prepared. The usual scholarship vote is again recommended for the coming year.

#### PROFESSIONAL PRACTICE

It has unfortunately been found necessary to institute proceedings against several persons for representing themselves as architects in this province, and in other cases to point out the prerogatives of the Association and the means of admission. There is no adverse litigation to report.

#### LEGISLATION

The necessary steps have been taken to request legislation strengthening the position of the profession in the matter of (a) proof of service, (b) nonseizable plans, and (c) protection of professional status, the intention being that in these respects the architect should not find himself in a position inferior to that of the notary, the land surveyor or the medical practitioner.

#### ENCROACHMENTS BY CONTRACTORS

Encroachments on the architectural field by builders have been complained of in certain cases, and the Council has drawn the attention of the Builders' Exchange and of the institutions involved, to this The question of publishing to the profession the names of contractors by whose activities members may find themselves superseded in providing designs for buildings was discussed with a committee of the Builders' Exchange. This body, while lacking a code of ethics and statutory powers for the regulation of the conduct of its members, has, however, expressed the desire that, in any case of a complaint of this kind against a member, the attention of its executive be called to the matter before any action is taken by our body. A willingness to maintain a joint standing committee with our body has also been expressed and action to that end by the incoming Council is recommended.

#### FOREIGN PLANS

The Council has notified the R. A. I. C. that it is of opinion that closer co-operation between the organized profession and His Majesty's Customs Officers is desirable in the matter of the entry of foreign plans, if the duty now provided for is to be collected with regularity. It is felt that the R.A.I.C. is the correct body to deal with the Federal authorities in this matter. It is, however, recommended that the incoming Council study the question. The present situation is felt to be unsatisfactory.

#### RECORDS

With a view to keeping a record of the date and authorship of the more important architectural works in the province, a return of work done in the year 1924, and also from 1900 to 1923 inclusive, has been asked, on forms provided. So far eight (8) members have complied. It is felt to be desirable to get as complete a return as possible of work done since 1900 for historical purposes.

#### PROVINCIAL ZONING ACT

The Civic Improvement Committee has given further attention to the problem involved in the "provincial health by-law relating to dwellings in general", of February, 1924. The retiring Council accepts their view that a Provincial Zoning Act is essential for the proper carrying out of these by-laws. This view was expressed to the Government by the Association last year, and opportunities have presented themselves since for urging the matter. A formal presentation of this opinion might, with advantage, be an early duty of the incoming Council.

#### CITY MONUMENTS

Following the special meeting of the 16th July, 1924, the Council took such action as still remained possible by way of ameliorating certain features of a monument then decided upon, which action met with friendly co-operation by civic officials concerned. Action on the general resolution passed at the special meeting has, however, been deferred, as, until a Town Planning Commission is actually appointed and its scope and personnel defined, it is idle to suppose that any useful purpose would be served by the discussion at the City Hall of advisory machinery with respect to sites or the character of monuments. The appointment of this Commission has, unfortunately, been again delayed, but signs are not wanting that it will soon be in being. The steps taken in connection with the Cenotaph provide a sound model for action, the specific advice of the assessors having been accepted and acted on, with a satisfactory result.

#### CITY BY-LAWS

The Council has not ceased to urge the promulgation of the by-laws, both through co-operation with other bodies and individually on behalf of the Association, and takes the view that the latter is the advisable course. The civic authorities have again recently been reminded of the profession's clear views and interests in this matter, and Mr. Vallance and Mr. Payette have been named to represent our Association in the futher revisions now necessary.

#### EXHIBITION

The Art Association again lent its galleries for an exhibition fathered by this Association, the older architecture of this province being the subject. Material exhibited comprised the drawings of our travelling scholars of recent years and sketches and photographs, etc., the property of various members of the Association. Besides these contributions from our body several organizations and institutions took part—Dominion Archives, the McCord National Museum, the Department of Architecture at McGill University—together with several private exhibitors notable among these being Mr. Vaillancourt and Mr.

Motley. The exhibition was open from November 15th to November 24th and was well patronized by the profession and the public.

#### PUBLICATIONS

The time is felt to be ripe for the publication of a portfolio of measured drawings of old buildings in this province, the work done so far by the P. Q. A. A. travelling scholars and by the McGill students in architecture providing a basis. It is felt that there should be no difficulty in obtaining the necessary funds—say \$6,000.00—all or most of which would be redeemed through sales. Further surveys and additional publication could then be embarked upon. A standing Publication Committee representing several interests taking part in the publication might be necessary, and power to pursue the matter further, make appointments and take necessary action, should be accorded the incoming Council at this meeting.

#### ANNUAL FESTIVAL

A banquet was held at the Ritz Carlton on the evening of the 15th of November, 1924, to celebrate the opening of the exhibition. Seventy-one (71) members were present, with over a score of distinguished guests, and a dozen entertainers, comprising delegations from the Schools of Architecture in the character of historical personages connected with the artistic past of the province. The speaking was designed to recapitulate the story of architecture in Quebec, and was fully reported in the press, in both languages.

#### COMPETITIONS

The Laurier Monument Competition at Ottawa, reported last year as being in order, was carried through and an award made in consonance with the views of the architectural and sculptural assessors.

The Montreal Cenotaph Competition was also carried through and the work completed during the year, the good offices and advice of your President being asked in the nomination of assessors.

No occasion arose during the year that is past requiring a warning to members to abstain from competition.

#### LIBRARY

The policy of restricting subscriptions to periodicals to cover only the journals issued by the professional bodies in this country, Great Britain, the United States of America and France, and concentrating on the purchase of a few publications of importance, has been adopted. The catalogue has been brought up to date. The preparation of a card catalogue has kindly been offered by Professor Traquair and gratefully accepted, and this work is now in progress.

#### ABATEMENT OF INCOME TAX

Measures have been taken to raise the question of an abatement of income tax in favor of architects, engineers and contractors having work in this province, on account of the joint and several ten year liability, with the proper authority. The object is to establish a simple method of computing a rebate on this account. So far the officials concerned have shown a readiness to perceive that architects, engineers and contractors in this province have a

financial responsibility over and above those practising elsewhere in Canada. The completion of these negotiations is left to the incoming Council.

#### THE QUEBEC SECTION

The Council notes with great satisfaction the increased activities of the Quebec Section and the economic arrangements made for accommodation at the School of Art. The balance sheet of the Quebec Section shows a satisfactory reserve of funds and a contribution will not be necessary in the coming

Indications continue, however, that there is lack of co-ordination between the bodies of members in Quebec and in Montreal and the present arrangement, intended to secure representation of our Quebec confreres on the Council, may be at fault. It is recommended that the incoming Council explore this problem with a view to amending the by-laws and be accorded the power for the coming year to invite an executive officer of the Quebec Chapter to attend all Council meetings, at the expense of the Association.

#### Correspondence

The Journal is not responsible for statements or opinions ex-

pressed by correspondents.

All correspondence should be addressed to "The Editor, 160 West Richmond Street, Toronto," and must be signed by the correspondent. When a correspondent discress to use a non-decorrespondent. plume he may do so provided he gives his name to the editor.

ARE YOU AN ARCHITECT OR A "YAHOO" ? The Editor, The JOURNAL, R.A.I.C. Dear Sir:

What is the use of anything, anyway?

In Swift's "Gulliver's Travels" there is an account of one of a filthy race of brutes called "Yahoo" and having man's form and his vices. A writer recently stated that humanity is still more Yahoo-manity than might be thoughtlessly imagined. Another writer recently stated that man was probably much happier when not civilized than he is at present thus rather severely criticizing present day civilization.

It sometimes seems that there may be an element of truth in each of the foregoing statements when one considers the surprising results of certain imposed conditions on the influences of a lifetime. The actions of individuals in a crowd, revealing unexpected selfishness, will often surprise an onlooker, and it might easily be imagined that there are many individuals who, under pressure, would become like the celebrated mariner who rejoiced in being "the cook and the captain bold."

Illustrations of this tendency may often be observed in the case of boys brought up under the influences of refinement who, in ordinary life, were always considered gentlemanly in their conduct, but who, becoming possessed of a car, develop a rudeness that is inexplicable and often dangerous-culture with cracked veneer, the "Yahoo" showing

When it comes to business methods, again and again the Yahoo impulse pops out and cultural instincts and training are overborne. With all the recent instances of malfeasance in business life, some of which have landed their perpetrators in jail with probably more to follow, it would be easy, but unnecessary, to give illustrations.

These thoughts are possibly prompted by repeated stories of improper methods used in attempts on the part of the architects to obtain work-especially in regard to schools, the boards of which seem to be especially susceptible to the temptation of professional bargain counters.

Discussing these tendencies in our profession one feels, more than it is possible to adequately express, that all followers of the arts should be in their makeup the antithesis of all that is Yahoo-ish and yet even among those whose art should be the equal of any art the Yahoo persistently crops forth at intervals. This is most frequently observable in efforts to obtain work. Architects have been known to intimate that if they don't do certain things (which, by others, are considered objectionable) they cannot develop a practice and, to them, the Yahoo propensity, if allowed full sway, would probably urge the use of a club to convert men into clients but, civilization preventing this, they decide to try something not illegal and endeavor to trap their prey by bait instead of violence, namely, by doing preliminary work gratuitously in the hope of getting ahead of their competitors.

This line of conduct is the result of a lack of intelligent logical consideration, otherwise they would realize that if one architect does this or any other unusual scheme all will be compelled to do so and thus seriously reduce what, to the best of architects,

is anything but a handsome living.

To the question which may be asked, "How can we otherwise obtain work", the answer is by following the precedent of those who have placed themselves in an honorable position in the community by working up a good practice from modest begin-

There is no reason why an architect should not attempt to obtain commissions by means of introductions or even by direct applications to prospective clients, but why on earth should it be necessary to follow this up by offers to do something for nothing? The one who does this is not only trying to take an unfair advantage of those who refuse to degrade their profession in this way, but is lowering himself and all others in the esteem of his client and of the public generally. Architects in this country have not the standing they have in older countries mainly because of the meretricious conduct of a minority in the regulation of their practice.

There is no reason why young architects should not start work as draughtsmen in good offices and when they have an opportunity of getting a commission of their own, start in active practice and follow this up by the natural development which will take place if they do their work well.

Architects who honestly and thoroughly do their work have blame little time to make drawings for nothing on pure chance.

To those who indulge in this pernicious habit I would say "For heaven's sake quit being a 'Yahoo' and be an architect.'

> Yours truly, A. FRANK WICKSON-

National Commemorative War Monument Competition See Page XXVI.

> Books and Manufacturers' Publications See Page XXVII.



21% Lower In HEAT LOSS than solid brick!

WHETHER the architectural treatment demands stone, brick or stucco, the elements of super-insulation, reduced cost of erection and flexibility have found their best expression through the use of Interlocking Tile.

A large hollow brick of patented design for loadbearing walls or for backing-up brick, stone or stucco facing.

The continued use of the Interlocking Tile is a testimonial of its superior merits.

## The Interlocking Tile Company Limited

32 TORONTO STREET

Toronto

### National Commemorative War Monument

Invitation to Sculptors, Artists and Architects to Submit Competitive Designs.

THE Government of Canada invite competitive designs for a National Commemorative War Monument which it is proposed to erect on Connaught Place, Ottawa, Canada.

The competition is open to all architects, artists and sculptors, resident in the British Empire who are British subjects, and to British subjects by birth resident elsewhere. Also to all architects, artists and sculptors who are citizens or subjects of countries which were allies or associate powers of the British Empire during the late Great War.

The total cost of the monument, when completed and placed in position, including the base above the level of the ground, is not to exceed \$100,000.00.

Copies of conditions, with a plan and photographs of the site, may be obtained on application to the office of the Secretary, Department of Public Works, Hunter Bldg., Ottawa.

Each competitor will be given a free hand respecting the design, which is to conform with the suggestions contained in the first paragraph of the conditions.

The competition will be in two stages, and parties wishing to compete must submit designs in the form of drawings for the first stage. The second stage will require the submission of plaster models, from a limited number of competitors selected from the first stage. The authors, not less than six and not more than ten, of the best designs selected in the first stage will be eligible for submitting plaster models in the second stage. The author of the plaster model which is placed first in the second stage will, on approval of the Government, be given the commission to carry out the work, or in the alternative, if not approved, will be compensated as provided in the conditions, and the authors of the remaining models submitted in the second stage will each be paid the sum of \$500.00.

Designs must be addressed to and received by the Secretary, Public Works Department of Canada, Room 784, Hunter Bldg., Ottawa, Canada, not later than the 11th day of June, 1925.

Parties who intend to compete should notify the Secretary at once.

## Acadia Apartments

Montreal



David R. Brown, Architect Thompson-Starrett Co., Ltd. Contractors

Floored with
55,000 ft. B. M.
%" x 2" Clear Plain Red Oak
48,000 ft. B. M.
%" x 2½" Clear Birch

## SEAMAN-KENT HARDWOOD FLOORING

THIS imposing block of 12 stories is a further monument to the excellence of Seaman-Kent Hardwood Flooring with which it is equipped throughout. The Acadia Apartments, facing the Ritz-Carlton Hotel on Sherbrooke St., Montreal, commands one of the finest sites in the city. The Architectural beauty of this structure is in perfect keeping with its prominence, as was the inclusion of Seaman-Kent Hardwood Flooring.

### SEAMAN-KENT COMPANY LIMITED

Largest Producers of Hardwood Flooring in the British Empire

Wallace Avenue - TORONTO

Phone: JUnction 1460

Factories: Meaford, West Lorne and Renfrew, Ont. Warehouses: Toronto, Montreal, Quebec, Winnipeg, Regina and Edmonton.