

THE
JOURNAL
ROYAL ARCHITECTURAL
INSTITUTE OF CANADA



MAY, 1931

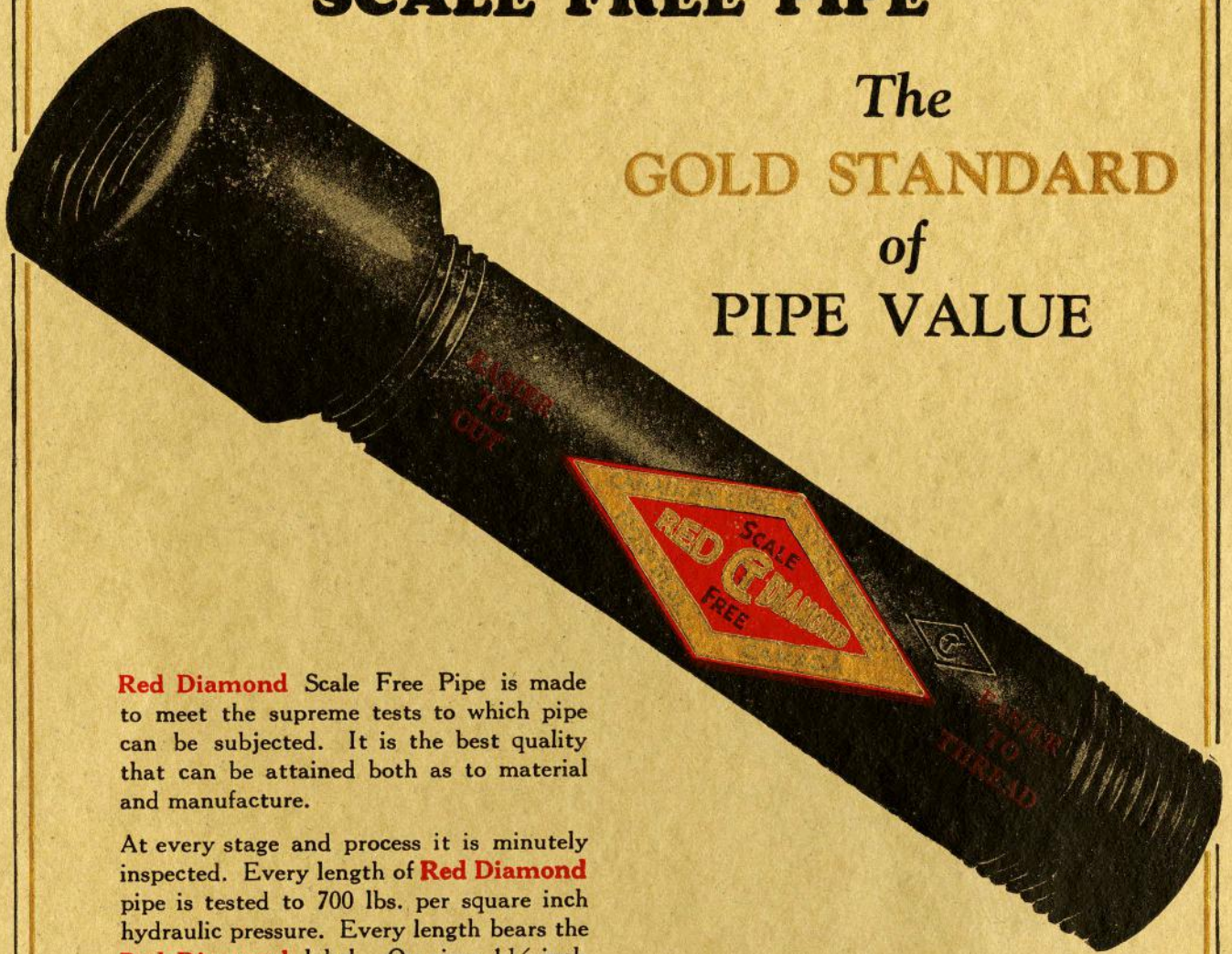
VOL. VIII. No. 5

TORONTO

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SCALE FREE PIPE

The
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Red Diamond Scale Free Pipe is made to meet the supreme tests to which pipe can be subjected. It is the best quality that can be attained both as to material and manufacture.

At every stage and process it is minutely inspected. Every length of **Red Diamond** pipe is tested to 700 lbs. per square inch hydraulic pressure. Every length bears the **Red Diamond** label. On sizes 1½ inch and smaller a metal tag in the same colors is attached to each bundle.

Insist on **Red Diamond** from your jobber.

*We also manufacture
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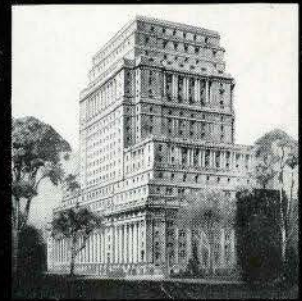
**CANADIAN TUBE AND STEEL PRODUCTS,
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CANADA'S FINEST BUILDINGS USE OTIS-FENSOM



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Canada Life Building
Toronto
Sproatt & Rolph, Architects



Canadian Bank of
Commerce—Toronto
Darling & Pearson,
Architects



Aldred Building
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Architects



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Architects Building
Montreal
Ross & MacDonald, Architects

Every one of these fine buildings is equipped with Otis-Fensom Signal Control Micro-Levelling Passenger Elevators.

Made in Canada

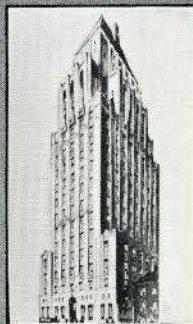
FROM PIT TO PENTHOUSE



Canada Building
Windsor
A. H. McPhail, Architect



Royal York Hotel—Toronto
Ross & MacDonald—Sproatt &
Rolph, Associate Architects



Price Brothers
Building—Quebec
Ross & MacDonald,
Architects



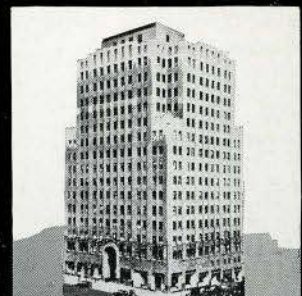
Canada Permanent
Building—Toronto
F. Hilton Wilkes,
Architect



Star Building
Toronto
Chapman & Oxley
Architects



University Towers—Montreal
T. L. Fetherstonhaugh,
Architect



Medical-Dental Building
Vancouver
McCarter & Nairne, Architects



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LIMITED**

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INDIANA LIMESTONE gives the

Royal York Imperishable Beauty . . .



The Royal York Hotel in Toronto, proud achievement of the Canadian Pacific Railway, and largest hotel in the British Empire, is faced throughout with Indiana Limestone. Beautiful as the massive walls now are, time will add to them a richer beauty . . . a mellow dignity.

Because of its easy-working qualities, speed and low cost of fabrication, enduring beauty and strength, Indiana Limestone is the ideal building material for permanent structures. Indiana Limestone is imported in rough blocks, from which the government collects revenue in duty. *Over eighty per cent of its final cost is spent in Canada*, in transportation over Canadian railways and in wages to Canadian workmen. It is in every sense a Canadian-made product.

The architect has long regarded Indiana Limestone as the perfect medium for expressing his design. Any experienced cut-stone contractor will tell you that it is his choice for permanence and beauty.

Let us tell you more about the use of this fine-grained, light-coloured natural stone. Write us for literature showing modern Indiana Limestone buildings, and information regarding remodeling.

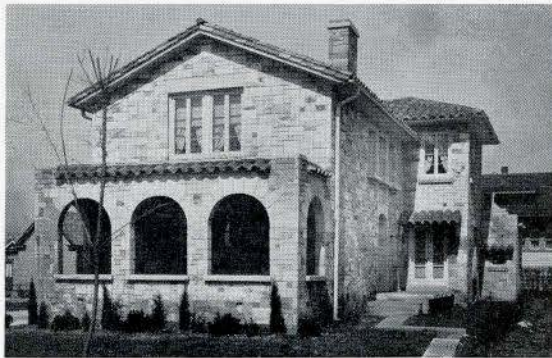
*The Royal York Hotel,
Toronto*

*Architects: Messrs. Ross
& Macdonald, Mont-
real and Toronto.*

*Consulting Architects:
Messrs. Sproatt &
Rolph, Toronto.*

*Builders: Anglin-Nor-
cross Limited, Montreal
and Toronto.*

*Cut-Stone Contractors:
Geo. Oakley & Sons,
Limited.*



For Homes
as well as
Large Structures

INDIANA LIMESTONE COMPANY OF CANADA, LIMITED
TORONTO and MONTREAL

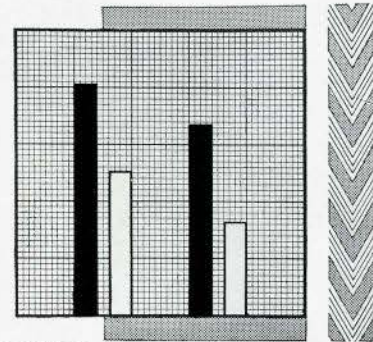
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INDIANA LIMESTONE COMPANY

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How OMICRON

*adds to the strength
of concrete floors*



OMICRON increases tensile and compressive strength of all cement mixes.

AS cement mixes hydrate, waste soluble salts, non-cementitious in character, are formed. Omicron—the discovery of Master Builders Research Laboratories—added to the mix, largely replaces these salts with useful, cementitious products. Strength is substantially increased.

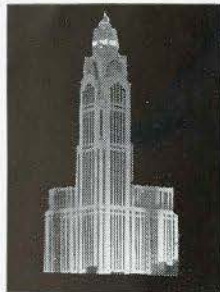
By largely eliminating the soluble salts, Omicron also places a definite check on corrosive disintegration. For it is these salts that are etched away by corrosive agents, intensifying the destructive action of abrasive wear.

Floors in all industrial and some commercial buildings are actively affected by corrosive disintegration. All floors are unfavorably affected in some degree. For mild corrosives are present everywhere. Hence the positive advantage of specifying corrosion-resistance for all concrete floors.

By specifying the correct Master Builders Omicron-containing hardening, coloring or waterproofing concrete ad-mixture, you make sure of the utmost efficiency in protection and decoration. For Omicron (a) checks corrosive disintegration, (b) increases floor strength, (c) permits the use of a low water-cement ratio and (d) makes a smoother, denser floor finish possible.

The soundness of the Omicron principle has been established by exhaustive laboratory tests; the acceptance of that principle indicated by well over 43,000,000 square feet of Omicron-protected Masterbuilt floors already installed.

May we send you detailed evidence establishing the practical value of Omicron in lowering the "square foot cost per year" of concrete floors?



American Insurance Union Bldg., Columbus, Ohio
500,000 sq. ft. of Master Mix Floors



Squibb Building
New York City
Omicron containing Master Mix used

Over 550,000,000 square feet of Masterbuilt Floors have been installed in Master Builders' twenty-one years successful record as America's pioneer and leader in specialized concrete protection and decoration.

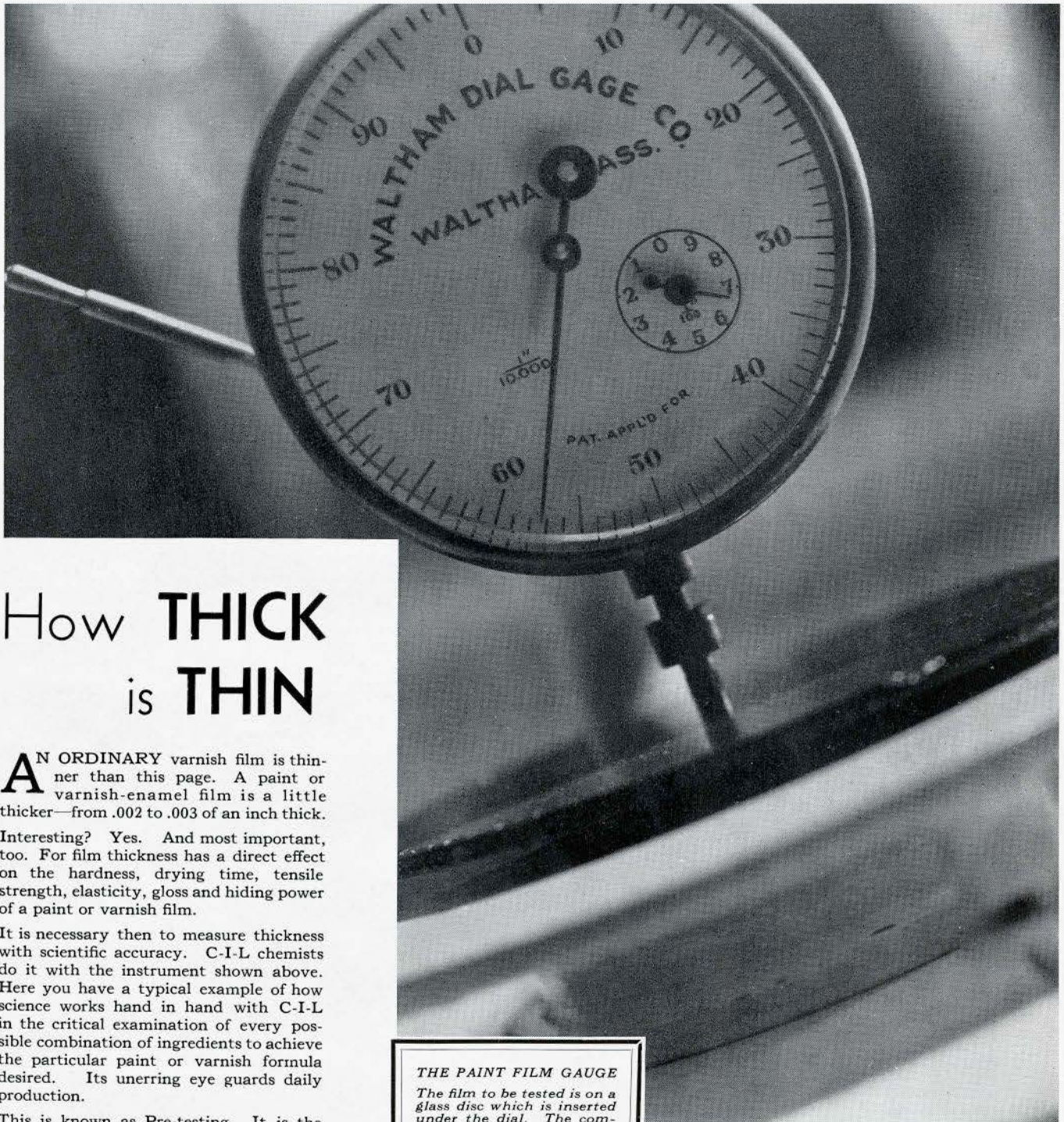


OMICRON
available exclusively as a basic ingredient in

Metalicron:	Integral water absorbent metallic hardener. For heavy duty industrial floors. Plain, colored or slip-proof.
Master Mix:	Liquid integral hardener for commercial floors. Hardens, dustproofs and waterproofs.
Colored Masterbuilt Floors:	Integral coloring, hardening, dustproofing and waterproofing ad-mixtures. Three types.

"write corrosion resistance into every concrete floor specification"

THE MASTER BUILDERS CO., LTD.
FACTORY: TORONTO MONTREAL AND TORONTO SALES OFFICES IN ALL PRINCIPAL CITIES



How **THICK** is **THIN**

AN ORDINARY varnish film is thinner than this page. A paint or varnish-enamel film is a little thicker—from .002 to .003 of an inch thick.

Interesting? Yes. And most important, too. For film thickness has a direct effect on the hardness, drying time, tensile strength, elasticity, gloss and hiding power of a paint or varnish film.

It is necessary then to measure thickness with scientific accuracy. C-I-L chemists do it with the instrument shown above. Here you have a typical example of how science works hand in hand with C-I-L in the critical examination of every possible combination of ingredients to achieve the particular paint or varnish formula desired. Its unerring eye guards daily production.

This is known as Pre-testing. It is the reason for the constant high quality of every C-I-L finishing product. It gives you confidence in the assertion that C-I-L finishes will protect your structures longer - - will enhance and retain the beauty of your design.

We invite your inquiry about C-I-L paints, varnishes, enamels, Duco, and other finishing products.

THE PAINT FILM GAUGE

The film to be tested is on a glass disc which is inserted under the dial. The combined thickness of the film and the disc is read on the dial. The difference between this thickness and that of the glass disc alone is the thickness of the film. This instrument is accurate to one ten-thousandth of an inch and a reading can be readily estimated to one hundred-thousandth of an inch.

Du-Lite New Process Paint Cilux
Muraltone Wall Finishes Interior Gloss
Trim and Trellis Finishes
Flow Kote Enamel
Floor and Dado Enamels
Genuine DUCO



CANADIAN INDUSTRIES LIMITED

PAINT & VARNISH DIVISION



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THIS VALVE HAS BOTH



FIG. 106-A, Screwed, Jenkins Standard Bronze Globe Valve, with one-piece screw-over bonnet, and slip-on stay-on disc holder. For 150 lbs. steam working pressure, or 250 lbs. oil, water, gas working pressure.



One-piece screw-over bonnet.

ONE-PIECE screw-over bonnet . . . slip-on stay-on disc holder . . . Fig. 106-A is the Jenkins Standard Bronze Globe Valve that has both.

Fig. 106-A also has unusual strength . . . a result of its unique construction. It has every Jenkins mechanical refinement of design and manufacture. It has a fine finish that proclaims its inherent quality . . . and it

has the praise of engineers and other valve users.

Fig. 106-A will win your approval, too. Its one-piece screw-over bonnet and slip-on stay-on disc holder are advantages obtainable also in Jenkins Bronze Angle and Cross Valves. Your supply house can fill your requirements. Write for a copy of Bulletin 141.



Slip-on stay-on disc holder.

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Head Office and Factory
617 St. Remi St., Montreal, Canada

European Branch
6 Great Queen St., Kingsway, London, W.C. 2

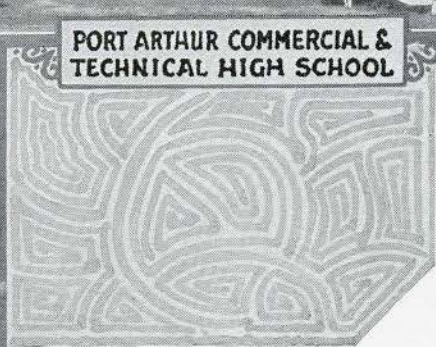
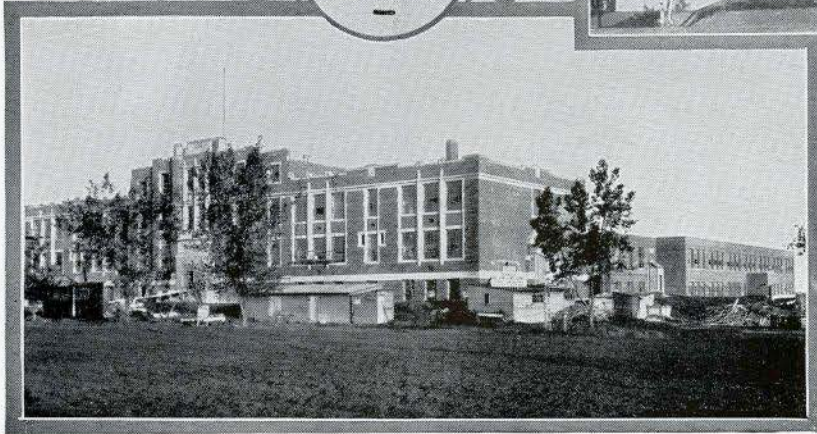
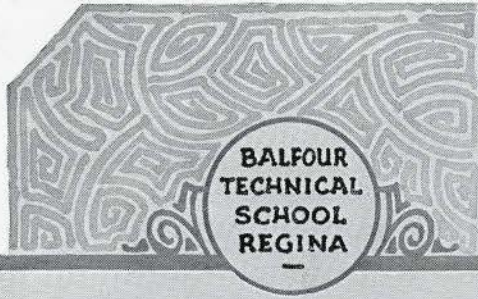
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Jenkins VALVES

Since 1864

JENKINS VALVES ARE ALWAYS MARKED WITH THE "DIAMOND"

Electric Contractor - - - - Sun Electrical Co. Ltd.
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 Architects - - - - Van Egmond & Storey



Electric Contractor - Mahon Electric Co. Ltd.
 General Contractor - - - - M. H. Braden
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Electric Service in these New Schools is PROTECTED

ALL the wiring in these two modern schools is permanently protected by Beaverduct . . . the tested conduit that is made to resist rust, to defy time.

It is significant that the great majority of schools built recently throughout Canada have been given the enduring protection of Beaverduct.

More and more contractors, builders and architects are specifying Beaverduct. They know that their responsibility ends when they install this wiring conduit.

Canadian General Electric, through any of its branch offices, will be glad to supply you with complete information on Beaverduct. Write today.

WD-431



BEAVERDUCT

TESTED CONDUIT

CANADIAN GENERAL ELECTRIC Co. Limited



View showing Escalator, South End of Arcade

Ross & Macdonald, Architects

Sproatt & Rolph, Associate Architects

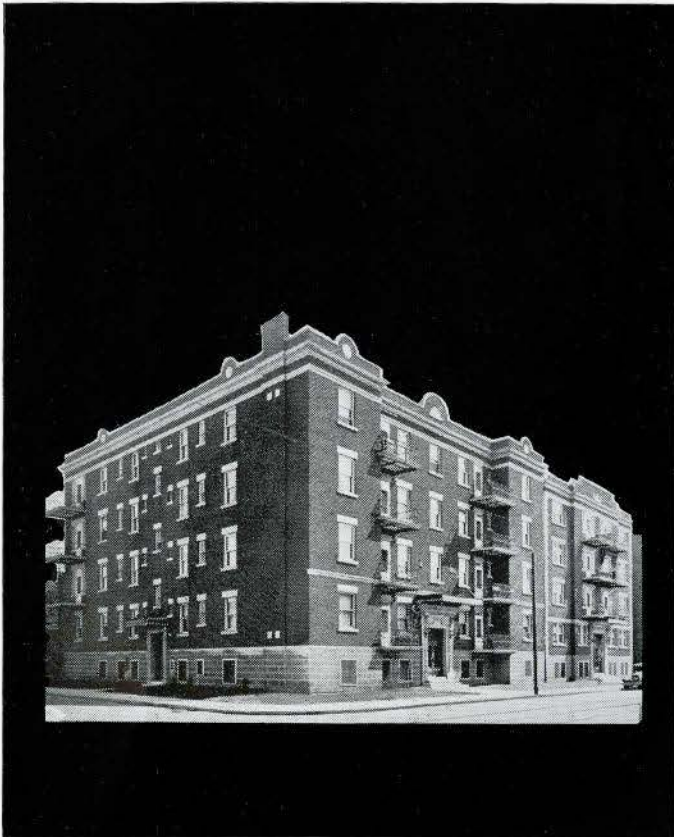
The Notre Dame (B) Marble and the Travertine floors in the new College Street store of the T. Eaton Company, Limited, was supplied and erected by us.

Geo. Oakley & Sons, Limited

Office and Plant:

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Make Your Apartments Popular and Modern

Arrange to install this aid to bigger profits now. Learn the magic of the word "Frigidaire" when prospective tenants mention refrigeration. Send the coupon today for Frigidaire literature especially prepared for architects and builders. Or call your local Frigidaire showroom and an apartment representative will give you full Frigidaire information for installation in new or old buildings. Do it now.



MAKE YOUR APARTMENTS REALLY MODERN

Follow the example of other successful
apartment builders —
Install Frigidaire

If the apartments you build are not equipped with Frigidaire, you're losing money. For Frigidaire-equipped apartments rent more easily . . . to a better class of tenants . . . for longer terms.

And here are the reasons.

Tenants prefer Frigidaire to any other type of refrigeration. They prefer the enduring beauty of the all-porcelain-on-steel Frigidaire cabinets; the quick-freezing of ice, salads and desserts with the famous Cold Control; the crisp, garden-freshness of vegetables kept in the Hydrator; the ease with which ice cubes are released from the patented Quickube Ice Tray; the service-shelf top . . . as handy as having an extra porcelain-topped table in the kitchen.

These are but a few of the reasons why tenants gladly pay a premium for Frigidaire-equipped apartments . . . why Frigidaire today is *Advanced Refrigeration* in all that the name implies.

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Address

City Prov.





At right: General office in Dominion Oilcloth & Linoleum Co.'s new building, covered with Dominion Jaspé Linoleum AAA Quality with Tile Border. Below: Detail of effective treatment around pillars.



DIGNIFIED — DECORATIVE AND PERMANENT

For general offices, private offices, corridors, waiting rooms, washrooms, board rooms, in fact for every type of business installation, the prevailing trend in floors is towards Dominion Battleship Linoleum.

It is permanent, odourless, quiet, comfortable and decorative to an unusual degree. Best of all, it needs practically no upkeep.

Dominion Battleship Linoleum comes in eight standard colours and in Jaspé effects. Tiles are available in the widest range of shapes and sizes from which designs may be readily evolved to suit every taste and purpose . . . to be laid with or without interlining.

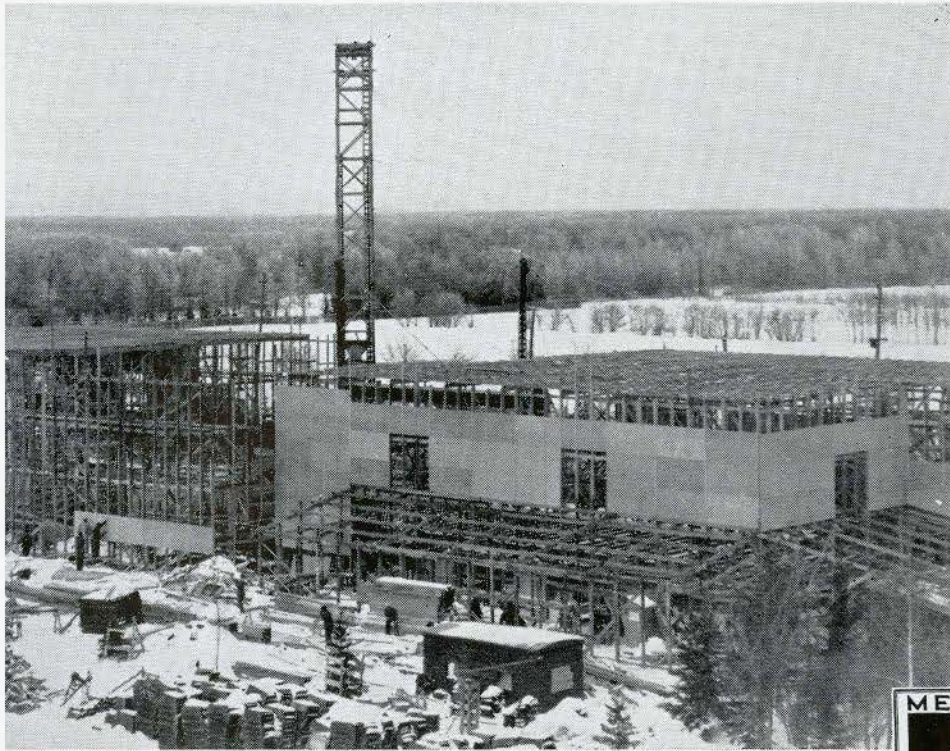
Installed by large house furnishing and departmental stores.

Write us for samples and literature.

DOMINION Battleship LINOLEUM



DOMINION OILCLOTH & LINOLEUM COMPANY MONTREAL LIMITED



Below Zero . . . but— with TEN/TEST Construction Marched Steadily Forward

*A news story of vital interest to every
Architect and Contractor*

FACED with the problem of building in sub-zero weather, the contractors for the new Arts Building of the University of Manitoba called on TEN/TEST Insulating Building Board for aid—and TEN/TEST met the emergency.

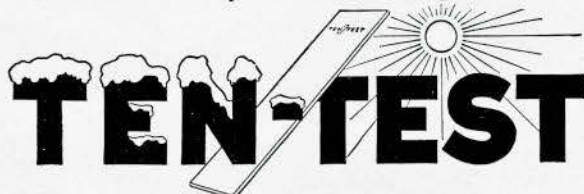
TEN/TEST, naturally, was specified for use in the roof of the finished building. The contractors simply took the TEN/TEST which they would later use for the roof, and with it, built *around the job* a temporary housing inside which work continued all winter without interruption. The heating required was derived from

the regular steam heating plant of the University.

After winter construction was completed, the temporary walls and roof of TEN/TEST were taken down, and *the same TEN/TEST Insulating Building Board was used for the roof of the finished structure.*

“It has been another way,” says Western Canada Contractor, “of meeting the problem of winter construction, and of providing work for tradesmen at a centre which has been chilled with some of the coldest days of the year.”

“The Pioneer of all Insulating Boards”



INTERNATIONAL FIBRE BOARD LIMITED, OTTAWA, ONTARIO

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Thirty Convenient Johnson Branches Insures Emergency Attention within Twenty-four Hours Anywhere. Every Johnson Installation Inspected Annually Without Charge. Each Johnson Installation made by Johnson Mechanics Only.



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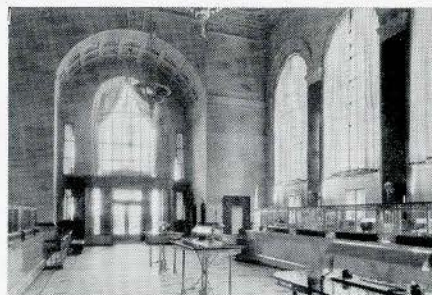
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Storage Rooms at 55° and Banking Spaces and Offices at 70°

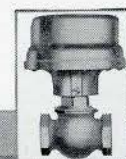
The Johnson System Of Heat & Humidity Control is installed in this new bank building. Johnson Room Thermostats on the walls of the banking space and each separate room operate Syphon valves on the radiators . . . including two thermostats controlling six radiator valves in the Directors' Room. A uniform, normal temperature is constantly maintained throughout the business and office departments of the building; never fluctuating, despite outdoor weather conditions and changes: and the radiator valves requiring no manual

attention whatever. The storage rooms in the basement of the building have Johnson Thermostats regulating ceiling type radiators and maintaining temperature at 55° in this department of the bank. Thus each section of the bank is automatically kept at the temperature necessary . . . with convenience and surety, and a large saving in fuel consumption by preventing overheating and heat waste and excess fuel cost each year.

JOHNSON TEMPERATURE REG.
Company of Canada, Limited
100 Adelaide Street East, Toronto



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Uffinger, Foster & Bookwalter, N.Y. City, Arch.



JOHNSON HEAT AND HUMIDITY CONTROL

ONE OF QUEBEC'S Newest High Schools



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Air Conditioning Apparatus

Shawinigan Falls High School, Province of Quebec. Architects; Shorey & Ritchey, Montreal. Engineers; Wilson and Kearns, Montreal. Heating and Ventilating Contractors; Corriveau & Larochelle, Shawinigan Falls.

"Air Hygiene" has become a major study among modern educators. Nowadays, more and more students are pursuing their studies unhindered by the unhealthy effects of careless heating, drafts, and stuffy, dried-out air.

For instance, this modern new high school at Shawinigan Falls. Here . . . whatever the atmospheric conditions outdoors . . . the air in the classrooms is always pure and refreshing. Sturtevant Air Conditioning Equipment (consisting of Air Washer, Air Heater and Silentvane Fan) circulates an even supply of outdoor air, washed clean and tempered. Temperature and humidity are closely regulated by Sturtevant Dew Point Control.

Sturtevant Air Conditioning Systems may be supplied for every requirement . . . from a one-room school to a university . . . from a private home to a skyscraper. Architects, engineers and contractors are invited to take advantage of Sturtevant's long experience in this field.

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A PROTECTION SYSTEM *for* EVERY BUSINESS

IN cities and towns of Canada where our Central Station Services are not available this Company is prepared to install Local Systems differing from the Central Station Systems in one respect only —

The Local Systems are connected to the Local Fire or Police Department or a local Central Office in the plant itself (if the plant is a large one) instead of connecting to a Central Office such as we operate in the larger cities.



We can install —

- Mercantile Burglar Alarm Systems
- Phonetalarm Systems for Vault Protection
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Just write or telephone us for a booklet concerning any of these systems.

Our Engineering Department will gladly co-operate with the architectural profession in preparing designs, estimates and specifications for the installation of our standard systems, modifications thereof or to meet special or unusual situations.



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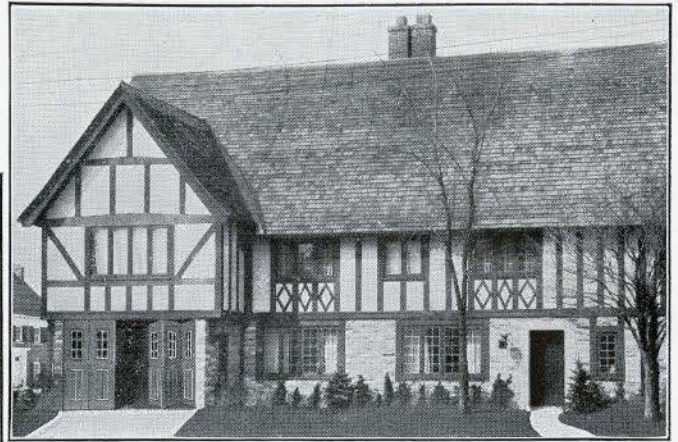
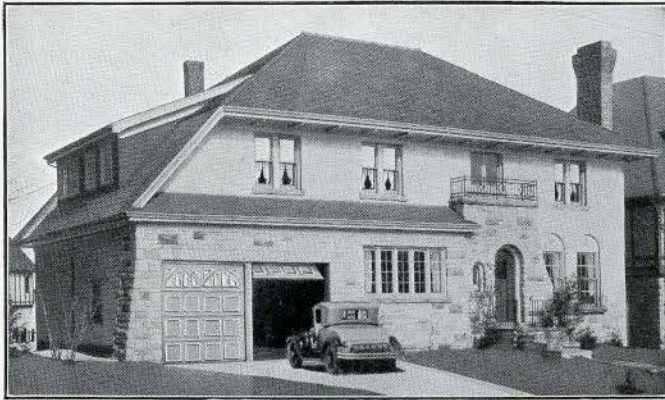
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MODERN GARAGE DOORS



OPEN IN—!

Doors that open in cannot be blocked by snow nor blown about in the wind. The hardware being inside and unexposed to the weather operates better and wears longer. Modern garage doors open in.

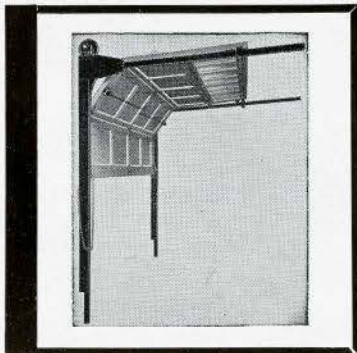
Rolltite

SPACE-SAVING overhead doors roll up out of the way and occupy a minimum of room.

EASY TO OPERATE—A heavy torsion spring carries the weight, a slight pull moves the door up or down.

COMPLETE UNITS—Rolltite Doors are supplied as complete units, doors and all hardware and in any size up to twenty feet wide.

BUILT TO LAST—Rolltite Doors are made of the best white pine with three-ply fir veneer panels. Heavy malleable hinges are used and a two-point latch with cylinder lock is supplied. The spring shaft and the hinge rollers are ball-bearing.



Booklets and catalogues describing Rolltite and Slidetite and other garage door hardware will be gladly mailed at your request.

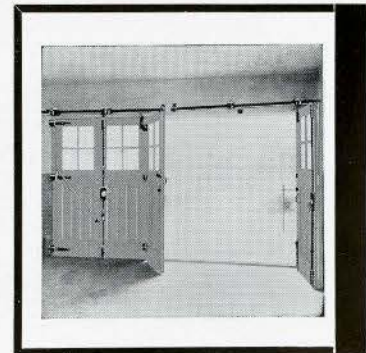
Slidetite

A WIDE CLEAR OPENING without centre posts and in any width from eight to thirty feet wide.

SLIDES DOORS BEHIND THE JAMB—Where they fold together, inside and clear of the opening.

EASY TO OPERATE—The doors are suspended on ball-bearing hangers running in overhead track inside the building. Track cannot be blocked or twisted and the doors always run smoothly.

COMPLETE SETS OF HARDWARE are supplied to suit the size of opening. No cable, no springs, nothing to get out of order.



Richards-Wilcox Canadian Co. Ltd.

Winnipeg

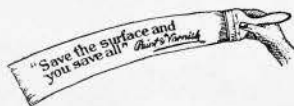
LONDON

Montreal



NO CAUSE For Worry—

Ink marks, pencil scratches, dirt—stains of all kinds—can be quickly and easily removed from walls finished with Berry Brothers' Delitone. This remarkable material is many times more washable than ordinary finishes. We believe it the most economical and serviceable wall finish on the market. Two coats are sufficient for a perfect job on old or new work. It will positively stop lime burns or hot spots on plaster that is in proper condition for the application of a wall coating. As a prime coat Delitone covers upwards of 750 square feet per gallon. Learn more about this finish. Write for complete information.



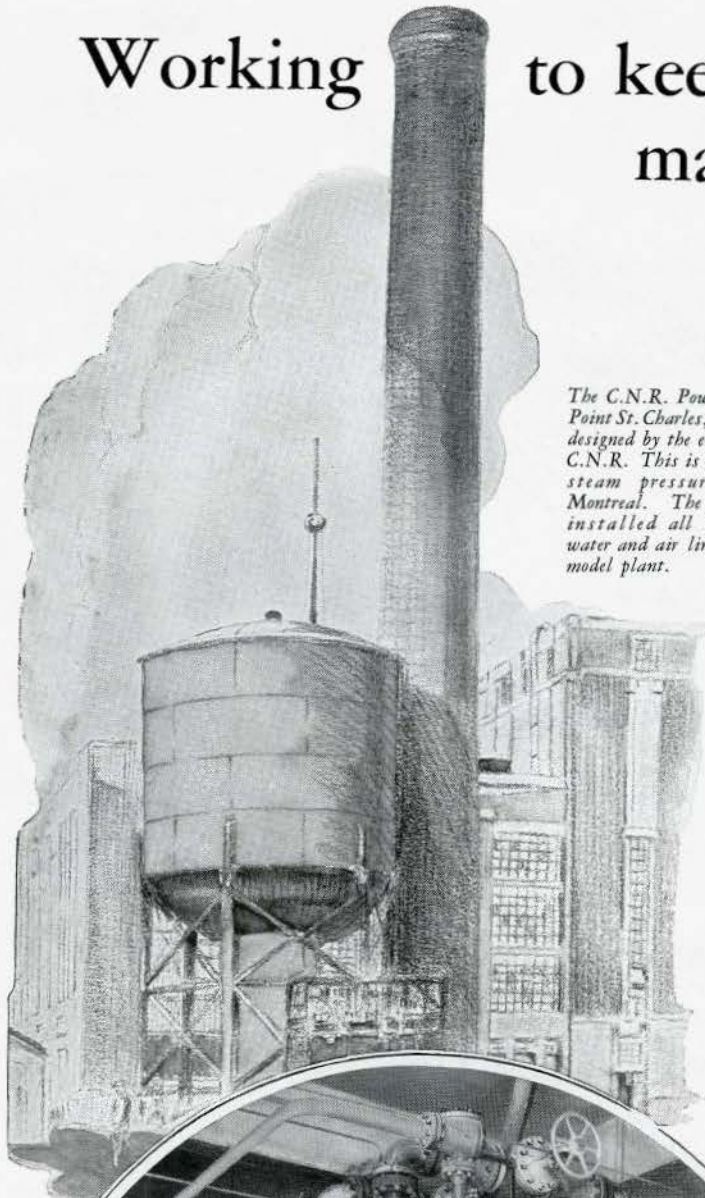
Architectural
department will
furnish complete
details

BERRY BROTHERS
Varnishes Enamels Lacquers

Walkerville, Ontario

Manufacturer of
wear-resisting
architectural
finishes

Working to keep maintenance costs down



The C.N.R. Powerhouse at Point St. Charles, Montreal, designed by the engineers of C.N.R. This is the highest steam pressure job in Montreal. The Garth Co. installed all the steam, water and air lines in this model plant.

MAINTENANCE and replacement charges in all jobs, whether high or low pressure, depend on the quality of the material used, its suitability to the work it must perform, and the skill employed in installing it.

While engineering specifications may control the former to a certain extent, the latter is entirely "up to" the contracting firm, and this is the one reason why so many important jobs are entrusted to the Garth Company.

For Garth engineering knowledge and supervision insure correct and careful methods in every detail of the work in hand.

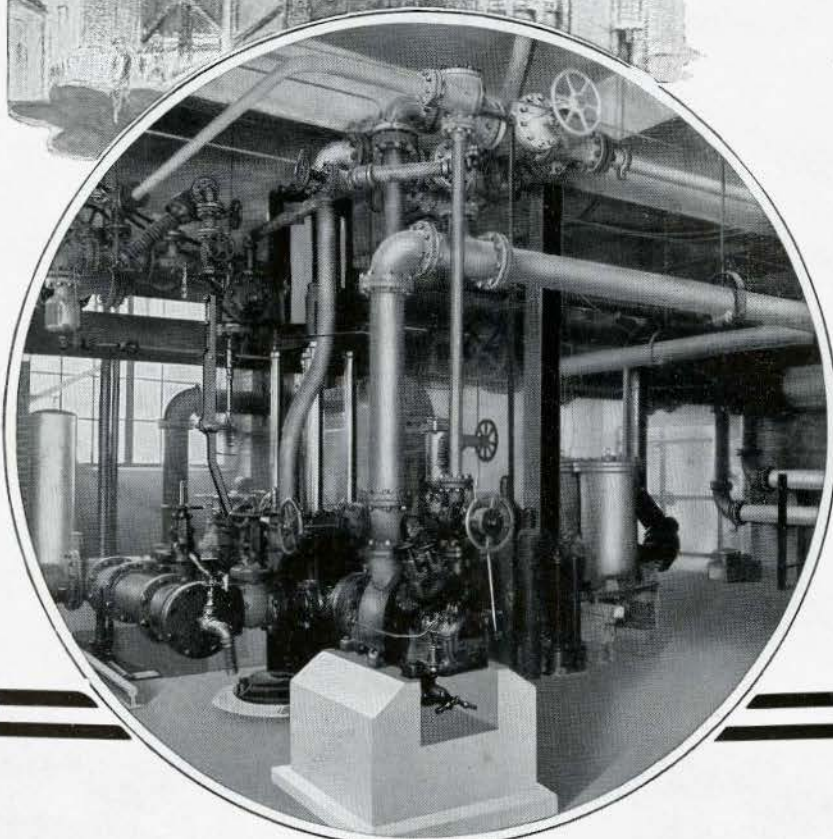
THE GARTH CO.

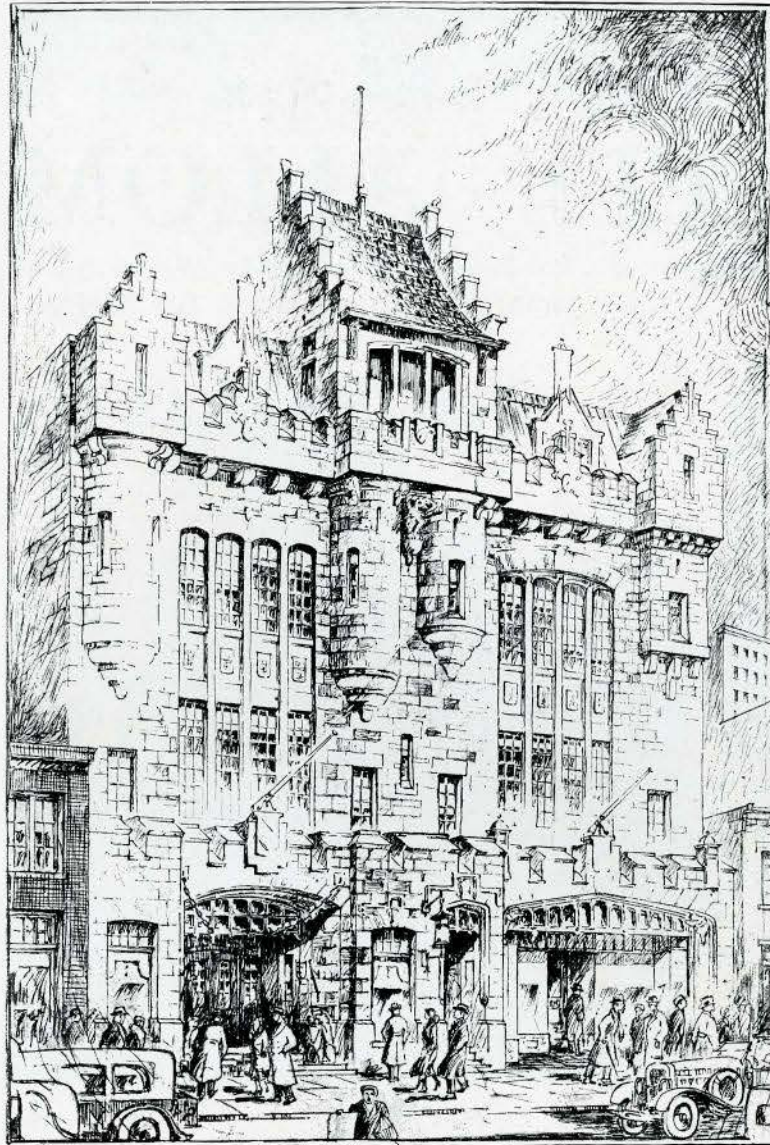


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Power and Industrial Process Piping
MONTREAL

*A Canadian Company owned and operated
by Canadians*

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Architecturally a masterpiece of a medieval atmosphere, a striking tribute to Mr. D. J. Spence and the Distillers Corporation, this will be one of Montreal's outstanding buildings.

Turnbull Elevator equipment of exceptional design has been installed to match the exterior and interior perfection of this unusually beautiful structure.

TURNBULL ELEVATOR Company Limited

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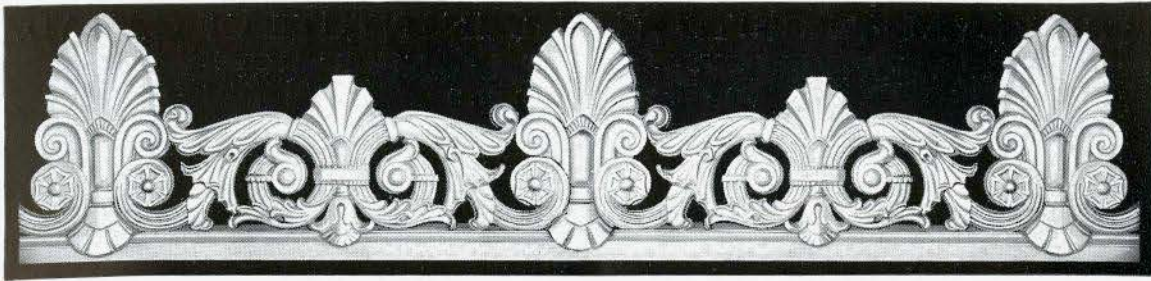
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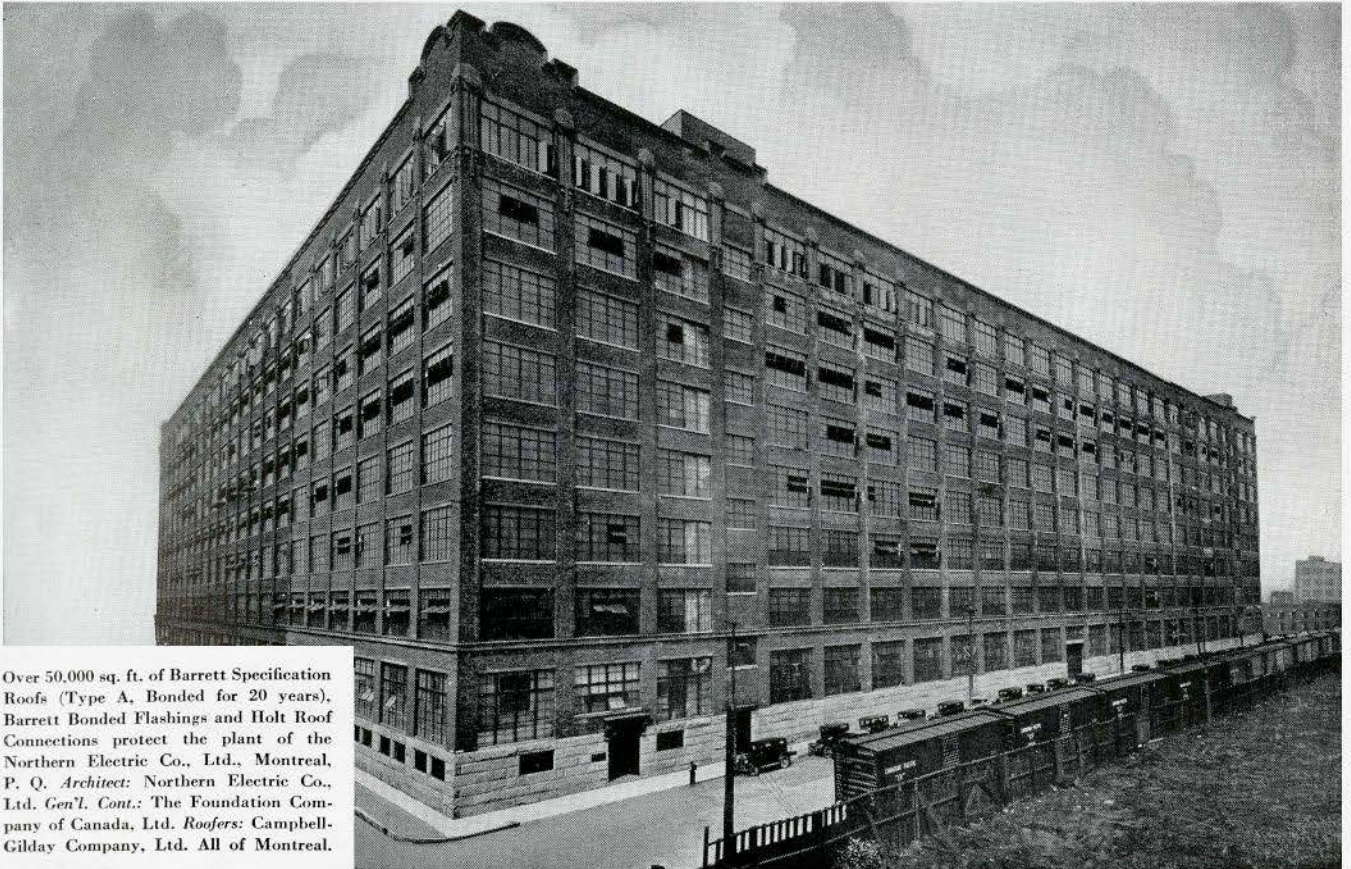
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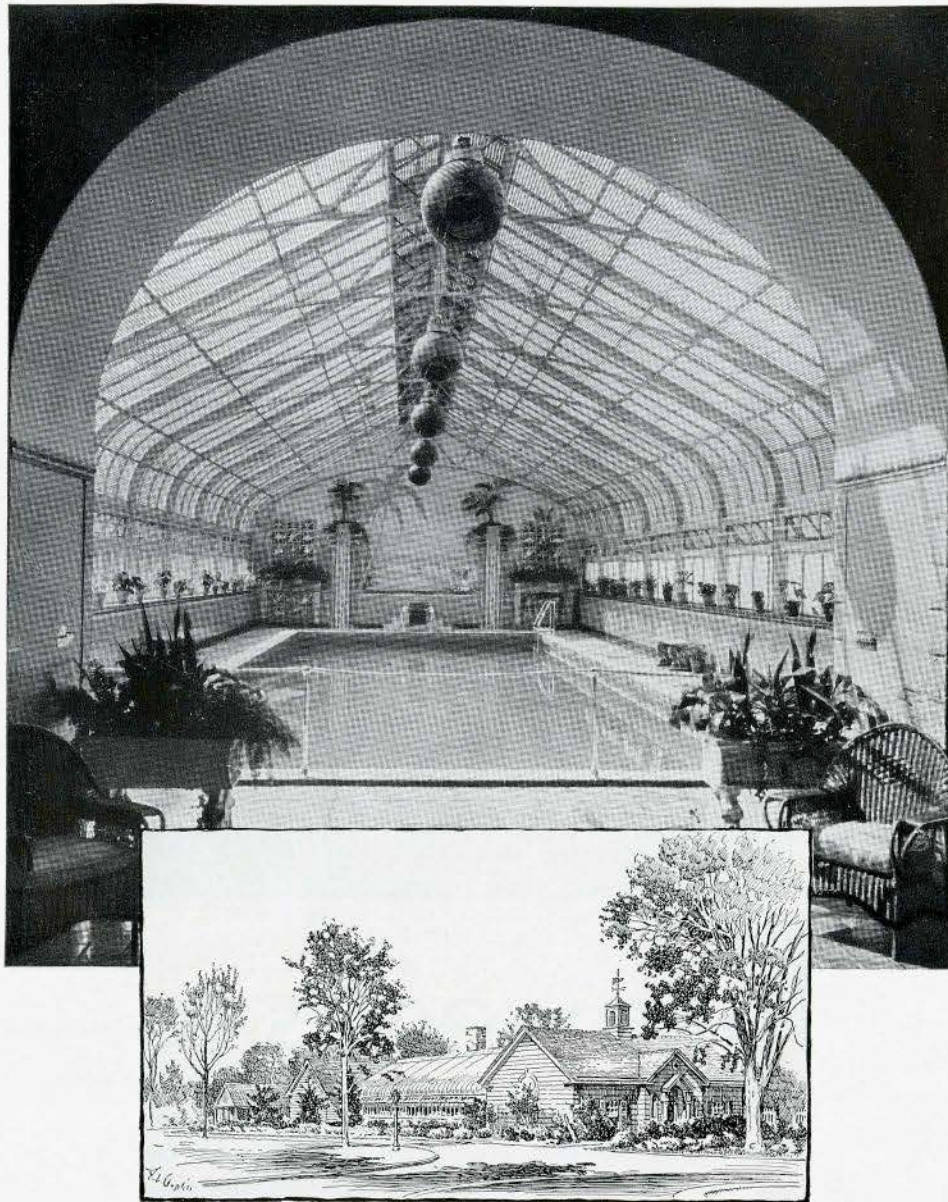
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THE JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 69

TORONTO, MAY, 1931

Vol. VIII No. 5

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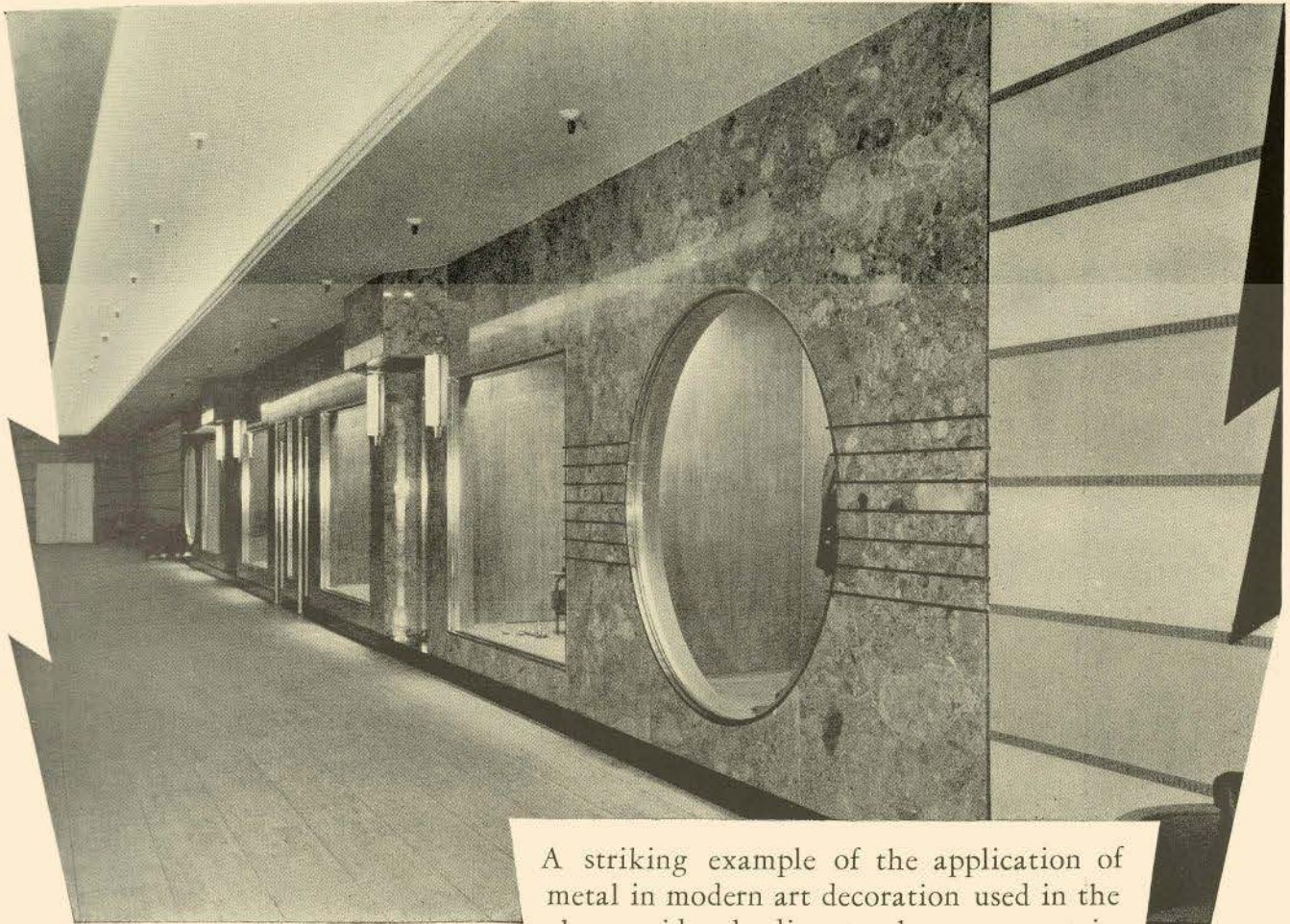
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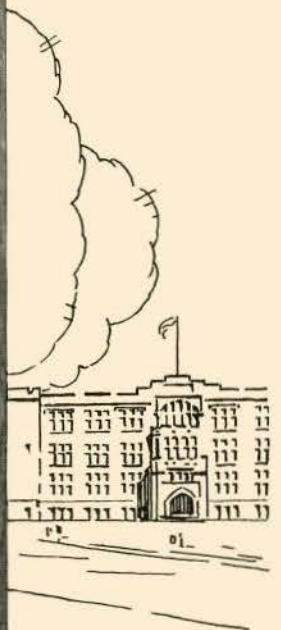
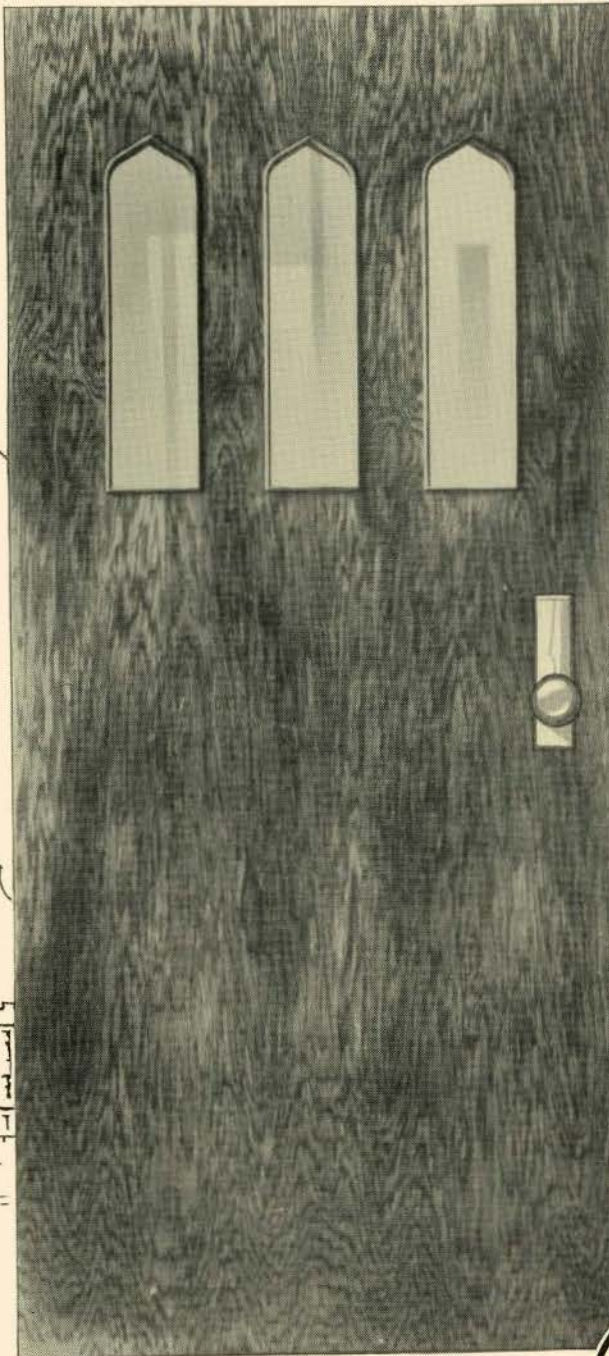
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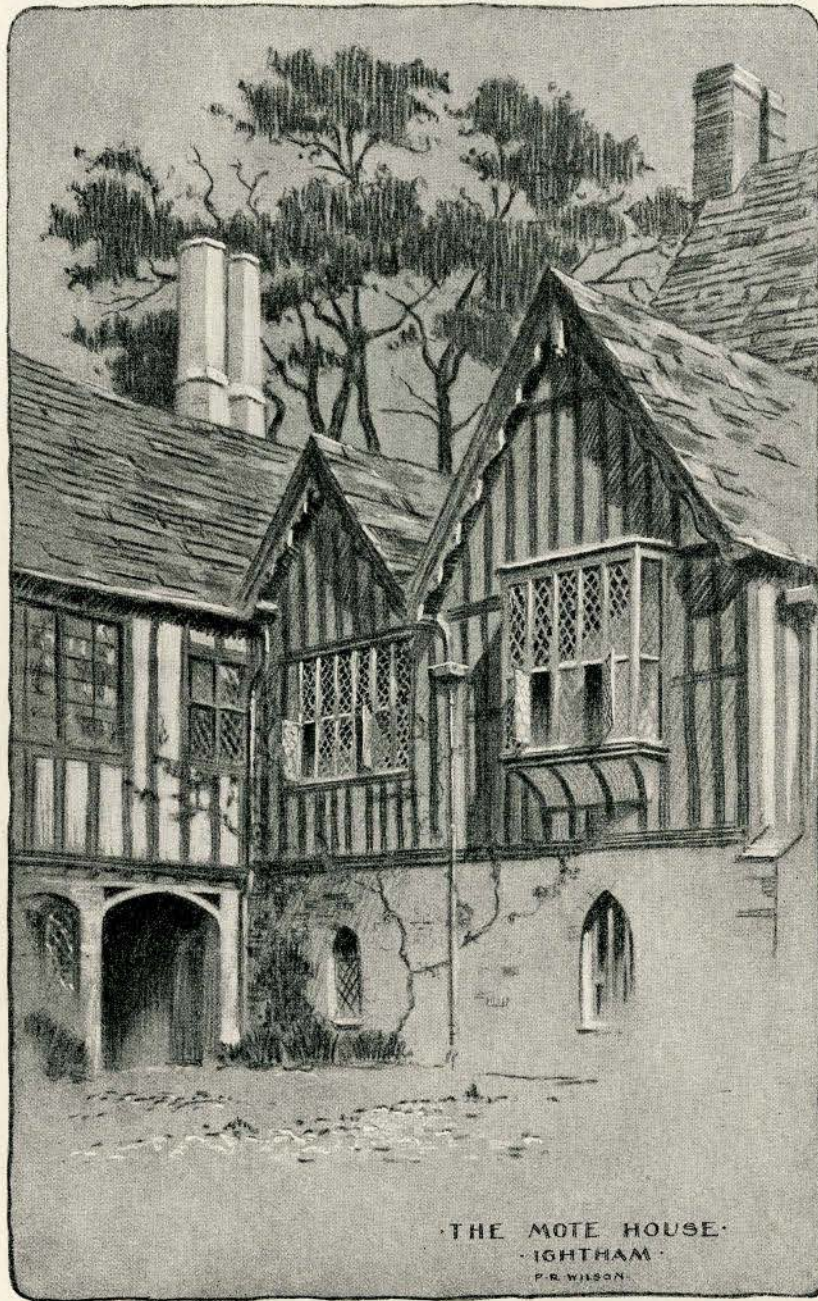
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THE MOTE HOUSE, IGHTHAM, ENGLAND
From a Pastel Drawing
By P. ROY WILSON, B.Arch.

THE JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 6

TORONTO, MAY, 1931

Vol. VIII. No. 5

R. A. I. C. NOTICES

Medal for Outstanding Building 1931 Royal Architectural Institute of Canada

PRELIMINARY NOTICE

At the annual meeting, in February, it was decided to award again this year a gold medal for the building of most outstanding merit completed within the last three years. Such award will be made at the time of the annual exhibition of the Royal Canadian Academy in November next. Additional awards of merit will also be given for various classes of buildings.

Detailed particulars regarding sizes of photographs, form of mounts, date of sending in will be announced later in *THE JOURNAL*.

Sales Tax Protection

The Canadian Construction Association has drawn the attention of the Institute to the likelihood of an increase in the sales tax in the near future.

It is suggested that in specifications for work to be tendered on between this date and the bringing down of the budget, a general clause to the following effect would be appropriate.

"SALES TAX"

"In tendering include for sales tax on the present basis. In the event of an increase in sales tax affecting any item required for the completion of the work, between the time of acceptance of the tender and the delivery of such item, the additional cost due to such increase of sales tax will be allowed."

Documents of the Institute

As a result of numerous requests for copies of the Institute documents, it has been decided to arrange for the printing of the Charter and By-Laws of the Institute, List of Fellows and Members, Form of Bequest, Regulation of Competition, Basis of Professional Practice, Basis of Professional Charges, Agreement Between Architect and Client, and Standard Forms of Contract, including the "Stipulated Sum" and "Cost Plus" forms. One complete set of these documents will be sent to each member of the Institute as soon as they are ready for distribution.

Additional copies of the Agreement Between Architect and Client and the Standard Forms of Construction Contract will be available on or about May 20th. Orders should be sent to the Secretary, R.A.I.C. 160 Richmond Street West, Toronto 2. The charges for these documents will be as follows:

Agreement Between Architect and client—10c per copy or \$1.00 per dozen.

Stipulated Sum Form of Contract—15c per copy or \$1.50 per dozen.

Cost Plus Form of Contract—15c per copy or \$1.50 per dozen.

Competition for New Premises for the Royal Institute of British Architects

The Royal Institute of British Architects invites architects who are members of the R.I.B.A. or allied societies (which includes members of the Royal Architectural Institute of Canada) to submit designs in competition for their new premises to be erected in London, England.

The final date for the reception of drawings will be March 31st, 1932. Any questions which competitors may desire to ask must be received by the secretary, R.I.B.A., 9 Conduit Street, London, W.1, England, not later than August 4th, 1931. Replies to questions of the competitors will be available during the latter part of September, 1931.

The assessors for the competition will be Mr. Robert Atkinson, F.R.I.B.A., Mr. Charles Holden, F.R.I.B.A., Mr. H. V. Lanchester, F.R.I.B.A., Sir Giles Gilbert Scott, HON. LL.D. Liverpool, R.A., F.R.I.B.A., and Dr. Percy S. Worthington, M.A. OXON., LITT.D., F.S.A., F.R.I.B.A.

An award of £500 will be made to the author of the design placed first by the assessors. Premiums to a further amount of £750 will be awarded to other designs according to merit.

Conditions for this competition, showing plan of site, surrounding buildings and schedule of accommodation required, can be obtained from the secretary, R.A.I.C., 160 Richmond St. West, Toronto 2.

Note re Discussion on THE JOURNAL at the Annual Meeting

It is regretted that, in the second column, on page 117 of the March, 1931 issue (Convention Number), the reference to the discussion on *THE JOURNAL* may, owing to its brevity, give a wrong impression of what occurred. The suggestions 1 and 2, were put forward, not as a result of a discussion, but to initiate one. In conclusion of the discussion Mr. Maxwell remarked:

"I think that there is great danger in giving up *THE JOURNAL* as we have it now. It specifically represents us, our work and our interests. It is quite in order, I should say, to launch another magazine, and to be responsible for it, if you like, and to try to make a popular appeal and a worldly success of it, and to interest a greater number of people in architecture, *but I think it would be more or less of a gamble to give up the good thing we have, and to abandon the policy we have established in conducting our Journal and the results obtained.*"

Those present will recall that these remarks were received with great approbation by the meeting. The executive committee will be guided by what was undoubtedly the sense of the meeting, initiating no changes in the scope or form of *THE JOURNAL*.

Department of Art, Science and Research

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

THE members of this committee were encouraged by the interest evinced in its work upon the occasion of the annual meeting of the Institute, held at Lucerne, this year, and as an earnest thereof, the chairman has been in touch with the United States Department of Commerce, Bureau of Standards, and is hopeful of obtaining some very useful data covering the various works of research carried out by the officials thereof.

The exhaustive search made by the committee since the annual meeting has resulted in obtaining some very valuable information from Mr. B. Stuart McKenzie, B.A., B.Sc., M.E.I.C., M.C.I.M.M., secretary, Canadian Engineering Standards Association, apropos of which it is deemed opportune to relate the functions of this body.

In the main, the association desires to:

1. Promote friendly relations between manufacturers and users.
2. Assist manufacturers to effect economy in manufacturing, and thus give the user the advantage of lower prices.
3. Show the user the value of standard specifications and the wisdom of buying to a smaller range of variety.
4. Relieve the user of the necessity of preparing his own specifications.
5. Solve industrial problems by conferences in which all interests are represented.
6. Draft rules for the protection of life and property.
7. Promote uniformity in manufacturing practice and quality of material.

The association claims that industrial standardization and simplification can be of financial benefit to those who understand and apply intelligently the principles underlying these two great movements. Further, that Canadian industries and others are consulting their best interests by co-operating with their own national standardizing body and supporting it in every way possible.

This committee of the Institute believes that there is a very valuable sphere open for the exploration of this field of economy by members of the profession, in taking advantage of this service.

One particularly interesting standard specification which came under the purview of the committee is that of A23-1929, "Standard Specification for Concrete and Reinforced Concrete."

Part I of this specification covers materials; their aggregate; reinforcement; proportioning, consistency and mixing; forms and placing thereof; waterproofing and protective treatment, including concrete in sea water as also concrete in alkali soils and water; surface finish and details of construction.

Part II covers design with formulae; reinforced concrete, composite and structural steel columns; footings; retaining walls; summary of working stresses, and direct and shearing stress in concrete.

In appendices of Part III will be found several well known specifications, having sufficiently close relation to the work in hand to be incorporated.

This publication is so exhaustive that it is small wonder to learn of its popularity, as evidenced by

the demand. Too much emphasis can not be placed upon the value of this bulletin and a copy should be in the office of every architect.

The Canadian Engineering Standards Association were also responsible for the issuance of bulletin C22-1930, under the caption of "Canadian Electrical Code," Part I, Second Edition, covering essential requirements and minimum standards governing electrical installation for buildings, structures and premises, divided into 70 sections with appendices. Of particular interest to members of the profession, section V is outstanding.

Copies of both these publications may be obtained from the secretary, Canadian Engineering Standards Association, Central Chambers, Ottawa, Ontario. Price as follows:

"Standard Specification for Concrete and Reinforced Concrete".....	\$1.00
"Canadian Electrical Code".....	.25

"Construction Joints in Concrete, Bonding New Concrete to Old," Special Report No. 16, issued by the Department of Scientific and Industrial Research, England, and published under the authority of His Majesty's Stationery Office, 1930, should be secured by members of the profession.

The author, Mr. Norman Davey, B.Sc., A.M. Inst. C.E., presents a very exhaustive treatise upon this subject. *Inter alia*, the report states that, for many reasons, it is usually impossible to construct monolithic sections continuously between expansion joints and therefore *construction joints* have to be made. Such joints are the subject of the paper.

Interruptions in the placing of concrete will occur under ordinary circumstances and may be due to:

- (a) The limited capacity of the concreting plant;
- (b) Idle periods, i.e., periods between shifts, labour disputes, etc.;
- (c) The shortage of material;
- (d) The inclemency of the weather.

By careful planning it is claimed it may be possible to pre-determine with a certain degree of exactitude the position in a structure at which the construction joints should occur, and to show these points clearly on the working drawings forming the basis of the contract. The joints should, of course, be so placed that they are subjected to the least possible stress.

The brochure is exceedingly well indexed and illustrated, and contains chapters covering experimental details, disadvantages of improperly made construction joints, factors reducing the efficiency of bond at construction joints, preparation of surface of old concrete in readiness for bonding on new concrete, application of new concrete to the prepared surface of the old concrete, durability of joints, location of joints, etc.

This report can be obtained from the following: Wm. Dawson Subscription Service Ltd., 91-93 Queen St. E., Toronto; Imperial News Co., Ltd., 235 Fort St., Winnipeg; 77 St. Antoine St., Montreal; 517 Burrard St., Vancouver.

Tradition and Modernism*

By JACQUES CARLU, D.P.L.G.

Professor of Architecture, Massachusetts Institute of Technology

Director of the Fontainebleau School of Fine Arts, France

I UNDERSTAND that I am here to-day to speak about modernism in architecture and about its relation to the past or tradition. First of all what is the meaning of the word "modern;" is it the proper one to use? Were not all periods intensively modern in their day? We should not lose sight of the fact that classical architecture, painting, or antique furniture, when new, were nothing else but modern productions. The Greeks did not reproduce Egyptian Temples; the Romans found their own architectural and engineering forms and the people of the Gothic period certainly created an art which was the exact reflection of their civilization and faith. Even the Roccoco period, during which beautiful masterpieces were destroyed or covered up, because they were no longer the expression of their time, was modern. If all great periods were modern why and when did they stop being so? I shall try to show briefly that it happened whenever human activity, out of contact with life, concentrated only on reviving the past; when archeological knowledge took the place of receptiveness and the spirit of life; when the revival of appearances and styles became the only concern of the designers.

It is true that we have inherited a tradition and this is precisely where lies the misunderstanding between the modernists who are looking forward, struggling for an artistic expression of our modern age, and the traditionalists who are still using or trying to adapt the formulas left by the past to their new problems. Are the traditionalists carrying out the true tradition? No! and I hope I can demonstrate successfully that to reproduce the past is a misconception of its teaching. Tradition generally speaking is a custom that has prevailed and has been handed down from generation to generation. It is also the transmission of doctrines, practices and morals, the transmission of a knowledge developed through the process of civilization and the various influences of progress. In architecture good tradition is the handing down to the younger generations of the logical method adopted by our ancestors to solve their problems, not our problems. Their solutions depended upon their degree of civilization, their knowledge of the materials at their disposal, the customs of their country and time.

We have now reached a new age of steel and machines; culturally and socially the world is in a state of transition—a period of great architectural

expression is open to us, a period of analysis and experimentation. We are living in one of the most interesting epochs of building. In such a period architecture cannot remain at a standstill; it is its duty to represent the attitude of mind which has expressed itself in other twentieth century developments, and to establish day by day its own style.

However, tradition does not lie in one form any more than in another and there is no reason for maintaining that the sort of art or architecture which conforms to a certain standard is art and that all other expressions are pure barbarism. Our investigation into the past must be based upon a broad and careful study, not only of all the glorious monuments, their fundamental principles and techniques but also of the conditions which gave birth to such works and of the aesthetic spirit which animated the human mind in all architectural expressions of its artistic adventure. The knowledge of such a tradition, far from leading us to an unreasonable sense of idolatry for what has gone forever, should on the contrary, spur us on to robust, pertinent and living criticism in all matters pertaining to our present day living architecture. The following quotation from Hugh Ferriss brings out my point in a very forcible way:

"A work of architecture is not a visual appearance only, but also discerned by the mind, an internal organization as well, and what is seen by the eye and what is discerned by the mind must be found indissoluble. For architectural tradition applies to a building as a whole, whatever may be the traditions of appearance and however fascinating to historians of styles and fashion. They are not traditions of architecture. True architectural traditions are of this order: a building to be a work of architecture must fully but precisely reveal the material whereof it is built, and the purpose wherefore it is built.

"The machine age has produced materials, methods and motives for buildings which, in the history of man, are absolutely new. This is the novel but actual environment which contemporary designers are called upon to mould architecturally. But how are the designers of the two categories under discussion, the traditionalists and the modernists responding to the environment? The so-called "traditionalists," unmoved by environment with the stark actualities of new materials, new methods and new purposes, still have their interest mainly or solely in heredity. In designing, their first thought is of an historic, a familiar appearance; Eclectics, they decide upon a style.

*Lecture delivered by Prof. Carlu on February 16th, 1931, at the Art Gallery of Toronto during the Toronto Chapter Exhibition of Architecture and Allied Arts.

"They produce, let us say, an exquisite copy or a clever modification of classic or gothic; meanwhile for the sake of an appearance they deny their steel with stone, deny with a pointed arch the girder, and deny the industrial or commercial mode of life with the wrong type of windows. To what a kind of tradition are they being faithful? Clearly to traditions of appearances, externals, styles and fashions. Indeed, do they merit the title of architect or do they merit the title of stylists?"

"In the second category, the mis-named "modernists" (the reference is not, of course, to the copyists of modernistic appearances, who are again merely stylists) we find designers who, unconcerned with revivalism or romanticism, address themselves at once, and realistically, to the basic problems of material, method and motive, the architectural "What," and "How," and "Why." If their first experiments seem unfamiliar and strange it can only be said that they are unconcerned with the factors of either familiarity or novelty of appearance; their concern is to "hew" from a unique material with a unique tool, a perfectly rational form.

"When Sullivan, decades ago, said: "Form follows Function," it seemed at the time so strange a saying that the majority did not understand its import but the minority made of it the basis of a movement; it was not in fact the announcement of a new principle, but it seemed so to minds which could not or did not realize that in the masterpieces of the past it had always been a principle. It was true in Greece, it was true in Egypt, it was evident in Gothic architecture. It had become obscure through the recent centuries of architectural eclecticism—indeed it was that whole long period unmarked by any vital work of the first order and marked only by innumerable "revivals" of the past. The principle was eventually forgotten. But of old, and of the present time, a veritable work of architecture is always a complete and precise statement of what, how and why it is built. Just here is their resemblance to the master-builders of old; it is the direct and unsentimental approach that justifies the title architect.

"To sum up: The so-called "traditionalists" rather than being engaged in a serious effort to preserve architectural traditions, are engaged in simply a solemn effort to preserve architectural appearances. They are thoroughly false to the true tradition—and the so-called "moderns," rather than being engaged in breaking down traditions, are engaged simply in breaking down false fronts. It is precisely the "moderns" who are faithful to the real traditions of architecture."

I have been trying to show that each form of art belongs to a definite period; the ideas and expressions of any one period indicating the needs and thoughts of that period. Forms like other human creations are perishable. We cannot escape

this conclusion anymore than the human being can fail to obey the eternal laws of life. Life is movement and action is the expression of man's richest gift. Dynamic equilibrium is impossible and no society, no form of art, can resist the general stagnation that would result from a cessation of progress.

"Art should be as alive as we are,
Art which does not progress, dies."

Contemporary architecture is the bond between yesterday and to-morrow; it connects the memory of the past with the expectation of the future. A new intellectual order is here prepared by a whole century entirely devoted to scientific and social researches, everything testifies to this fact. So much the worse for those who do not realize it. Here is the new order—architects and engineers have to re-adjust their technique, their taste and their imagination to the new materials, bearing in mind that everything, every element of their building, should be determined by inflexible logic.

Enthusiastic researches and experiments have been started in the logical application of the new materials available for building and it should bring into architecture new forms essentially appropriate to the materials out of which they are formed. No more lies, no more fake skin-like treatments unrelated to the structure. Against a solid geometrical and logical background architecture must rediscover its laws, it must recover its rationalism and its feeling for form and discard what is useless. It must be the enemy of false ornamentation and of decoration for decoration's sake. Then the architecture of tomorrow, clinging closely to essential truth, shall be sound, sober, clean, logical, forcible and unadorned as are divinities; built for a certain purpose with the maximum of efficiency and the minimum of effort and cost and shall be definitely freed from the oppression of costly styles.

Already legitimate modernism has justified itself and in all directions we can discover evidences of its victory. The movement is becoming increasingly strong, not only throughout Europe but also in America. The experimental stage is now over and modernism after thirty years of experiments has, at least in Europe, overcome the ill-founded prejudices of the educated public. Modern architecture is here with the world to stay. If here and there modernism still appears to be in opposition to our time it is because it has within itself what is invisible to the blind multitude, the rhythm of the future.

The romantic forms of the past cannot do for modern society. It is against the tradition of time-honoured formalities that Frank Lloyd Wright, America's pioneer of modern architecture, has built and preached and he was a prophet without honour in his own country when he said, decades ago: "Form is made by function but qualified by

use, therefore form changes with changing conditions. The last analysis is never made. All forms stand prophetic, beautiful, and forever, in so far as they were in themselves truth embodied. They become ugly and useless only when forced to seem and be what they are not and cannot be." The new art development of today is only a child of the future. We shall never look backward; the world has never gone backward, but forward, always forward towards the future.

And again Wright says: "Creation never imitates, creation assimilates."

I am not planning to review here the different types of modern public architecture—it would take us too far. But it is evident that all modern buildings, before any other consideration, must first be planned for efficiency. These buildings are man's modern tools and what is required from them is the same kind of service and the same type of efficiency which is expected from a machine. Even modern churches have been erected and if they have caused a great deal of comment and criticism, it is because religion is probably the field where people are most naturally inclined to hold to what they think is the right tradition. This may be because most of them do not realize the fact that, here again, the modernists are closer to tradition than the traditionalists.

Perret, a French architect, has, with his famous reinforced concrete church at Le Raincy, France, taken the problem where the Gothic architects left it on account of the limitations of their material, "stone." Everybody knows that the Gothic architects, taking into account the discovery of printing and its consequent spreading of knowledge and increased demand for religion of a less mysterious nature, created an entirely new type of structure, more open, giving more light, permitting the reading of prayer books and planned to accommodate on the same area twice as many people than did the old Romanesque churches. They went as far as they could, throwing the buttresses outside to clear the inside, carrying the weight of the new vaults as vertically as possible to reduce the thickness of the walls and piercing them to the limit. If we compare the heavy, gloomy, early Romanesque churches with the latest gothic productions, for instance Beauvais and the Ste. Chapelle in Paris, it is easy to see what they were driving at and what they would have done had they had at their disposal new materials like steel and reinforced concrete.

I just spoke about the modern tendency in church architecture because it is one form of architecture which in our time is supposed to remain unchanged. I would now like to say something about the treatment of the home. Again in this field there is no such thing as new art, there is only the art of accommodating ourselves to the present civilization, an art which is the complement of our daily social life. When the architect Le Corbusier stated that a "house is a machine to live in," he did not mean that our houses should look like motors either inside or outside; but as in a machine and wherever space is very limited, every element must take its place according to its function. For reasons of

speed and saving of money the dwelling of the future may be an all-metal house turned out like automobiles, like Fords in the simplest cases or like "de luxe" cars for more ambitious schemes.

The technique of construction will introduce every known labor-saving device and utilize the newest methods. Only a few days would be required for the construction of such houses as they could be put together of standardized parts fabricated in distant factories before the basement or ordinary homes of the present could be completed.

These future houses would be stronger but at least ten times lighter than the actual dwelling. Their framing could be of steel or of some other stainless alloy. The hollow walls constituted of metal sheets or of some entirely new sheathing material with inside such an insulation as to make a three-inch thick exterior wall more effective against heat and cold than the usual wall of masonry.

The all-metal floors could be surfaced with fabricated sound-proof flooring—the large windows made of that special glass admitting the ultraviolet rays.

And now that living a secluded life is no longer smart a roof garden or terrace with play space for children would complete the layout and double the area occupied by the house. There a roof sun porch where one could enjoy sun or shadow would afford more privacy than one on the ground without cutting off the sun from any room in the house.

Our technical progress in mechanical equipment of buildings will soon have reached that stage when the process of living will be independent of heat and cold. At the present time the place of the refrigerator is in the kitchen, but we can foresee the time when extremes in climates will be corrected and regulated as easily as our clocks and watches. We should get the maximum of efficiency in our furniture, bearing in mind the saving of space and money. Particularly where the question of money is of importance we should have standardized furniture in order to get different solutions of planning for a room which is to be used for different purposes.

There should be no fixed partitions or as few as possible and whatever there are should be movable, every person arranging his own house according to his needs and his taste. All that being taken care of, there is no reason why a more individual atmosphere should not be added, for instance by the selection of a colour scheme for the walls, curtains and carpets, by the colour of the furniture and by the very important arrangement of the lighting fixtures or direct lighting from the windows. Every person could then create an interior perfectly suitable to his own desires. In lighting there is, of course, the arrangement of fixtures before or after the building, but light from the start should be a very important element of decoration and atmosphere.

Of late there has been a tendency to introduce metal furniture, tables, chairs, desks, etc., entirely or partly made of metal. These are perfectly logical and well in keeping with our metal age. At the present time such furniture is still more costly than

wood furniture as its manufacture has not yet reached the stage of mass production that it eventually will. If each line of a metal piece of furniture is not perfectly logical it is absurd, but if each detail answers a practical requirement it is a source of pleasure. A beautiful piece of metal furniture should please our intelligence as much as a well conceived and ingenious engine. Strength and lightness can be obtained within a small volume. A light metal chair does not mind the 220 pounds of a big fellow sitting on it. Cushions and straps can often be taken apart and easily cleaned or washed. This will suffice to show you that personally I think metal furniture very suitable in most cases.

To close my remarks on the treatment of interiors I would add that the tendency is now to decorate without ornament and that it is possible to furnish a room more richly by doing away with some of its furniture.

While I intend to remain in the domain of architecture it seems difficult, particularly as I am a painter as well as an architect, not to say a few words about the modern movement in painting, especially decorative painting and sculpture in relation to modern architecture. There is in fact no dividing line between architecture, decoration and applied arts, the latter being links between daily life and the fine arts. It would be impossible to attempt, in a short lecture, a complete analysis of the modern movement in painting. That alone would require a series of lectures, but what I would like to connect with architecture and particularly with decorative painting is the influence of cubism on the movement. The impressionist movement was a result of discoveries in optics, of the decomposition of light. Impressionist painters expected to achieve the impossible feat of transferring light directly into their canvasses. This school, which at the beginning was a reaction against Romanticism and naturalism, finally sank into an excessive naturalism, shutting itself up in a formula. Nothing but a false and conventional atmosphere remained on the canvasses, the result was just as far from nature after all as the old classical formula was; forms destroyed by light did not exist any more and the reaction happened once more.

The laws of creation and organization in art and nature are of the same order: unity in diversity; but nature and art oppose each other as art should be a unity created by man's powers and not by nature. The more art creations have given themselves to imitation, the further they have diverged from art. The best music, for instance, is not the imitation of noises but the creation of harmonies based purely on mathematics and sensations, and if painting was only imitation of nature the most beautiful painting would be what a mirror would reflect of a scenery.

Cézanne—who said that all forms in nature are composed of cylinders, spheres, cones—meant, in that symbolical way of expressing his idea, that

such were the last appearances that forms tend to adopt in an abstract universe. But he himself never crossed the boundaries of ideal forms. He certainly gave the impression of copying nature, but in front of nature he could simplify and abstract up to the limit of remaining uniquely a painter. His idea was that the object and the surrounding world should be structurally related to each other; but he was a primitive who pointed the way and let his followers carry his principles further on.

Then came the Cubist movement, a movement of very great importance which had a tremendous influence on modern painting. It was a revolution, a complete turning away from the lasting influence of the Renaissance. It was first a great intellectual movement, a search for absolutism in art which was the consequence of a century of philosophical analysis. At the same time the discoveries in optics, the progress of photography and of moving pictures took definitely away its objective meaning from painting. It was no use for the painter to try anymore to compete with the camera. Painting was liberated from its mercenary aim, free at last to be a medium for intellectual expressionism only. Painting with the cubist is an expression of thought in a plastic medium which has nothing to do with naturalistic deception. It accepts but two dimensions, and its laws of structure and equilibrium between forms and colors are the very laws of mural or decorative painting.

Architectural sculpture has a definite purpose, it is an adjunct to architecture. The sculpture which is separated from its building and stands isolated may be interesting in itself for other reasons than that for which it was done, but it becomes entirely meaningless as a decorative piece of sculpture.

Modern sculpture is sometimes purely abstract architectural sculpture in which surfaces, forms, light and materials are used as plastic substances without any subordination to a realistic representation of nature, they give a feeling of rhythm and beauty. When sculpture uses realistic representation of nature, the human figure generally, nature must remain entirely subdued to the general discipline of the composition.

In bas-reliefs first consideration must be given to the relation between the void spaces and the solid ones. It must be first an interesting pattern adding interest only by the play of light and shadow to the surface which is to be decorated. Reliefs must be calculated in relation with the scale, the direction of light and the material used, as it is evident that light does not play in the same manner on marble, stone or other material and that if the painter plays with his own made light that is not true for the sculptor. Then it could remain an abstract design, but if naturalistic representation is wanted and submitted to the discipline as above stated the result will be a piece of sculpture with all the architectural qualities of a purely abstract design well organized with, in addition, all the sensitiveness and charm that introduction of human elements can give to a work of art.

The New Restaurant in the T. Eaton Company Building, Montreal

ROSS AND MACDONALD, *Architects*

JACQUES CARLU, *Associate Architect*

THE new restaurant in the T. Eaton Company's Store in Montreal has, since it was opened to the public in the latter part of January, attracted a great deal of attention, due, perhaps, to the modern spirit which seems to permeate the whole of the

from the elevator halls on the Victoria and University Street sides of the building. This foyer is 57 feet long by 36 feet wide. The elevator halls have been treated as long arcades in which have been placed display windows inserted in white metal and



ENTRANCE HALL TO FOYER

interior and its appointments. Like many other large organizations, the T. Eaton Company has endeavoured to follow the modern trend in architectural design, and having expressed a desire to have the new restaurant designed in a like manner, the architects were expected to create a modern atmosphere throughout the entire area of the restaurant floor. The illustrations shown in the accompanying article demonstrate very clearly the satisfactory results obtained.

DESCRIPTION OF THE RESTAURANT

The dining room is located on the ninth floor of the store and is reached through a foyer leading

framed in French marble. The purpose of these display windows on the restaurant floor is to give it a slight commercial touch and discreetly remind the visitor that he is still within the walls of a department store.

The entire outside wall of the foyer has been treated so as to leave as much window space as possible to allow the play of sunlight on the delicate colour scheme of the room. The foyer, which has a parquetry floor of walnut and oak, has been furnished in such a manner as to serve as a tea room or lounge. The furniture is of very simple design with the colour scheme of the upholstery in striking



THE MAIN DINING ROOM



DETAIL OF END BAY IN MAIN DINING ROOM



ALCOVE IN FOYER



THE FOYER



NORTH AISLE OF DINING ROOM



ALCOVE OFF MAIN DINING ROOM

harmony with the black satinwood of the frames. The tea tables have clear glass tops resting on blades of white metal, and there is also a central table of large dimensions supported by legs of glass in which light has been placed so as to illuminate the vases of Austrian glass. A wide open niche ornamented with vertical mirrors connects the foyer with the main dining room through doors of white metal.

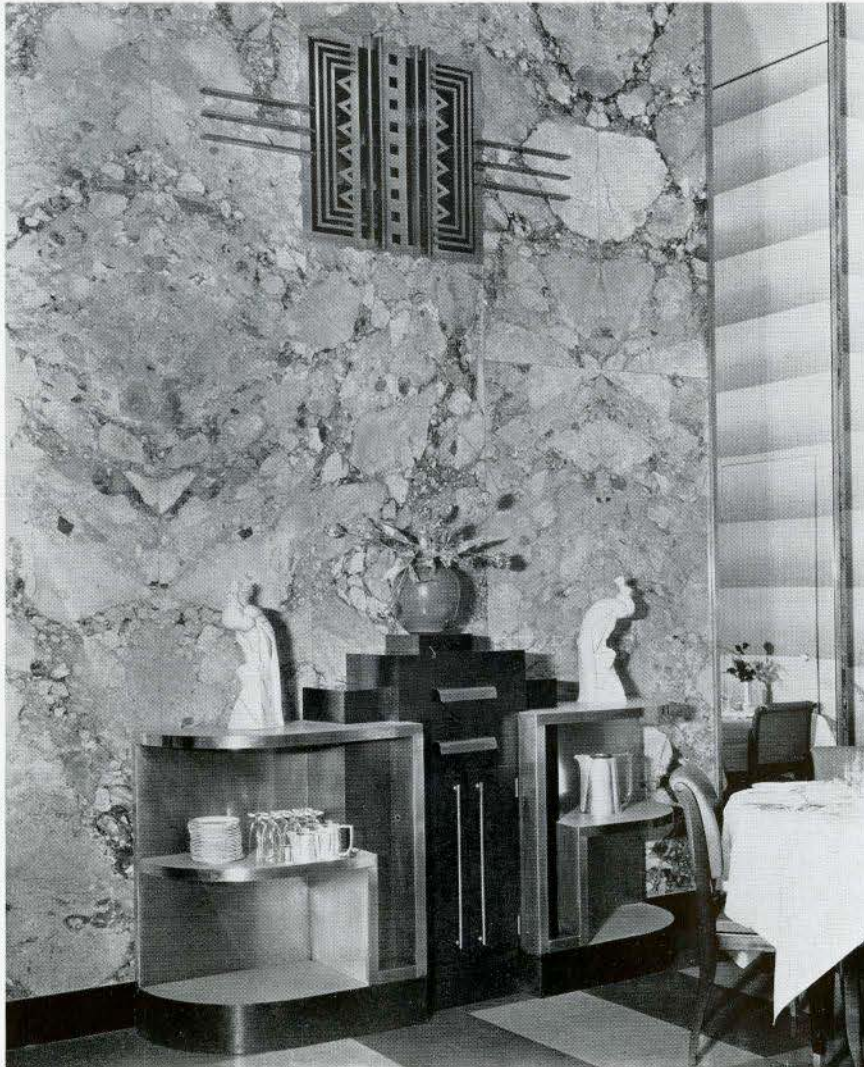
The main dining room is of imposing proportions, being 131 feet long, 75 feet 6 inches wide and 35 feet high. It is in the form of a huge nave presenting in its central portion a clerestory admitting a natural and artificial light controlled through windows of opal glass. The decorative scheme is ultra-modern in its simplicity, colour and blending of materials. The aisles which run on both sides of the "nave" are partly raised on a platform separated from the central part of the room by a balustrade of white metal. The walls are covered with a French fabric horizontally striped in colours of beige and pink. The ceilings of the aisles are pierced with circular domes artificially lighted, the reflection from which lends a soft tone to the general colour scheme. The central part of the room is surrounded by a series of columns of Escalette French marble, pink and soft grey in colour, supporting the clerestory. The lintels between the

columns are decorated with bas-reliefs in an unusual pattern of harmonious colours. At either end of the dining room is a black marble illuminated fountain above which is a long mural painting in black, silver-grey and pink, executed by Natacha Carlu, wife of Prof. Jacques Carlu. The collaboration of the painter and architect is very noticeable, for, although the murals are prominently located, they are not conspicuous as they are in perfect harmony with the interior treatment of the room.

The ceiling and the remainder of the walls are decorated in neutral tones, while the floor is tiled in several shades of rubberized linoleum. With the exception of the cylindrical-shaded lights on the columns, all lighting is indirect.

The main restaurant will seat over five hundred people and in addition there are two private dining rooms with accommodation for about forty people in each. These private dining rooms have been treated in a simple manner with black glass, white metal and modern fabrics.

In order to secure perfect harmony, everything about the restaurant, including the furniture, decoration and lighting fixtures, has been executed from designs prepared by Professor Jacques Carlu in association with the architects for the building, Messrs. Ross and Macdonald.



A DETAIL IN THE MAIN DINING ROOM

The New Interest in Architecture*

(A Layman's Viewpoint of Modern Architecture)

BY E. H. BLAKE

THE prospect of addressing you tonight has filled me with more and more apprehension as the time drew near, and as I began to realize that the subject upon which I had undertaken to speak was not only a technical one, but one also that presented possibilities of an extremely contentious treatment.

Two weeks ago in this room Professor Carlu expounded to an audience, apparently largely in agreement with him, the extreme theory of the modern architecture; and as I listened to him I realized with some dismay that nearly everything I had in mind to say tonight lay in direct opposition to the theories and the standards of criticism which he, with so much authority, presented to us.

Well, in the face of Monsieur Carlu's authority, I have decided to stick to the line that originally suggested itself to me; and meanwhile I have sought what comfort I could in the reflection, cherished, I believe, by laymen the world over, that no one is so competent as themselves to grapple with the intricate problem of architectural criticism. Our views on some of the other arts—on painting and music, for instance—may not always be quite precise; but in the case of such familiar objects as buildings, we are most of us ready to demonstrate with confidence our enthusiasms and our prejudices. We may not know the difference between plinths and pediments; but we do know, and with an instinctive certainty of its merit, we *do* know what we like.

We, the general public, have good reason, however, to consider ourselves interested in matters of architecture. It is the one art that constantly confronts us without choice; it is the one art that works in the medium of the bare, every-day necessities of life; and it is the one art which, in its aspect of town-planning, exercises a momentous influence not only upon the amenities, but also upon the health, and even the safety of the community as a whole. The vast extension of steel construction in recent years has produced a startling acceleration in the process of urban hiving; and now that the motor-car has added its complication of traffic to the congestion produced by the skyscraper, architecture and its off-shoot town-planning, have become, more than ever, a matter of vital public concern.

This revival of public interest is accompanied, and no doubt stimulated, by the dispute which rages today in almost every civilized country over the form of architectural design. The struggle centres, of course, around the question of the style most suitable to the new materials of steel and ferro-concrete. On the one hand, the moderns insist that these materials, having produced something like a revolution in architectural practice, demand a form expressive of themselves and of the mechanical age that has produced them—a form stark and geometrical, unweakened by the outworn decorations of the past. On the other hand,

the more formal practitioners of architecture, while admitting the inappropriateness of dressing the new materials exactly in the old styles, complete with every detail of classical convention or gothic ornament, do still assure us that the forms and motives of the past can be developed and adapted to meet the new facts of construction, and that, only so, can the tradition of fine building be preserved.

In this new battle of the styles, the exponents of the extreme modern view are decidedly the more aggressive. They have devised a theory which, if not novel, is, at any rate, plausible; and in their practice they display a spectacular quality that at least commands attention. In France and Germany, they enjoy a wide measure of support among our old friends the *intelligentsia*. In the United States, where their experiments in building are more restrained, their success lies chiefly in having created a popular demand for the so-called modern style of interior decoration. Modern lighting fixtures, modern carpets, modern furniture, modern ash trays, are now the subject of mass production, and confront us everywhere in the form usually of geometrical patterns of varying degrees of pleasantness. In the field of contemporary journalism and amateur criticism, the modern attitude is almost everywhere predominant. Even when its more extravagant products are not applauded, its theories are generally accepted as the bases of architectural value.

In the midst of this world-wide interest in the new architecture, it must strike us as curious that this exhibition presents so few examples of buildings actually executed in anything that might be described as the thorough modern manner. We can, of course, find frequent suggestions of the modern influence; but these are confined usually to features of a decorative character; and we can, with one or two exceptions, search in vain for a building conceived and actually carried out in accordance with the strict theory of the extreme modern school. In this respect, I should think that this exhibition must be unique among contemporary exhibitions of a similar range; and its barrenness in modern work must prompt some searching questions. Does it mean that our architecture in Ontario is a poor, provincial thing, trivial and derivative, untouched as yet by the spirit of the new age? Does it mean that we are denying the epoch of machinery in which we live, and producing worthless, insignificant buildings that not only fail to reflect, but actually attempt to disguise the civilization of our time? Does it mean that our architects, content with plagiarism, are burying their brains as well as their buildings under the accumulated rubbish of the past?

To questions like these, anyone who believes in the complete theory of the new architecture must respond with an emphatic affirmative; and I could not help feeling, the other night, that Professor Carlu's lecture really constituted a denunciation, polite of course, and probably not deliberate, of

*Lecture delivered by Mr. Blake on March 2nd, 1931, at the Art Gallery of Toronto during the Toronto Chapter Exhibition of Architecture and Allied Arts.

the work which he saw around him. If he did not directly condemn, he at least stated, with full conviction, the theory that implicitly condemns almost everything we see on these walls. One open criticism, from the modern point of view, has, however, been recently delivered, not actually against this exhibition, but against the architectural section of the Royal Canadian Academy, which included many of the photographs here exhibited. "This collection," wrote a reviewer in the Canadian Forum, "only served to accentuate the fact that there was no architecture for which the various exhibitors were responsible which could cause any sort of pride to anyone."

Applying equally to the present exhibition, this criticism, harsh as it may sound, is really but a faint echo of the truculent abuse with which architects working, however independently, in the traditional manner are assailed by the modern school, and particularly by its high priest Monsieur Le Corbusier. A skilful pamphleteer, as well as a practitioner in the modern manner, Corbusier is the recognized exponent of the modern theory; and it was to the authority of his writings (many of which have been translated into English) that Professor Carlu referred frequently the other night. Let me give you one or two of the more vigorous passages which Professor Carlu refrained from quoting. "Our architects," says Corbusier (meaning, of course, those of the traditional school),

"Our architects are disillusioned and unemphatic, boastful or peevish. This is because there will soon be nothing more for them to do. We no longer have the money to erect historical souvenirs. At the same time we have got to wash."

Again he writes,

"There exists in France a great national school of architecture, and there are in every country, architectural schools of various kinds to mystify young minds and teach them dissimulation and the obsequiousness of the toady."

In short, the architect of today who does not acknowledge the modern theory is a timid, poor-spirited copyist, even a deceitful pedant, absorbed in outworn tricks and discreditable devices.

But before we allow ourselves to be drawn into the contest on either side, let us scrutinize a little more closely the theory that provokes so much interest and so much rancour. We know that the moderns claim that steel and concrete demand new and expressive forms; but what rules do they lay down for achieving these forms? What is it that constitutes, in the modern view, fine architecture? The answers, given by the principal exponents of the cult, by Corbusier in France and Erich Mendelsohn in Germany, may be formulated in three simple axioms.

First: That architecture, to be good, must be straightforward, logical and truthful. The *appearance* of a building must correspond with the *facts* of its construction. Good building must reveal the mechanical laws upon which its structure depends. Everything that conceals or disguises the real structure, such as classical ornamentation on a steel building, is false, ugly, and architecturally vicious.

Secondly: That architecture, to be good, must be not only straightforward and truthful, but also

economical in structure, and exactly appropriate to the purpose for which it is to be used. There must be no waste either in materials or decoration. The building that is functionally perfect (that is, economical and practical) is bound to be, in the modern view, artistically satisfying.

Thirdly (and this is really only a guide to the application of the two preceding axioms): That, in the modern world of machinery, we must learn the practice of structural truth and structural economy not from the traditional schools of architecture, but from the engineer—the engineer who, says Corbusier, "inspired by the law of economy, and governed by mathematical calculation, puts us in accord with universal law." And in consequence of this engineering inspiration, all good building will assume mechanical forms. "We claim," says Corbusier, "in the name of the steamship, of the aeroplane, and of the motor-car, the right to health, logic, daring, harmony, perfection."

Other axioms, sometimes conflicting, may be deduced from the writings of Corbusier and Mendelsohn, but these contain the essence of the modern theory—structural truth, structural utility, and mechanical inspiration.

Now let us look at a few examples of industrial building, given by Corbusier as conforming to these requirements, and described by him as examples of the engineer's aesthetic, that is, fine building resulting from the application of engineering practice. All of the examples that I am about to show are taken from Corbusier's principal book *Towards a New Architecture*. [There followed a group of six lantern slides which included a steel bridge, a concrete factory, and a number of Canadian and American grain elevators].

Taken as a whole, this group of slides shows that the mechanical inspiration is not invariably a happy one. If, in their bareness and gauntness, these industrial buildings are less objectionable than their decorated predecessors of the Victorian age; none of them (in spite of Corbusier's protestations) reveals the *coherence of design* that is the real stamp of architecture. But industrial building is, at best, a difficult and unattractive medium; so let us turn to the more congenial field of domestic work, and see what the mechanical theory of architecture makes of the dwelling house.

"The house," says Corbusier, "is a machine for living in." It should be, above all things, convenient, economical, bright, airy and healthy. Its most important room, with the best exposure, should be the bath room. The mechanical arrangements for heating, plumbing, electric lighting, and so forth, should *reveal* and not disguise themselves; for, apart from economy, the exposure of them will convey, to the modern mechanical mind, functional beauty. Decoration must, in fact, be entirely functional; we must turn our backs on the past, and apply equally to our domestic architecture the forms of engineering and the methods of mass-production. The new materials of steel and concrete, plate glass and nickel, rubber and synthetic floor-coverings, enable us and, in fact, compel us to adopt the distinctively modern, mechanical forms derived from the steamship and the motor-car. In short, say the modern school, it is only by making use of the new materials for building and decoration, in forms distinctively mechanical, that we can achieve a domestic architecture, consonant

with modern ideas of hygiene, and satisfactory to the modern intelligence. "Our old houses," declares Corbusier, "are like old coaches filled with tuberculosis."

Here, too, according to the modern precepts, the claims of utility should be paramount. Mouldings and cornices collect dust; the surfaces of all walls and doors must accordingly be smooth and flat. The windows of our houses should be unobstructed areas of plate glass, preferably uncurtained, and should operate by means of the same ingenious device as the windows of our motor-cars. Floors should be of some smooth, synthetic material, unencumbered by dust-collecting rugs. Open grates, unless they are electrified, are dismissed as abominations of dirt and labour. Furniture should, so far as possible, be built into the walls. Such of it as *must* remain in the open should be of smooth surface—some recommend the laminated woods and veneers favoured by the French and American schools—some insist on the metal of the German school, with plate glass for table tops. Everything, in short, not merely designed for utility, but utility dictating the form of everything; and so again, according to the moderns, beauty will be achieved. [A group of fifteen lantern slides followed, commencing with a view of the deck of an ocean liner. The balance of the slides consisted of views of domestic exteriors and interiors, many of them executed by Corbusier, Jeanneret, Bourgeois and Duncan Grant, and providing examples of modern work of the extreme school in Germany, France, Holland, England and North America].

In this group of slides I have tried to give an idea of the pure, modern domestic style in its different varieties. You will have noticed that it is almost entirely an urban style. Mechanical architecture does not yet seem to have adapted itself to the country-side. But in whatever surroundings they may be built, it is difficult to conceive of anybody wanting to live in houses like these, except the advance guard of the modern movement itself, and even they will probably sicken of them before long, just as their predecessors sickened of the naturalistic forms and the built-in inglenooks of the *art nouveau* of the nineties. We may all of us be in revolt against the stuffy over-decoration and the distracting gimcracks of the Victorian age, but we still want books and pictures; we still want colour and pattern. And we want, too, the privacy that can only be got from the use of curtains; and the quiet that can only be got from the use of rugs—and from plumbing that is both thoroughly concealed and insulated. We do not find in concrete a suitable or pleasant material for domestic building; and we fail to see that a steamer's superstructure presents the most appropriate or even the most healthy model for an urban dwelling. In fact we seem to remember having heard that steamers are extremely unhealthy places for those who have to spend their lives working in them; like the old coaches, they are filled with tuberculosis. We do not believe that the replica of an operating theatre constitutes the ideal room for eating our meals in, or for the entertainment of our friends; or that our bedrooms are most attractive when modelled on the semi-private wards of a hospital. We may as well even confess that we like the association with the past that is suggested by old forms, however severe and simplified, both in building and in furniture.

Now I believe that, in this prejudice against the logical creations of modern architecture, and in this preference for traditional forms, we, the general public, and our architects here in Ontario, who apparently agree with us, are right—*actually theoretically right*; for I am convinced that in its extreme form, in the strident, sensational form of Corbusier and Jeanneret, of Mendelsohn and Bourgeois, the theory of modern architecture is a false theory, buttressed by false analogies. Of the steamship and the motor-car in their relation to building we need say no more; but I believe that the two more plausible axioms of the modern doctrine, the axioms of structural truth and structural utility, are, when taken in isolation, equally false. Function, we remember—in the view of the moderns—function combined with materials, not only determines form, but discovers beauty. Let the concrete column be adequate and only adequate to its load, let the steel beam reveal its stress, and utility and beauty are at once achieved. Now here, I believe, is a disastrous confusion; a confusion resulting from the identification of bare material construction with the other and more important aspect of architecture which is composition and design; and this confusion cannot be better pointed out than by one of Corbusier's own comments that runs counter to his whole argument. "The purpose of construction," he says in an aside, "is to make things hold together, of architecture to move us."

That is, in fact, the primary purpose of architecture; and the essential error of the modern theory lies partly in neglecting and partly in distorting the very means by which this purpose can be accomplished. "Well-Building," runs an old definition of architecture, "hath three conditions, Commodity, Firmness, and Delight." To neglect any of them, and particularly the last, is to deprive architecture of its complete realization; to amplify the two first (the structural conditions of Commodity and Firmness) into the doctrines of structural truth and structural utility is actually fatal. Often, it is true, there does occur a happy coincidence between composition and utility; but great architecture *has* to have the freedom, in pursuit of design, to utilize expedients that are not only occasionally uneconomical, but even sometimes structurally deceptive. Are the Doric columns of the Acropolis, which M. Le Corbusier in his traditional moments so much admires, adequate only to their task? No. They are excessive, excessively wasteful. Is Michael Angelo's dome of St. Peter's truthful, straightforward construction? It is not. To contain the thrust occasioned by its imposing height, it requires a series of six great chains concealed in the masonry of the drum. Do the side buttresses of St. Paul's reveal their function? They do not; because Wren, in pursuit of a great design, deliberately concealed them behind a false façade. Yet the Greek Temples would look grotesque with entablatures supported on spidery columns merely adequate to their purpose, like Corbusier's City on Wings; St. Paul's, with its buttresses all exposed, would be the sad skeleton of its full magnificence; and St. Peter's, with a squat self-sufficing dome, would be a squat, disproportioned church. And so we could run through many of the great monuments of architecture until we came at last to one of our own skyscrapers, and wondered why the logic of steel construction and the demands of utility were not exemplified in a

ground floor free of the usual unnecessary masonry, and filled completely, from steel girder to steel girder, with plate glass for shop windows. It is because, of course, the towering mass above would *appear* to have no support; the building would *look* top-heavy, and would move us, not agreeably, but in a most disagreeable, unnatural way.

And this, I think, brings us to the central weakness of the architecture of the modern school. In so far as it actually achieves mechanical inspiration, in so far as it fulfils completely its own structural axioms, it is unnatural and unhuman. Architecture is not mere engineering, and its aesthetic results flow, not from mechanical forms and exact utility, but from a relation, recognized by the great masters of the Renaissance, between building and the human form. *That* is what moves us; not the modern colossal embodiment of mechanics. It is the human scale, the human sense of proportion, the reference to building, however vast, of agreeable human sensations, it is these that constitute the condition of delight in architecture. And in the creation of this human scale, this human reference, another element denounced by the moderns plays an indispensable part—the element of decoration. Decoration assists the artist to secure that human control over all the elements of a design that is essential to good composition. This, far more than a mere desire for ornamentation, is the underlying reason for the cornices, the mouldings, and the pilasters of classical decoration. It is considerations such as these, not the calculations of engineering, that secure the human reference, and make architecture what common-sense has always known it to be, an art, the foremost of the plastic arts.

Architecture is also, in the same sense as is literature, a traditional art. It is a continuing and ever-developing process that has its roots in history and custom, in climate and country. To-day it is the fashion to talk of a revolution in architecture. There can no more be a revolution in architecture than there can be a revolution in literature, though we hear of that, too. What *has* occurred, in the case of building, is something like a revolution in methods of construction. There has been a tremendous extension of the medium in which architecture works; and architects in every country today are confronted afresh with the age-old problem of subduing new methods of construction and new materials to the central purpose—of design. In this contest, old conventions are often being modified; old styles and familiar decorative motives are being re-treated and re-formed. But the best work of our day, work that is truly modern, is still informed by the living spirit of tradition; and composition, that is, the abstract disposition of material in coherent form, takes, as it always has taken in fine building, precedence over structure

and utility. Let me show you a few examples of this, the true modern architecture, taken largely from Scandinavian sources. [There followed a group of fifteen slides, which included views, some exterior and some interior, of the following buildings: Town Hall, Stockholm; The Market Hall, Delmenhorst; The Salzburg Festival Theatre; The Danish Shipowners Association, and the new Police Headquarters in Copenhagen, together with a number of industrial buildings. The group concluded with the three following examples from the current exhibition: the entrance of the Canada Permanent Building, the library of a residence, and the exterior of the Medical Arts Building].

These last three examples, taken from the work, so much of it beautiful, that we see around us on the walls of this room, should satisfy us, I think, that the recent products of architecture in Ontario do not suffer by comparison even with the best of contemporary work in Europe. Those who persist in seeing in this exhibition nothing but the derivative exercises of copyists are blinded by a false and misleading theory. That the keynote of this exhibition is traditional, we may, in fact, be thankful; for the prevailing tradition is the still-living one that our early colonial builders found so suitable to the climate, the customs, and the origins of this province. For nearly a century our Georgian tradition has been in partial eclipse, obscured in turn by the hideous exuberance of Victorian Gothic, by the ponderous importation of American Byzantine, and most recently, in domestic work, by the sterile extravagances of what can best be described as Rosedale Tudor. From this prolonged eclipse, the sensible, suitable Georgian tradition is now re-emerging in its modern form, adaptable and vital still, but because of its formal beauty, an object of dislike at once by the intelligentsia of modern architecture and by the self-styled home-builders of our jumbled, dejected suburbs.

Now I must conclude, and, in doing so, I wish to make an acknowledgment. Those of you who are familiar with the writings of the late Geoffrey Scott will have realized that the principal part of what I have attempted to do to-night consisted in applying to the modern mechanical theory of architecture the standards of criticism that he laid down, seventeen years ago, in his great essay *The Architecture of Humanism*. With that book Geoffrey Scott swept away the Victorian variations of the specious doctrines of structural truth and utility, and restored to English architectural criticism the artistic and traditional standard of the human reference. Now, once more, that standard is assailed by errors similar but still more extravagant. If it is valid and enduring, as I believe it is, this human, traditional standard is what will preserve the new interest in architecture from losing itself to-day in the maze of modern mechanism.

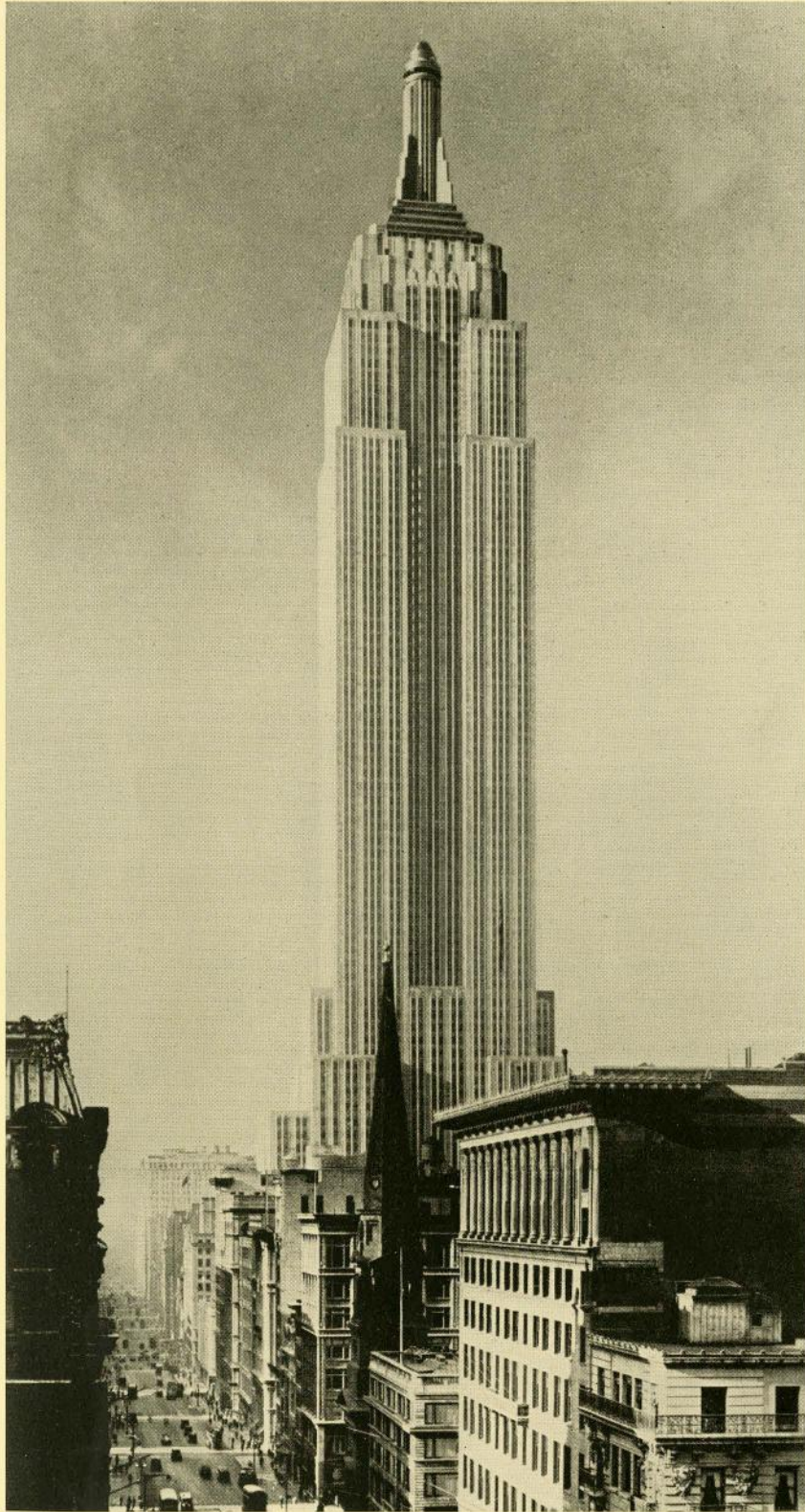


Photo: Hamilton M. Wright

THE EMPIRE STATE BUILDING, NEW YORK

Shreve, Lamb and Harmon, Architects

Awarded Medal of Honour in Architecture at the recent exhibition of the Architectural League of New York

(See Note on Page 209)



FIFTH AVENUE ENTRANCE, EMPIRE STATE BUILDING, NEW YORK
Shreve, Lamb and Harmon, Architects

Photo: Amemya



Photo: Hamilton M. Wright

THE CRANBROOK FOUNDATION—CRANBROOK, MICHIGAN

Eliel Saarinen, Architect

Awarded Medal of Honour in Architecture at the recent exhibition of the Architectural League of New York

(See Note on Page 209)



VICTORIA HOUSE, LONDON, ENGLAND
Charles W. Long, F.R.I.B.A., Architect
(See Note on Page 209)

The Chapel of St. Nicholas, Gipping, Suffolk

By PHILIP J. TURNER, F.R.I.B.A., F.R.A.I.C.

GIPPING, a small village situated about three miles from the town of Stowmarket in Suffolk, England, contains a remarkably interesting 15th century chapel. This building is a fine example of flint panel work or cut flint worked into the stone, of a type that is characteristic and typical of others in the eastern counties, where the cutting of flint has been for centuries a craft peculiar to this dis-

trict. Had the inscription read "Pray for the souls of, etc.," no such inference as the above would probably have been made. This inscription proves nothing moreover, one way or the other, except the probability that Sir James and his wife were living at the time when the words were cut in the stone. Sir James married Anne, daughter of Sir John Arundell of Lanherne, Cornwall.



GIPPING CHAPEL FROM SOUTH EAST

trict. On its exterior walls are to be found a wonderful collection of heraldic devices, rebuses, monograms, decorated panels, and other elaborate details in stone that make a study of this building one of more than usual interest.

The chapel was built by Sir James Tyrell, Knight Banneret about 1483, and it is dedicated to Almighty God, in honour of St. Nicholas. Contrary to common tradition there is nothing to prove that the chapel was erected in expiation of the crime he is said to have committed, namely that of superintending the murder of the Princes in the Tower which took place about the time the chapel was built. The inscription over the "Vestry" (Private Chapel) Door (see drawing. 2) "Pray for Sir James Tyrell and Dame Anne his wife" has served to keep alive, if it did not originate, the local tradition above referred to. This conclusion seems to be assuming a great deal however, although it is realised that it was not customary for a donor (and his wife) when living to ask for the prayers of their

In the "Memoirs of Sir James Tyrell" (Rev. W. H. Sewell) there is to be found an interesting story of the Tyrell family. The author of the article in question, who has devoted much study to the elucidation of the story regarding the murder of the Princes, and Sir James' connection with it, states positively that it is "utterly unworthy of serious consideration."

Sir James Tyrell, though he was executed in 1502 on a charge of treason in connection with his friendship with de la Pole, Earl of Suffolk, (rival to Henry VII), was certainly, up to the immediate close of his life, one of the ablest men of his day, and from both Richard II and Henry VII, he received the highest honours for his unrivalled services to his country and sovereigns.

The family of the Tyrells were for many centuries connected with the village of Gipping and one branch of this distinguished race was descended from the Tyrell who was responsible for the death of William Rufus in the New Forest. The father

of Sir James—William Tyrell—was Sheriff of Norfolk and Suffolk in 1446, and up to the end of the 19th century members of this ancient family were living at Gipping.

There is no doubt that the building was erected as a *private* chapel for the family who lived at the hall nearby, and that it has only been used as the village church during comparatively recent times. The "Mother Church" proper for Gipping was the parish church at Stowmarket in which is the Tyrell Chapel. The family have always been buried here and in the north aisle are to be seen memorials of the Tyrell family that go back for more than five hundred years.

The original building, it will be noted, is quite small, especially as it seems probable that the north "Vestry" (Chapel) was built a few years later than the nave and chancel. The tower, too, which is a badly built modern stucco addition, seems out of place. Probably erected in the last century, it was possibly added, one can imagine, to make the chapel "look more like a church!" In any case, it seems an excrescence, and one would imagine that a tower feature was never intended in the original design.

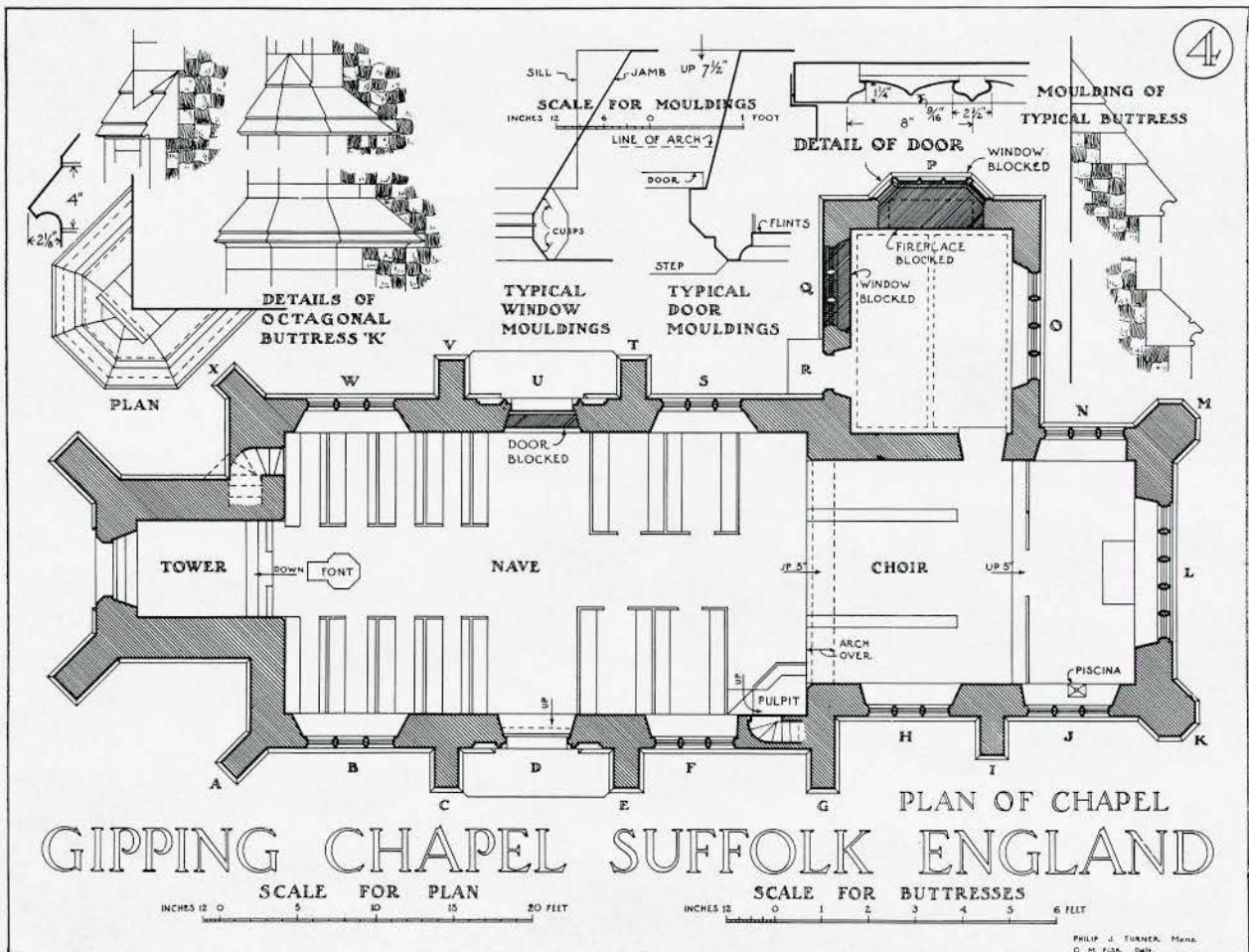
It will be noted that the interesting black and white diaper pattern of the wall surface suddenly terminates just above the springing of the roof (see photo of east end) and also in a similar position on the north gable of the "Vestry." From this fact,

and also for the reason that other similar buildings of this period were usually finished with flat roofs and parapet walls, one is led to the conclusion that the present pitch roofs are not as old as the rest of the building. Doubtless at one time the chapel was allowed to fall into a bad state of repair, and rather than restore the original battlemented parapets and flat lead roofs, which might have been a costly operation, it seems quite likely that the parapet walls were taken down and sloping tile-covered roofs were substituted and placed over the flat ceilings of the first roof.

That the original building was finished with a flat roof seems to be further confirmed from the fact that the ceilings of the chapel and vestry are of the usual shape of this period. Having arrived at this conclusion the author of this article has indicated on the elevation of the building by dotted lines, what might reasonably be inferred to be the outline of the original parapet walls. The building restored to this form, and with the tower out of the way, would have a much more satisfactory appearance than it has now with the projecting eaves.

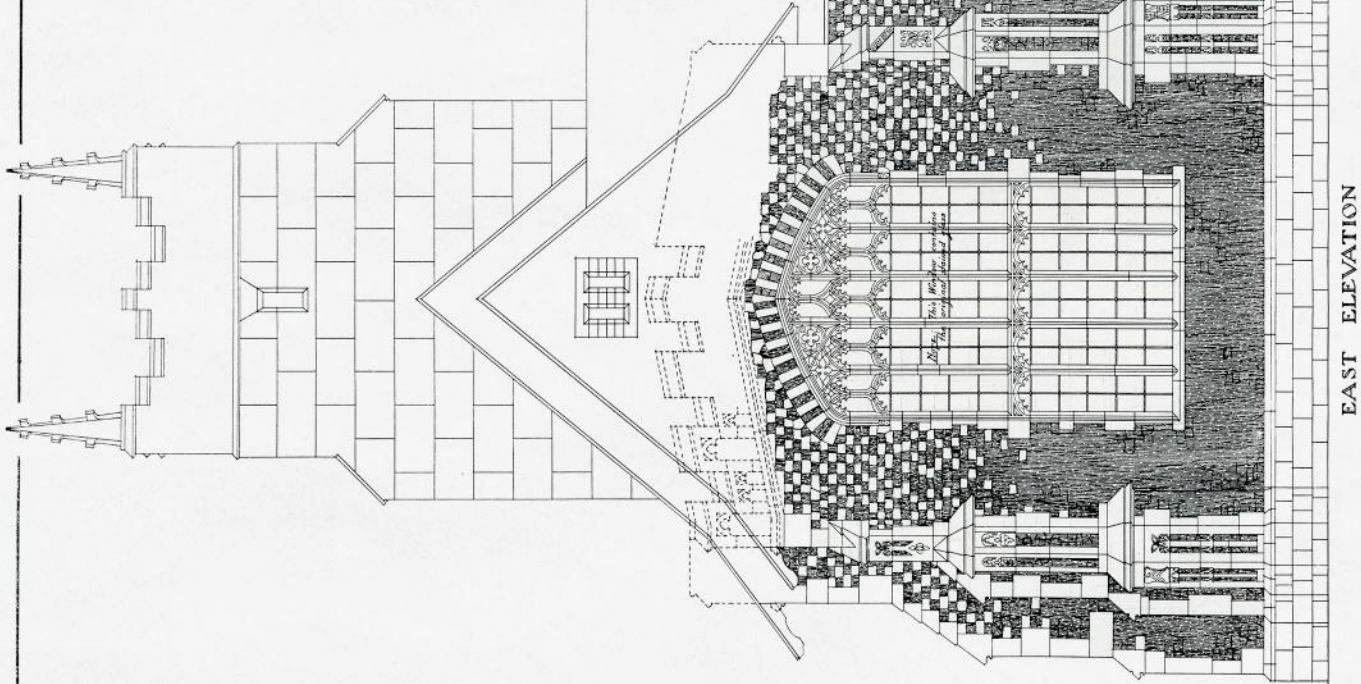
The main dimensions of the chapel are as follows:—

	Length	Breadth	Height in Centre
Nave.....	33 feet	18 feet	20 feet
Chancel.....	21 feet	14¼ feet	19½ feet
"Vestry" (Chapel)....	13¼ feet	10½ feet	19 feet

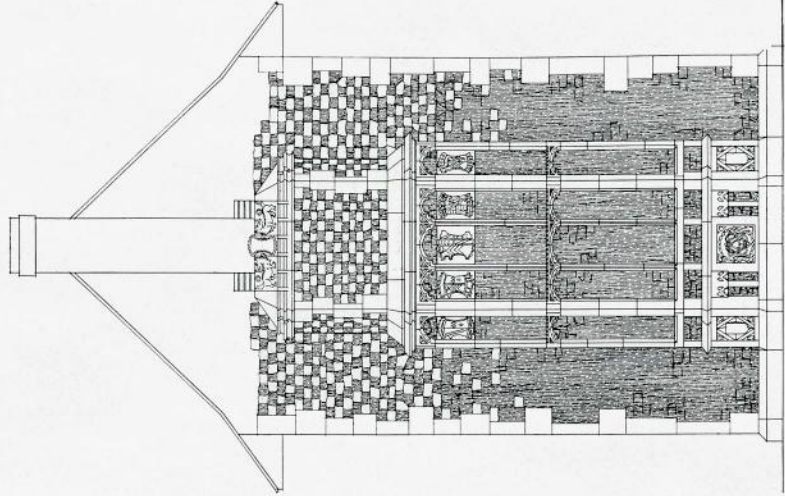


GIPPING CHAPEL
SUFFOLK ENGLAND

SCALE OF FEET
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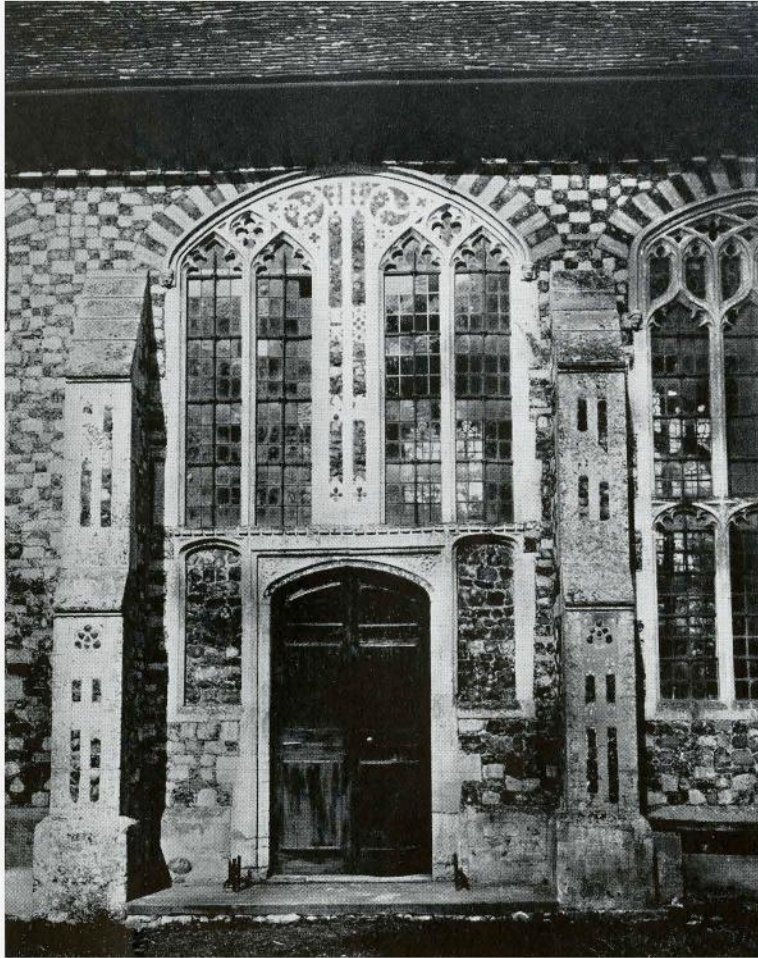


EAST ELEVATION



NORTH ELEVATION

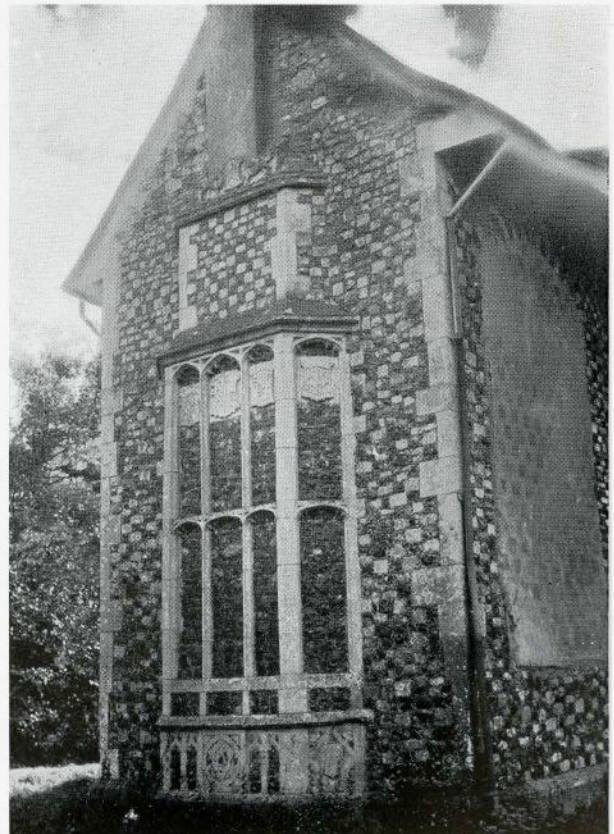
PHILIP J. THURNELL, M.A.S.A.
G. W. FIDLER, R.A.I.



SOUTH DOORWAY



EAST END



NORTH ORIEL WINDOW

The room on the north side, though now used as a vestry, was (in all probability) originally used for other purposes, perhaps as a private devotional chapel. The wall, west of the doorway leading from the chancel, bears traces of a former opening of some kind. This perhaps was a window like the

finely designed flint panel work in the base, with five excellent carved heraldic shields of the Tyrell family and connections in the upper panels of the bay. Surmounting the whole is the Tyrell shield with supporters (see details I). The coat of arms consists of two chevrons within a bordure en-

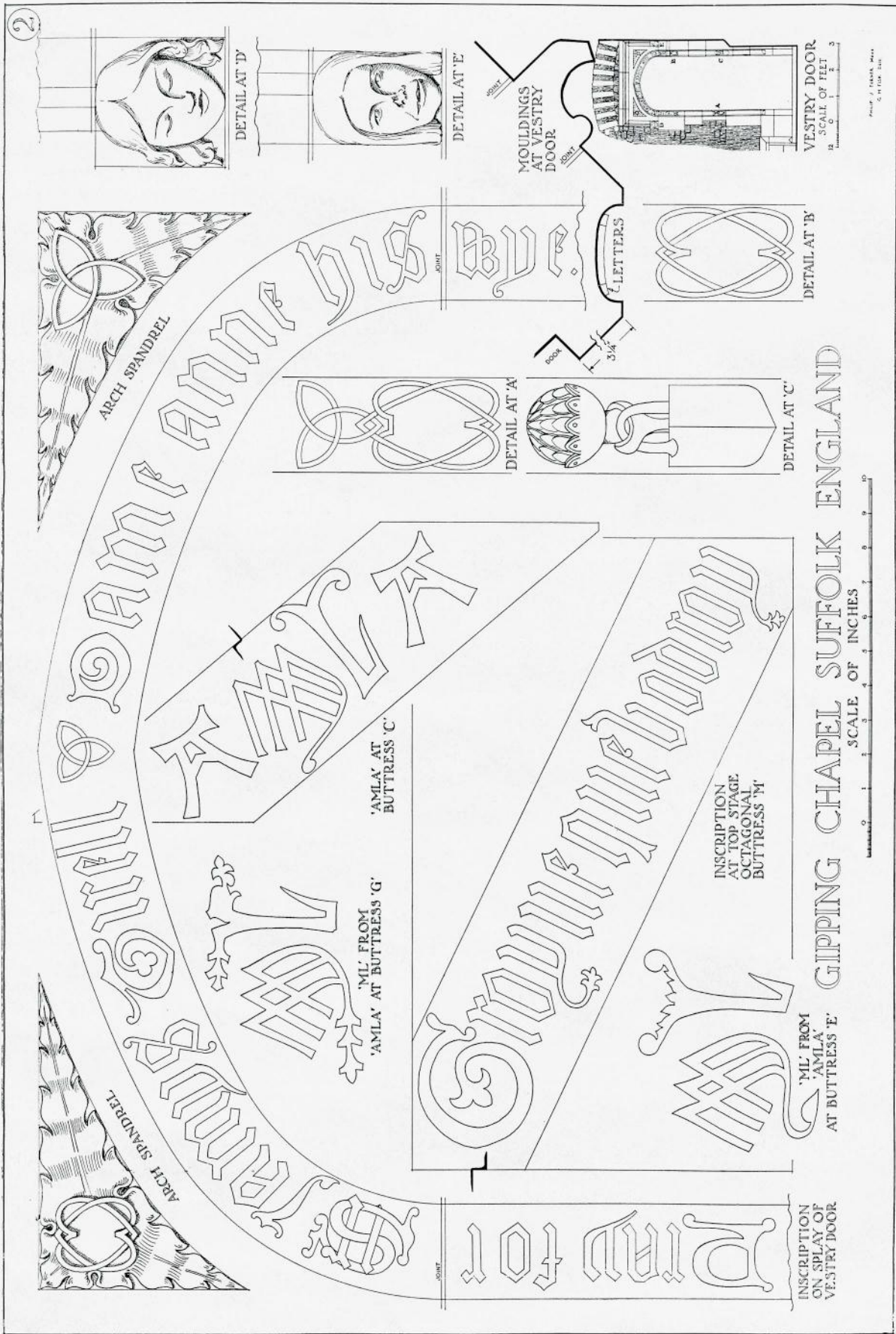


INTERIOR OF CHAPEL SHOWING ORIGINAL STAINED GLASS

one in the opposite wall of the chancel, or it may have been the original priest's door before the present north chapel was built.

The room contains a good fireplace (see drawing 3) uncovered only recently. It is an open question whether this interesting feature, so far as the exterior is concerned, was part of the original plan. The form is so much more that of a bay window of this period. In any case, the exterior has some

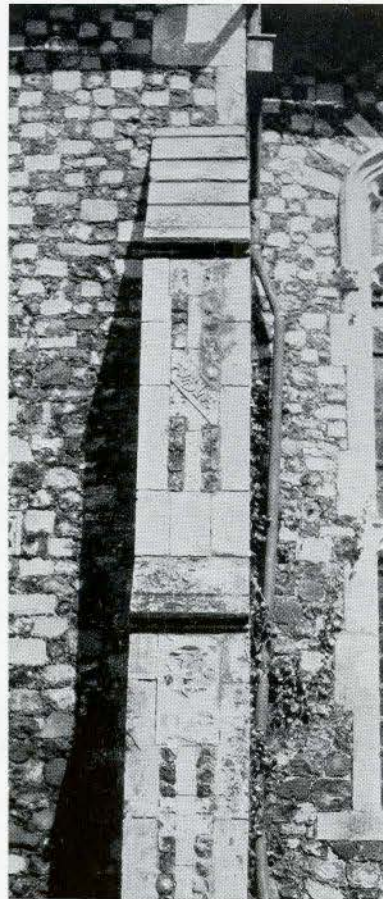
grailed, differenced with a martlet to denote 4th son. Supporters are two tigers passant regardant. It is to be noted that the dignity of Knight Banneret was originally conferred on such gentlemen as had signalised their valour in two royal battles and such knights were allowed to display their arms as barons did, and to bear arms with supporters as in this instance.



As will be seen from the detail drawings, there is repeated on the walls of Gipping Chapel, in a great many forms, the badge of Three Long Bows, borne by Tyrell. That this interlaced and endless knot was suggested by the assonance between Tyrell and the French Tirailleur and Tirailleur seems to be quite probable.

Occurring six times on the walls of nave and chancel in different places is the label "AMLA." The explanation of this inscription has puzzled archaeologists for a long time, and no sure interpretation of these letters has been reached to satisfy everyone. One writer asserts that the letters stand for "Ave Maria Laetare Alleluia," while another authority supposes them to be a Hebrew charm "Atar Melech Leonlau Adonai"—Thou (art) King for ever, O Lord.

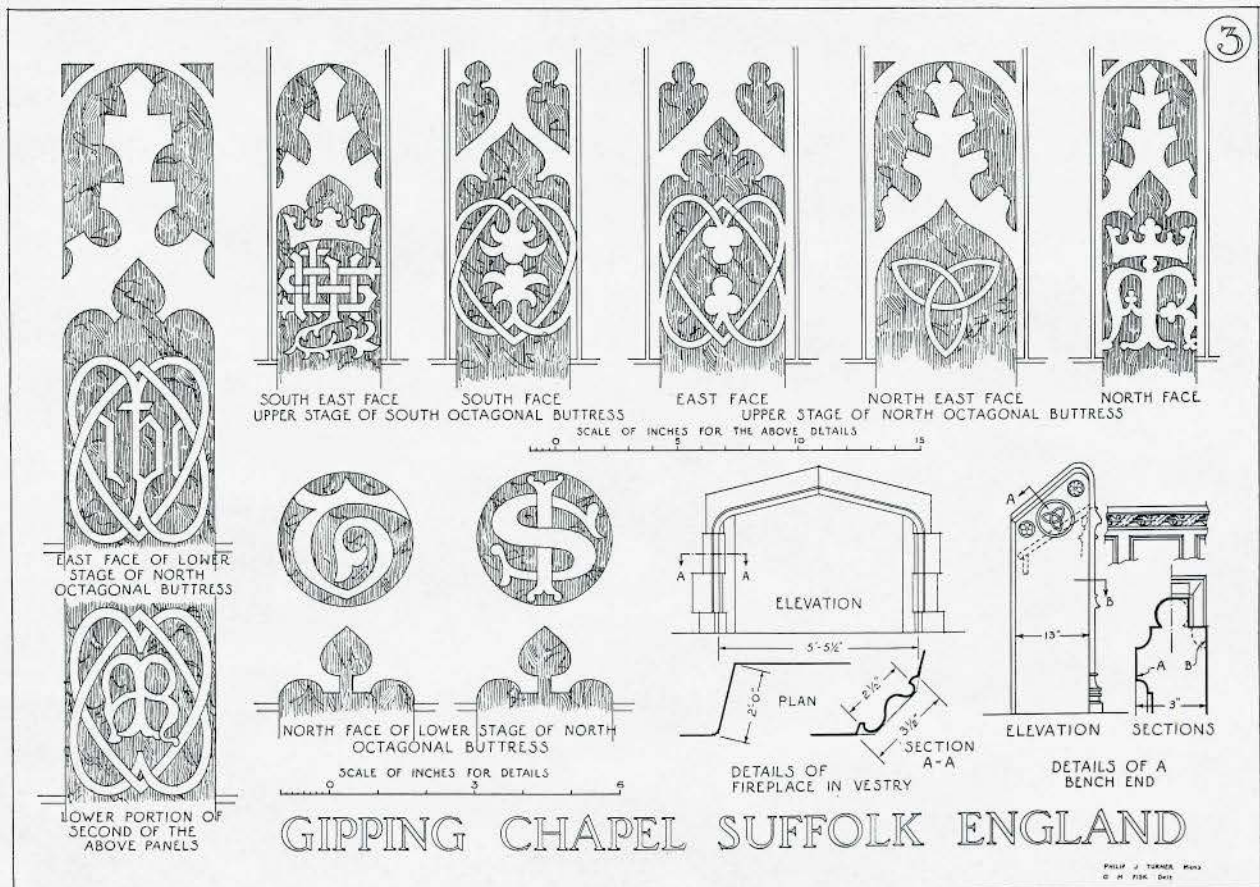
These two suggestions appear to be somewhat far fetched and as Rev. H. A. Harris suggests,



S. E. BUTTRESS AT ANGLE OF NAVE SHOWING POSITION OF MOTTO "AMLA"

the four letters may represent nothing more than a "posy" name, perhaps that of Sir James Tyrell's wife Anne. The letters in this label take on different and somewhat fantastic shapes, especially the letter "M" (see drawing 2 and photo of buttress C) but as the letter cannot be said to be crossed, it cannot particularly designate the Virgin Mary.

Among other inscriptions, monograms and devices scattered profusely about the flint work, which are of interest, is the old French motto—Groyne que Vodroy — "Let him complain who will." This may be found to be a motto of the Arundells. On the south buttress of the church is a shield bearing the Darcy arms—then there are the letters "I" and "T" entwined, which stand for Sir James Tyrell—the letter "A" in two hearts for Dame Anne—the letter "I" and "S" probably stand for James.



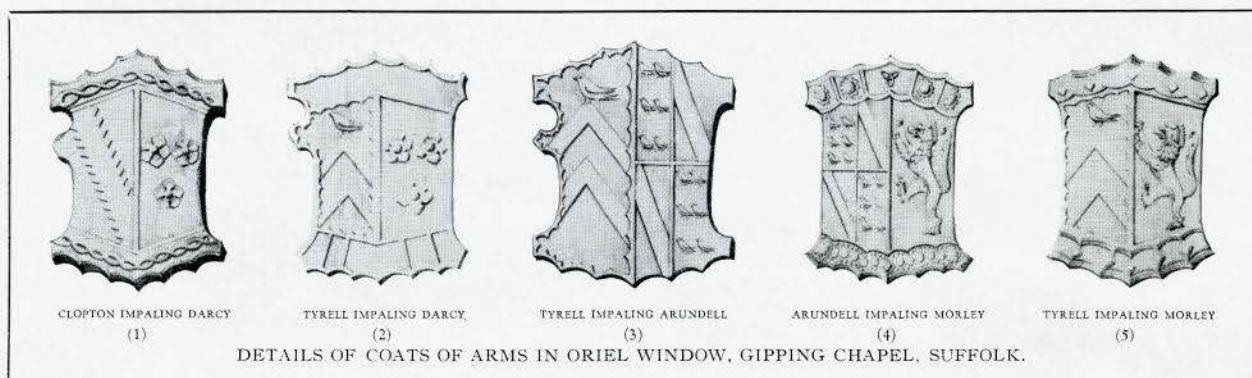
Also to be found is the sacred monogram for Jesus. Maria is represented by the letter "M" and a very elaborate monogram occurring once only, containing the Tyrell's knot or badge resembling the triquetra or semicircle entwined, combined with the letters "W" and "A." Several panels about the building show the interesting and evidently favourite device of the two hearts entwined around the Tyrell badge which also makes a good geometric design for the craftsmen who executed this work.

On the north side of nave over the door (which is blocked), in a wheel-like design, are the letters "G" and "T"—a monogram of "I" and "S" combined, and the letter "R." The interpretation of this cannot be stated satisfactorily, though one solution has been given as follows: "Gratias Tibi Jesu Reddo"—I return to thee Thanks, O Jesus.

held in the left hand. It is supposed to represent the Abbot of St. Osythe. In the third is the Blessed Virgin Mary. Fourth to the south a male figure weeping with a nimbus meant, no doubt, for the beloved disciple. In the fifth a female figure with long hair flowing down the back reading a book, perhaps intended for Dame Anne Tyrell. In the 2nd and 3rd and 5th of the lower lights the canopies are more or less perfect. The 3rd lower light represents a peacock's tail in a boar's mouth, which is the Tyrell crest. On one piece of glass the following words are scratched—Edmd Tyrell Patron: Richard Chilton Curate 1756.

The five shields on the exterior of the north bay have the following heraldic devices:—

- (1) Clopton impaling Darcy.
- (2) Tyrell impaling Darcy. Sir James' mother whose Christian name Margaret is to be seen



The interior of the building does not contain much that is of interest, though there is a little carving on one or two of the benches, including the Tyrell knot or badge. Three years ago a very diminutive stairs in the south wall was uncovered, this evidently lead to the rood screen at the entrance to the chancel.

At one time the glass of the east window must have been allowed to fall into bad repair, and fragments of it have been patched and put together with but little care as to its original design. The ten uppermost lights were once filled with angels holding shields with the emblems of the Passion of our Saviour.

On one of the shields are represented two bleeding hands, two bleeding feet and in the centre a bleeding heart. The most northern of the upper lights represents a body in plate armour of the 14th century—perhaps Sir James Tyrell. Second upper light represents an ecclesiastic reading from a book

among the fragments of glass in the east window.

- (3) Tyrell impaling Arundell. Quarterly: 1 and 4, Six swallows three, two, and one (Arundell); 2 and 3 A bend (Carminow).
- (4) Arundell (quartering Carminow) impaling Morley.
- (5) Tyrell impaling Morley. Sir James' Uncle and Aunt of Heron, Essex.

BIOGRAPHICAL NOTE

Sir James Tyrell, 4th son of William Tyrell, High Sheriff of Norfolk and Suffolk, 1446, and Margaret, daughter of Robert Darcy of Maldon, Essex (shield 2 on bay). James Tyrell was Knighted 1471, made a Knight Banneret 4th July, 1482, beheaded for (so called) treason 6th May, 1502.

He married Anne, daughter of John Arundell of Lanherne Co., Cornwall. They had two sons.

REFERENCES

- (a) Sir James Tyrell Chapel by Rev. W. H. Sewell, M.A., Yaxley, Suffolk (Journal of Royal Archaeological Institute, Vol. XXVIII, March, 1871).
- (b) Memoirs of Sir James Tyrell (Suffolk Institute of Archaeology, Vol. V, No. 2, 1878.)
- (c) History of Stowmarket (Hollingsworth.)
- (d) East Anglia Notes and Queries, I, 128.
- (e) Additional Manuscripts, 19106.

Note—As the existing south door is of much later date than the rest of the building, the author, in making his drawings, has shown the design of the present north door (blocked up) in the south doorway, as they were evidently both identical.

New York Architectural League Exhibition

The forty-sixth annual exhibition of the Architectural League of New York was held in the Grand Central Palace, Lexington Avenue, New York, from April 18th to April 25th. The usual exhibition, which is devoted to contemporary architecture, sculpture, landscape architecture and craftsmanship of American origin, was this year augmented by two outstanding foreign exhibits, the Swedish Architectural Exhibition and an exhibition of Mexican architecture and allied arts, both of which were full of interest.

Among the features of the show were a number of striking models, including one of the proposed Electrical Building for the Chicago World's Fair in 1933, showing the use of color in architecture.

Two gold medals for distinguished accomplishment in architecture were awarded this year instead of one as in former years; one of the awards going to Shreve, Lamb and Harmon, New York architects, "for the masterful treatment of an office

building as exemplified by the Empire State Building" (illustrated on pages 191 and 193). The other medal going to Eliel Saarinen, architect, of Birmingham, Mich., "for the distinguished quality of his work in the Cranbrook Foundation at Cranbrook, Michigan" (illustrated on page 195). The silver medal in architecture was awarded to the firm of Peabody, Wilson and Brown of New York for residential work shown at the exhibition.

The Medal of Honour in Sculpture was won by Lee Lawrie of New York for "The outstanding quality and inventiveness of design shown in his work in the Architectural and Allied Arts Exposition and in consideration of the distinguished character of his past achievements." The Medal of Honour in painting was awarded to John W. Norton for his paintings now installed in the Tavern Club in Chicago. The Birch Burdette Long memorial prize for distinguished rendering was awarded to Schell Lewis for "The excellent quality of his pencil renderings shown at the Exposition."

Victoria House — London, England

Victoria House, which is illustrated on page 197 of this issue is said to be one of the largest office buildings erected in London, England, during recent years. It is situated on the east side of Bloomsbury Square on a site which originally formed part of the Duke of Bedford's estate. The building, which was designed by Charles W. Long, F.R.I.B.A., is of Portland stone on all four façades and harmonizes with the existing buildings in Kingsway, of which Southampton Row is a continuation, and with the British Museum which is close by.

The building is 80 feet high to the main cornice, the maximum allowed by the London Building Acts, with provision for three floors in the roof. Separate entrances have been provided on all four sides each of which have large bronze doors with entrance lobbies and staircases finished in marble. On the ground floor there is a central public office approximately 42 feet high with marble walls and ceiling. Along the front of the building facing Southampton Row is a colonade of shops while the rest of the building is devoted to meeting halls and public and private offices.

XIIIth International Housing and Town Planning Congress

The XIIIth International Housing and Town Planning Congress, arranged by the International Federation for Housing and Town Planning, will be held in Berlin, Germany, on the 1st to 5th June, 1931, inclusively. The subjects for discussion will be: (a) The Abolition of Slums; (b) The Traffic Problem in Relation to Town and Regional Planning; (c) The Lessons of Recent Congresses. Various contributions will be presented on above subjects by experts from all important cities of Europe and America. The annual meeting of the International Federation for Housing and Town Planning will be held during the Congress period in Berlin. The delegates will make the following visits: Exhibition of Housing and Town Planning, Housing and Town Planning in Berlin, a visit to Potsdam by car and boat, an all-day visit to the Spreewald by cars and boats, a visit to Dresden and the Saxon Switzerland, a visit to Hamburg, a visit to Essen and the Ruhr Region. Delegates will be able to purchase railway tickets for these visits at reduced rates. An official reception will be given by the Reich Government,

the Prussian Government and the City of Berlin during the Congress period. The meetings of the Congress will be held in the mornings in the Festsaalgebäude adjoining the Zoological Gardens, situated in the west end of Berlin, where there are good hotels; good communications are available by the Stadtbahn, the underground railway and many tramway and omnibus routes. The exhibition will be held in the well-known Berlin Exhibition Grounds, covering an area of about fifty acres. The Festsaalgebäude is conveniently situated as regards the Exhibition Grounds, which are easily reached by underground railway from the Zoological Garden section. Congress fees will be: delegates £1; ladies accompanying delegates, 10s. Mr. C. B. Purdom is honorary secretary of the International Federation for Housing and Town Planning, 25, Bedford Row, London, England.

EDITOR'S NOTE: Mr. Noulan Cauchon, Chairman of the Town Planning Commission, Ottawa, will represent the Town Planning Institute of Canada at the International Housing and Town Planning Congress.

We expect to publish a report of the Congress upon Mr. Cauchon's return.

Activities of the Institute

A meeting of the executive committee of the council of the Royal Architectural Institute of Canada was held at the office of the Institute, 627 Dorchester Street West, Montreal, Quebec, on Friday, April 24th, 1931, at 4.00 p.m.

Present: Percy E. Nobbs, president; Alcide Chausse, honorary secretary; E. I. Barott; Philip J. Turner; W. S. Maxwell; J. Cecil McDougall and I. Markus, secretary.

Reading of Minutes: The minutes of the meeting of the executive committee held on March 18th, 1931, were read and approved.

Reports of Standing Committees:

Architectural Training: Mr. Maxwell reported that thirty-six entries had been received from students in the schools of architecture at McGill University, University of Toronto, University of Manitoba and the Ecole des Beaux Arts, Quebec, for the prize offered by him for a competition open to students in architecture. He further reported that the entries were now being judged and that the awards would be announced very shortly. It was decided that subsequent to the awards being made, the designs are to be offered to the schools of architecture for exhibition.

Scholarship Funds: It was reported that four competitions open to architectural assistants were published in the April issue of THE JOURNAL, involving prize money amounting to three hundred dollars. It was decided to announce another series of four competitions in the May issue of THE JOURNAL. Messrs. E. I. Barott and J. Cecil McDougall were requested to co-operate with Mr. W. S. Maxwell in the preparation of the programmes to be completed by April 30th.

Mr. McDougall reported that letters had been sent to members of the Institute requesting subscriptions towards the R.A.I.C. scholarship and prize fund, and that a number of subscriptions had been received to date. He expressed the hope that further subscriptions would be forthcoming in the near future.

Professional Usages: The president reported a professional practice case arising between a member of the Ontario Association of Architects and a member of the Province of Quebec Association of Architects as having been finally disposed of, with the concurrence of the presidents of the component societies concerned.

The president reported that the basis of professional charges which the Institute proposed to publish had been submitted to the presidents of the component societies for their approval, and that a letter had been received from the Ontario Association of Architects suggesting some modifications. The president was requested to revise the document to meet as far as possible the wishes of the Ontario Association of Architects.

Editorial Board, The Journal, R.A.I.C.: A letter dated April 23rd was read from Mr. J. P. Hynes, containing certain suggestions with reference to the publishing of a supplement to THE JOURNAL. No action was taken in the matter.

Exhibition and Awards: Mr. Turner was requested to prepare a notice in connection with the next Institute exhibition for publication in an early issue of THE JOURNAL.

Joint Committee of the R.A.I.C. and C.C.A.: Mr. W. L. Somerville was appointed to act as the convenor of the joint committee of the R.A.I.C. and C.C.A. with a request that he take up with the members of his committee any matters of interest to both bodies.

Fellowships: A letter was read from Lord Willingdon acknowledging the resolution passed at the annual meeting. A letter was also read from Sir Andrew T. Taylor acknowledging and thanking the Institute for the diploma which he had received as an Honorary Fellow of the Royal Architectural Institute of Canada.

Fellowship in the Royal Architectural Institute of Canada: A nomination for Fellowship in the Institute was presented to the meeting and it was decided to defer the balloting until further nominations for Fellowship had been received.

A letter was read from Mr. J. B. Mitchell of Winnipeg tendering his resignation as a Fellow of the Institute due to his retirement from active practice. The resignation was accepted with regret, and the secretary was instructed to so advise Mr. Mitchell.

Standard Forms of Contract: The president reported that the "Cost Plus" form of contract had been reviewed by our legal advisor and that it was now about to be printed.

The question of printing the "Cost Plus" and "Stipulated Sum" forms of contract was referred to the joint committee of the R.A.I.C. and C.C.A.

Mr. McDougall reported that the revised agreement between architect and client had been reviewed by our legal advisor and that it was now completed with the exception of one point which was referred back to the committee and legal advisor for final wording before the document is printed.

Proposed Institute Documents: The secretary reported having arranged a meeting in Toronto at which Messrs. W. L. Somerville representing the joint committee of the R.A.I.C. and C.C.A., Mr. J. P. Hynes, chairman of the editorial board of THE JOURNAL, Mr. Gordon M. West, the honorary treasurer and himself were present, for the purpose of considering the publication of the various Institute documents. The recommendations of the committee were as follows:

(a) That 1,000 copies of the charter and by-laws of the Institute, list of Fellows and members, form of bequest, regulation of competitions, basis of professional practice, basis of professional charges be printed and distributed to the members in a letter size folder with index to contents printed thereon.

(b) That 2,000 copies of the agreement between architect and client be printed, one copy to be sent to each member gratis, along with the other documents, and the balance to be sold at 10 cents per copy or \$1.00 per dozen.

(c) That 2,500 copies of the "Stipulated Sum" and "Cost Plus" forms of contract be printed, one copy of these forms to be sent to each member gratis, and the balance to be sold at 15 cents per copy or \$1.50 per dozen.

It was moved by Mr. Chausse and seconded by Mr. Barott that the recommendation of the committee be accepted with the exception of the "Stipulated Sum" and "Cost Plus" forms of contract, copies of which, it is understood, will be furnished by the Canadian Construction Association.

Proposed Exhibition of Hospital Architecture: A letter was read from Mr. B. Evan Parry in which he advised that an exhibition of hospital architecture, as suggested by the Canadian Medical Association, might involve an expenditure to the Institute of approximately \$150.00. The secretary was instructed to write Mr. Parry and ask him if it would be possible to raise the required funds from some other source.

R.I.B.A. Matters: The president submitted a memorandum dated April 13th, 1931, which had been prepared by Mr. Turner and himself which he proposed to send to the Royal Institute of British Architects. The memorandum was approved by the executive committee.

A letter was read from the secretary of the R.I.B.A. calling attention to a competition for the new premises of the Royal Institute of British Architects which is to be open to all members of the allied and associated societies of the R.I.B.A.

The secretary was instructed to see that due notice of this competition was published in the next issue of THE JOURNAL.

Miscellaneous: The president informed the meeting that the government was considering the advisability of placing an additional duty on imported building stone, and that this was a matter that might be viewed differently in various sections of the country. After some discussion, the president was requested to advise the presidents of the component societies that the Institute would not seek to formulate a corporate opinion on the matter.

A letter dated March 19th was read from the Canadian Construction Association with reference to the proposed sales tax as affecting buildings now under construction or contracted for. The matter was referred to the president for his attention.

A letter was read from the president of the Alberta Association of Architects drawing attention to the action of the Canadian Manufacturers Association with reference to legislation affecting architectural bodies in the Provinces of Alberta and Manitoba. The secretary was instructed to write to the Canadian Manufacturers Association requesting information on the activities of their branches in these two provinces with respect to architectural legislation.

Date and Place of Next Meeting: The date and place of the next meeting of the executive was left to the president.

Adjournment: The meeting adjourned at 7.30 p.m.

Activities of Provincial Associations

The Alberta Association of Architects

Secretary—J. MARTLAND, 501 Civic Block, Edmonton, Alta.

The Presidential address delivered by Mr. G. H. MacDonald at the annual meeting of the Alberta Association of Architects was, due to lack of space, omitted, in the report of the meeting which appeared in the April issue of THE JOURNAL. Mr. MacDonald's address is therefore printed herewith in full.

"Your council for the past year has taken initial steps towards remedying our charter which will, I believe, have a very profound influence on our future activities as an association, and which will bring it in line with the charter of the Manitoba and Saskatchewan Associations.

"The incoming council should see the completion of this work; further than that it would not be well to make greater comment in an address of this kind on this matter, except to say that after several conferences with government officials on matters brought to our attention by members at large of this association, in which they, and we all, are deeply interested, the way seemed to open up for a solution of adverse problems of long standing, and your 1930 council seized the opportunity offered with alacrity and have followed up the matter vigorously towards, what I hope and believe will be, a successful conclusion.

"Should you see your way to approve of our action in this and other matters, you can thank your council for their co-operation and vigorous action throughout the past year, sacrificing in some cases clearly defined ideas of their own for the greater good.

"We have to record with regret the retirement of one of our oldest and most honored members, Mr. J. M. Whiddington, of Lethbridge, from membership in the association and, I take it, from active practice at least in Alberta.

"In the wider area of the Dominion the R.A.I.C. has in its issue of typewritten matter throughout the year been most voluminous. There is no question, however, that the clear definition of professional practice, fees, examination requirements, etc., is timely and will strengthen the Institute and component associations.

"The R.I.B.A. is feeling the influence of distance and considerable correspondence took place last year as to the means of rectifying the fact that invitations to and agendas of meetings did not reach the allied societies until after the meetings had been held. No solution has yet been reached that I am aware of. Notice of the 100th anniversary of this great body has reached us in good time, as it will be held in July, 1934. All who can plan to do so are invited to arrange to attend.

"It is frequently said, and perhaps with truth, that we in the west pattern our goings and comings

on the wheat crop. A successful crop year undoubtedly has a heavy influence on our building activity. For the reason that marketing conditions have recently been unfavorable, we are perhaps not inclined to look forward with high expectation to this coming building season. Let us see if there are any encouraging signs.

"There are two that suggest themselves to us immediately: (1) Lower commodity prices, with or without lower wages, mean lower cost of building; (2) Building loans are a good investment for inevitable accumulations of capital such as obtain under similar conditions to the present.

"These alone should be of assistance in stimulating building. There is also encouragement to be gained from the undoubted adaptability of the west and its quick recovery from past depressions.

"Slightly over a decade has passed since the war ended. During that period the cities of Edmonton and Calgary combined have erected buildings to the value of about \$70,688,000. In the other cities in the Province, over a half dozen in number, the permits have varied, but a number of them, including Lethbridge, have been close to five millions. Taking cities alone, therefore, and disregarding towns and villages and the country points generally, it is not too much to say that building has reached in the last twelve years close to \$100,000,000.

"Take a few of the principal buildings: In 1919 Lethbridge did not have its public library, Government telephone building, Standard Bank, Crystal Dairy, several of its best store buildings, hospital additions, a number of its fine schools, and its \$138,000 Collegiate, and its fine new "Marquis" Community Hotel costing \$227,529.00, and many fine residences and other buildings of prominence.

"In 1919, Calgary did not have Eaton's store, the million dollar Technical School, Crescent and Western Canada Schools, the handsome new Bank of Nova Scotia, Spillers Mill, York and Wales Hotels, addition to the Palliser Hotel, Government Telephone Building, Bank of Montreal, immense new Hudson's Bay Store addition, and one of the largest single contracts carried out in the west since the war—the new \$1,297,000 Federal Post Office.

"When we turned back to peaceful pursuits after the war, Edmonton did not have its new Grain Elevator and C.N.R. Depot; its new group of buildings at MacDonald Drive, consisting of the Public Library, Memorial Hall, and a section of the new Alberta College; the new medical building and St. Joseph's College at the University; Concordia College group in the east end; many fine new schools, generally fireproof; the group of club buildings around 103rd Street represented by the Y.W.C.A. and Masonic Building; a large number of fine new warehouses, such as Eaton's Mail Order Building, The Bank of Commerce, the new Government Administration Building, the Normal School, and immense hospital additions, all of a most substantial type. Homes have since been erected in Calgary and Edmonton at the rate of about 400 or 500 per year.

"It is not my purpose in this survey to make comparisons but it will be of interest to this gathering to note that in spite of the fact that we visit Calgary and say "Calgary is going ahead very rapidly," and the Calgaryans perhaps say: "Edmonton seems to be building up very fast," the fact is that for ten of the twelve years since the war

Calgary and Edmonton building permits amount to almost exactly the same sum. For two years, 1928-29, Calgary had greater growth, but a large part of the increase was hotel and department store construction, which Edmonton is yet to get. So that to all intents and purposes the two cities are advancing along almost the exact lines.

"In fact the building since the war has in a large measure given a new character to our principal cities and we old settlers would hardly recognize the cities of 1919. In this province generally, for example, we in 1919 would see few of today's fine municipal hospitals and schools. The town of Wainwright was largely wooden shacks in its business section; since its great fire it has been built into a very fine and substantial modern town of great beauty. The beautiful Jasper summer resort was not in existence at that date.

"The present readjustment period should not offer as great difficulties as that succeeding the war. We have surveyed briefly the changes, looking forward from 1919 to the present date. Taking a look forward over the next decade, is it too much to expect an equal amount of progress? I believe you will agree we can say there will be another \$100,000,000 at least spent in building up our chief cities in the next ten years—in which you will all have a share. With regard to the rapidity of readjustment, at this time it is difficult to forecast. In Canada periods of depression usually follow somewhat later those in the United States, and similarly improved conditions come slightly later.

"A forecast of building conditions in the neighbouring republic will, therefore, be of interest, as it will likely apply with equal force to us at a slightly later date. This survey was extensive and was encouraged by the United States Chamber of Commerce. The result of the survey is a prediction of increased construction in the U.S.A. for 1931, over 1930, largely in commercial buildings, dwellings and institutional buildings. The reasons given for the increase are:

1. Volume through normal channels equal.
2. Publicly financed (Federal and State) added volume.
3. Greatly decreased cost of building.
4. Improvement in mortgage and finance conditions.
5. Demand for Institutional and residential building increasing.
6. Better construction demanded by owners and financial interests.

"By way of comment I may say that the Federal and State Governments are making a definite effort to alleviate conditions by increasing their own construction programme. Strong efforts are being made to have a part of this work diverted from Government departments to local architects. The decreased cost of building amounts to from 10% to 20%. Industrial buildings re-figured from the previous year show a decrease of 18%, as compared with a year ago. Large residences from 11% to 14% less. Office buildings a similar decrease in cost.

"Over a large section of the United States, first mortgage money conditions will be greatly improved, with considerably more money available than a year ago, and mortgage conditions will continue to improve. Second mortgages are not favourable, which shows that institutions are look-

ing about for thoroughly sound investment of surplus funds.

"During the period of depression in the United States, loaning institutions have examined their collateral more carefully, and have found buildings deficient in plan, construction and equipment, operating costs high, depreciation rapid. They are finding that it does not pay to "economize" by eliminating or paring down competent architectural service, and the employment of competent architectural service is become a condition of the loan.

Of the above, lower costs of building through lower commodity prices are now in effect here and it is true also that large loaning corporations are even now looking around and establishing themselves with the object of making safe and sound building loans.

"Whether the Canadian Federal and Provincial Governments will follow the lead of the United States and increase their building programme in order to relieve conditions remains to be seen. I believe the tendency is that way and that we will soon again be on the up-grade."

The Ontario Association of Architects

Secretary—R. B. WOLSEY, 350 Bay Street, Toronto 2, Ontario.

The Architects' Act of 1931, which was enacted at the recent session of the Ontario Legislature, provides for the establishment of a registration board of five members, three of whom are to be elected by the Ontario Association of Architects, one appointed by the Government and one by the University of Toronto. As the Act is to come into force on July 1st, 1931, the council of the associa-

tion has taken immediate steps to arrange for the election of the three O.A.A. representatives. Nominations have already been made, and a special general meeting of the association will take place on Monday, May 11th, at the Engineers Club, Toronto, for the express purpose of electing the three representatives.

TORONTO CHAPTER

Secretary—E. R. ARTHUR, School of Architecture, University of Toronto

The annual meeting and dinner of the Toronto Chapter of the Ontario Association of Architects was held on Friday, April 17th, at the Military Institute at 7.30 p.m. About forty members were present.

The main business of the evening was the election of officers. This resulted as follows: F. H. Marani, chairman, (*re-elected*); Mackenzie Waters, vice-chairman, (*re-elected*); R. W. Catto, treasurer, (*re-elected*); E. R. Arthur, secretary, (*re-elected*).

Members of executive: H. F. Secord, V. D. Horsburgh, Murray Brown.

Mr. Martin Baldwin, in his report on the work of the exhibition committee, stated that the recent exhibition was, in many ways, the most successful the chapter had held, though in point of numbers it was second to the first exhibition held at the Art Gallery. Altogether 25,000 people visited the show in the three weeks it was on view. Mr. Marani described the work of his committee on the "Set Back on Buildings Exceeding Height Limit," which had resulted in the passing of a by-law by the city council. The secretary reported on the proposed re-erection of the Cawthra house. The

suggestion now before the mayor and the board of control is that the building (a fine old stone house, built in 1850) should be re-erected in a city park on the corner of Crescent Road and Yonge Street. He further reported that sufficient money had been collected privately to take care of the building, which would house several historical societies, with accommodation for their very fine early Toronto and early Ontario relics. In addition it was thought that it might be quite feasible to hold meetings of the Ontario Association of Architects in one of the rooms

Mr. Mathers brought up the matter of the employment of students of the School of Architecture by architects. As twelve months practical work is required of these students, he thought that the architects should help in giving them the experience demanded by the course. He suggested that a fixed rate starting perhaps from \$5.00 per week for the first year man, rising to \$10.00 for the second year man, and \$15.00 for a third year man, be a basis for discussion. As this important matter was brought up at a very late hour it was decided to leave it to the executive committee for a report.

Province of Quebec Association of Architects

Secretary—HENRI S. LABELLE, 627 Dorchester St. West, Montreal.

The fortieth annual meeting of the Province of Quebec Association of Architects was held in the association's headquarters, 627 Dorchester Street West, Montreal on January 31st, 1931, with Wilfrid Lacroix, president, in the chair.

After the minutes of the last annual meeting were read and approved, Mr. Lacroix presented the following report of the council for the year 1930, which was adopted:

THE PRESIDENT'S REPORT

Following the tradition, I am as president, submitting a report of the activities of your council for the year 1930.

During the last twelve months we have suffered a sad loss, through death, of three of our members. Owing to non-payment of annual dues as provided for in the by-laws, six of our members had their names removed from the 1931 list and four members have resigned. On the other hand, ten new members have been registered and two former members had been re-instated, bringing the total to 244 members.

Council Meetings: Monthly meetings of the council have been held generally on the first Thursday of the month and two special meetings were called to consider urgent matters.

The committees which have functioned this year were the following: Professional Practice, Membership and Scholarship, Town Planning, By-Laws, Library and Year Book, Entertainment, Exhibition, Publicity, Delegates of The P.Q.A.A. to the R.A.I.C.

Committee Work: The work of these committees will be seen in the following:

PROFESSIONAL PRACTICE
Ernest Cormier, *Chairman*

As a consequence of the recent amendments of the Architects' Law of the Province of Quebec, it has become necessary to modify the methods of functioning of the committee on professional practice to obtain better results.

Under the previous regime, the committee had to study cases submitted to them, generally with incomplete information which resulted in adjournments for supplementary inquiry, correspondence, etc. After a certain delay, the committee was in a position to report to the council for final decision. This procedure has been simplified in such a manner that the council has been able to take position in many cases, at the meeting which followed the date when the case was opened. To obtain this result Mr. Labelle has been entrusted with the necessary inquiries and personal interviews with the parties interested and as much as was possible, he submitted to the council the progress of the case at the following meeting. This method has rendered special meetings of the committee unnecessary.

The work accomplished has been of such an importance this year that most of the time of the council meetings has been spent on deciding of cases of professional practice. The council has granted four temporary permits to practice to foreign architects in association with members of the Association. The council has dealt with twenty-five cases of illegal practice; fourteen of which have been settled, three have been filed for want of sufficient proofs and eight have either received a temporary settlement or are still in abeyance.

The council is of the opinion that for the important work involved in inquiries and personal interviews, an honorarium should be given to the person in charge of this work, at present Mr. Labelle. It is most desirable that the general meeting accept this view and vote this expense in order to obtain a more efficacious application of the Architects' Law.

MEMBERSHIP AND SCHOLARSHIP
Philip J. Turner and Ludger Venne
Joint Chairmen

Regular examinations were held in Montreal on three occasions. In January, two candidates both took the final examinations. One candidate was relegated in two subjects and the other failed to pass. A third candidate who took the Matriculation examination failed in one subject only. In May three candidates who sat for the final examinations failed to obtain the necessary marks to qualify for membership. Paul Lambert successfully passed the matriculation examination. In November, three candidates took the full registration examination. Two failed in all subjects and one student was relegated in two subjects only.

Professional practice examinations were also held in Quebec in January and March.

The following have been elected as members after examination on professional practice and from qualifications submitted of other architectural Societies: Henri Julien, Antoine Monette, J. A. Pesant, P. Gonzales Renaud and F. B. Taylor of Montreal; Paul Boileau, G. A. Poitras, Berchmans Tanguay and Chas. A. Jean of Quebec; and J. M. Lafleur of Three Rivers.

The following were reinstated as members during the past year: Raphaël Boilard and Ad. Trudel.

Losses by death during the year have to be recorded in the cases of Hyp. Bergeron (honorary member), W. D. Adams and J. E. Pilon.

The following members have resigned: Eustace Bird, Herbert Raine, W. S. Post (New York) and W. S. Richardson (New York).

The scholarship for measured drawings of old work was not awarded this year.

TOWN PLANNING
Chas. David, *Chairman*

No question has been submitted to this committee during the past year. Your committee had no invitation from the city hall to carry on the work of the previous committee in reference to the revision of the buildings law.

BY-LAWS
Irenée Vautrin, *Chairman*

Your chairman had no activity to report on this committee during the past year, but hopes to have an important report to submit next year.

LIBRARY AND YEAR BOOK
D. J. Spence and Chas. David, *Joint Chairmen*

This committee has started to prepare the 1931 year book and has referred the matter to the honorary secretary for tenders, printing and distribution to the members of the association.

No new book was added to the library during the past year.

ENTERTAINMENT
E. I. Barott and R. Chenevert, *Joint Chairmen*

Due to the small quarters which the association has been occupying for the last year, no lectures have been held in the association's rooms, but now that the association have moved to their new quarters in the builders temple, we hope to have something interesting to offer during the next year.

The association gave a dinner to the Royal Architectural Institute of Canada at the time of their convention in Montreal and this was fairly well attended.

EXHIBITION
F. R. Findlay, *Chairman*

As chairman of the exhibition committee, I have the honour to submit the following report for the year 1930:

In March and April our association participated in the Annual Spring Exhibition of the Art Association of Montreal and this committee issued the necessary notices and canvassed our members for exhibits. A total of forty-three exhibits were sent in by eighteen architects, the quality of the work was very high. The members of the committee

supervised the hanging of the pictures and wish to express appreciation to the Art Association for their kind co-operation. The chairman of your committee was appointed to the hanging committee of the Art Association as the architect member.

Our association was invited by the City Improvement League to exhibit photographs for an exhibition to be held by the league in the Dominion Square Building from January 24 to February 28, 1931. Your committee composed a circular letter which was sent to our membership and thirty exhibits have been received from seven architects.

To create early and increased interest on the part of the membership in the Annual Spring Exhibition at the Art Association of Montreal, your committee sent out an advance circular letter under date of 9th Dec., 1930, indicating to all architects the approximate date of the next Spring Exhibition, the nature of exhibits desired and the advisability of commencing work at once on material for the exhibition.

About five committee meetings were held during the year and the members of the committee showed keen interest and did excellent work.

PUBLICITY

G. McL. Pitts and Chas. David, *Joint Chairmen*

A very interesting question has been brought to the attention of this committee, viz: "A Program of Public Information." Unfortunately, owing to the association moving to its new headquarters, your committee could not study this question as carefully as required, and your chairmen recommend that this question be referred to the next publicity committee.

DELEGATES TO THE R.A.I.C.
Percy E. Nobbs, *Chairman*

The presidency of the Royal Architectural Institute of Canada having again been held during the past year by one of your delegates, the heavy responsibility of acting as the executive committee of the council of the R.A.I.C. during that period has fallen upon the delegates of the P.Q.A.A. to the R.A.I.C.

The volume of work which the executive of the R.A.I.C. has to deal with tends to increase year by year, and the annual report of the council of the R.A.I.C. will bear ample witness to the way in which the delegates to the R.A.I.C. have discharged their duties. The system by which the executive business of the R.A.I.C. is now entrusted to the delegates of one or other of the component societies of the R.A.I.C. seems fully justified.

It is recommended that the expenses to attend the annual meeting of the R.A.I.C. at Lucerne-ir-Quebec, on February 20th and 21st, of the 1931 delegation, other than present officers of the R.A.I.C., should be paid by the P.Q.A.A., and that previous to attending this meeting the delegates should have a meeting with the council of the P.Q.A.A.

COMMENTS ON COMMITTEE WORK

The most difficult problem is actually facing the association and the application of the Architects' Law which governs the practice of architecture in this province.

I wish to draw to the attention of the members that the revision of 1929 of the Architects' Law is of great importance to the profession, having as a definite result to exclude architects residing outside of this province and not registered with our association, to practice in Quebec at the detriment of our members. This revision has also the advantage of eliminating the doubt and ambiguity which exist in a great number of cases of illegal practice, thus permitting the council to act in a more efficacious way in many complaints submitted by our members.

As mentioned by Mr. Cormier in his report of committee on professional practice, the council has thought advisable to ask Mr. Labelle to make the necessary investigations in order to obtain all information required by our lawyers and I would ask the meeting that a recognition for this work be voted as an honorarium to Mr. Labelle.

I wish to thank all members of the council for the support which they have given me during my term of office and particularly Mr. Cormier who is retiring this year after fourteen years of continual work.

I hope that the members will approve the choice of their council on the association's new headquarters which we will have the pleasure to inaugurate this evening.

WILFRID LACROIX,
President.

Following the election of officers (a report of which appeared in the February issue of THE JOURNAL), Mr. Ernest I. Barott, the newly elected president, took the chair and conducted the meeting for the remainder of the session, during which many routine matters were dealt with. A dinner held in the association rooms, following the business sessions, concluded the annual meeting.

NOTES

A meeting of the executive committee of the council of the Royal Architectural Institute of Canada was held in the office of the Institute, 627 Dorchester Street West, Montreal, on Friday, April 24th, 1931.

* * * *

Messrs. Ross & Macdonald, architects of Montreal, announce the removal of their offices from 601 Belmont Street to The Architects' Building, 1135 Beaver Hall Hill.

Mr. F. H. Marani was re-elected chairman of the Toronto Chapter, Ontario Association of Architects, at the annual meeting of the chapter, held at the Military Institute, on April 17th, 1931.

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Mr. John S. Archibald of Montreal, past-president of the Royal Architectural Institute of Canada, who was among those injured in the recent C.N.R. train wreck near Edson, Alta., while on

his way to Vancouver, is now recovering from his injuries in Montreal.

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Messrs. Lawson & Little, architects, announce the removal of their offices from 522 New Birks Building to the Architects' Building, Montreal.

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Mr. John M. Lyle, architect of Toronto, left on April 8th for a trip to England, France and Italy. Mr. Lyle expects to return early in June.

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Mr. C. Davis Goodman, architect, announces the removal of his office from 1135 Bleury Street to Room 308, 1502 St. Catherine Street W., Montreal.

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Mr. J. J. Woolnough, city architect of Toronto, was elected a member of the executive committee of the Building Officials Conference of America at the seventeenth annual convention of that body held at the King Edward Hotel, Toronto, from April 21st to 24th, 1931.

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Mr. C. R. Tetley, architect, announces the removal of his office from 1074 Beaver Hall Hill to Room 701, Architects' Building, Montreal.

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Professor Ramsay Traquair, of the School of Architecture, McGill University, left on April 30th for a two months' trip to England.

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Mr. A. Stuart Allaster, architect of Windsor, announces the opening of a branch office at 174½ Christina Street, Sarnia, Ontario.

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An exhibition of drawings by students of the Faculty of Architecture of McGill University was held in the lecture hall of the Art Association of Montreal from May 1st to May 10th.

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Mr. P. Roy Wilson, architect of Montreal, left on April 30th for an extended trip to Europe. He expects to be away about five months.

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Mr. Paul Philippe Cret, well-known architect of Philadelphia, and Professor of Design in the School of Fine Arts at the University of Pennsylvania, has recently been presented with the Edward W. Bok award for 1930. The award is made annually to the individual who, in the preceding year, "shall have performed or brought to its culmination an act, or contributed a service, calculated to advance the best and largest interests of the community of which Philadelphia is the centre." This award was established in 1921, and consists of a cheque for ten thousand dollars and an embossed scroll in an ivory casket.

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Mr. Philip J. Turner (F), F.R.I.B.A., addressed the Builders Exchange of Montreal at their dinner meeting held in the Queen's Hotel on April 8th, on "Some Constructional Aspects in the Building of Liverpool Cathedral."

Mr. Turner, who is special lecturer in "Building Construction" at McGill University, has had special opportunities of studying the construction of this famous cathedral, and his lecture was illustrated with specially prepared slides, as well as an exhibit of seventy-five large photographs showing the work in progress.

The second annual banquet of the Uptown Architects Bowling League of Toronto was held on Monday night, April 20th, 1931, with the president, R. S. Morris in the chair. About sixty members of the league were present. The following guests attended the dinner: Dr. Henry Sproatt, J. H. Craig, Professor E. R. Arthur, Harold J. Smith, Douglas E. Kertland, A. S. Mathers and Gordon Wallace. Mr. Craig, president of the Ontario Association of Architects, delivered a very interesting address on the architectural profession, and Dr. Henry Sproatt made the presentation of the prizes.

The league is made up of the following architects' offices: Marani, Lawson and Morris, Sproatt and Rolph, John M. Lyle, D. E. Kertland, W. L. Somerville, Stevens and Lee, Mathers and Haldenby and Chapman and Oxley.

The championship trophy was won by the office of Sproatt and Rolph, the second prize by the office of Stevens and Lee, and the third and fourth prizes by the office of Marani, Lawson and Morris. Individual prizes for the season's bowling were presented to R. Hanks, A. Mollenhauer and A. Blackeby.

At the conclusion of the banquet, the following officers were elected for the ensuing year: honorary president, Dr. Henry Sproatt; president, S. Kertland; secretary, W. T. Shaver; treasurer, C. H. Bell.

* * * *

Mr. Philip J. Turner (F) informs us that the survey of Gipping Chapel, which is illustrated in this issue, was made by him just thirty years ago during his student days in England. Though the measurements and sketches were all completed in 1901, no finished drawings had ever been made until last year. In this connection, Mr. Geo. M. Fisk, as part of his studies in the School of Architecture, McGill University, has made under Mr. Turner's supervision a very fine set of drawings of this interesting building.

Mr. Fisk is to be congratulated for the excellence of his draughtsmanship shown and also from the fact that he has recently been awarded the McLennan Memorial Scholarship (value \$1,000.00) for having obtained the highest standing in his graduating year in the School of Architecture.

* * * *

The National Fire Proofing Company of Canada Limited announce that they have recently created a department of engineering, the object of which will be to provide advisory service to architects, engineers and contractors in connection with the use of the various types of Natco floor construction. The department is in charge of Mr. J. Arthur Harrison, a graduate of the Engineering Department of the University of Toronto.

As we go to press, we learn with very deep regret of the sudden death of Jules F. Wegman, F.R.A.I.C., a partner in the firm of Darling and Pearson, architects of Toronto. A formal obituary notice will be published in the next issue of THE JOURNAL.



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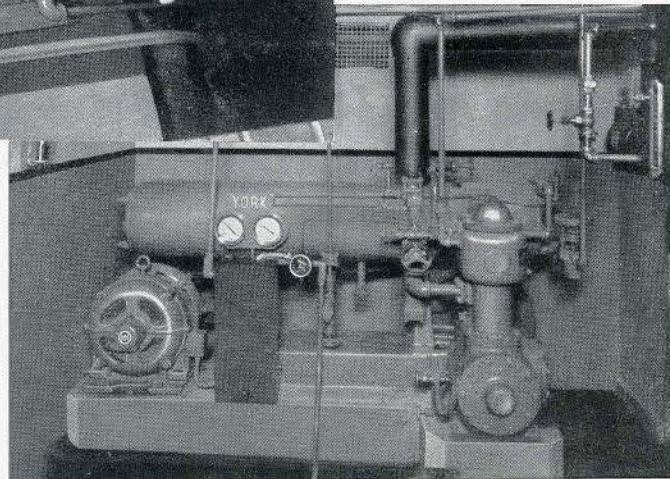
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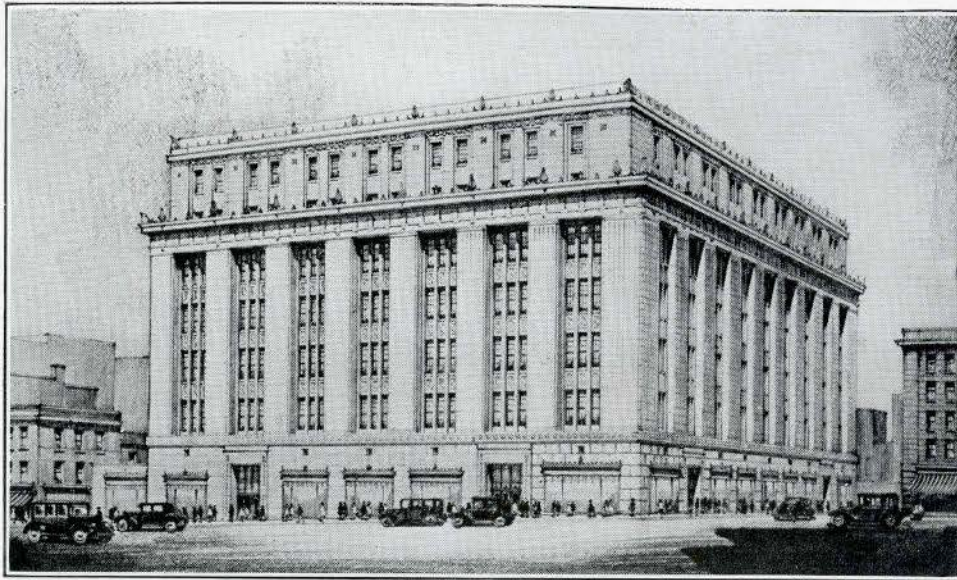


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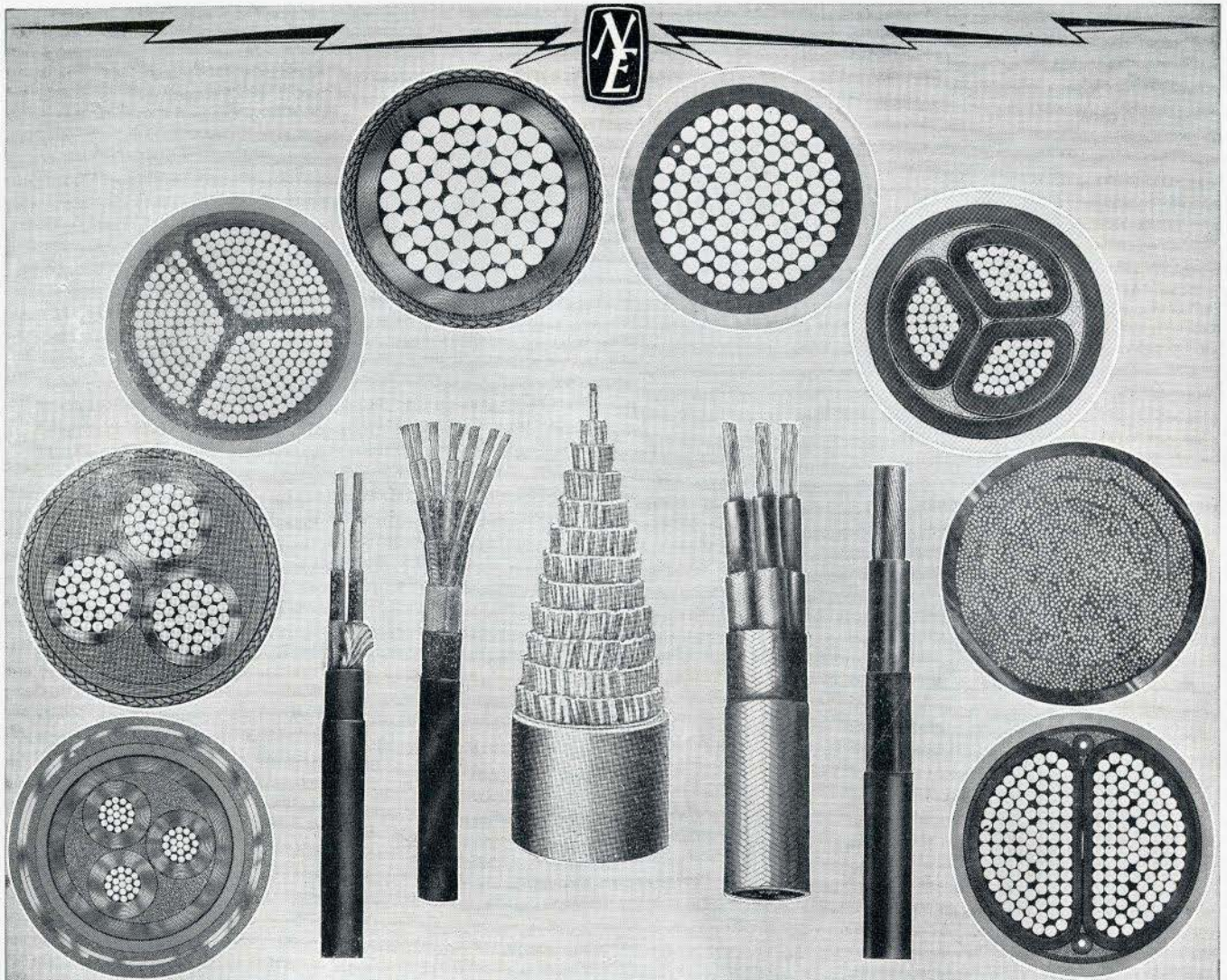
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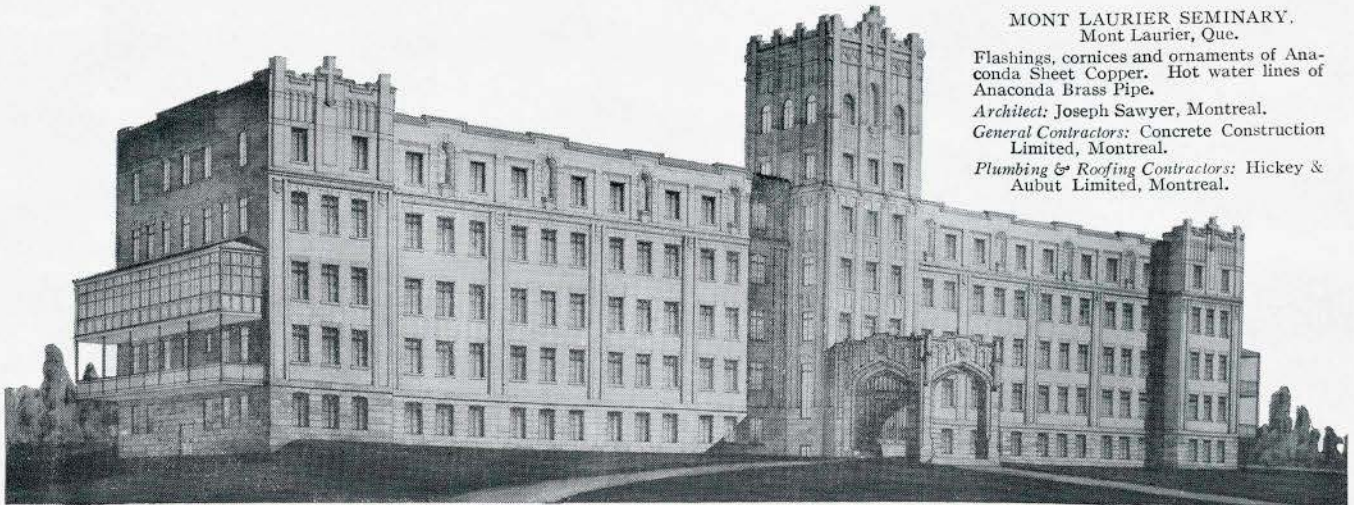
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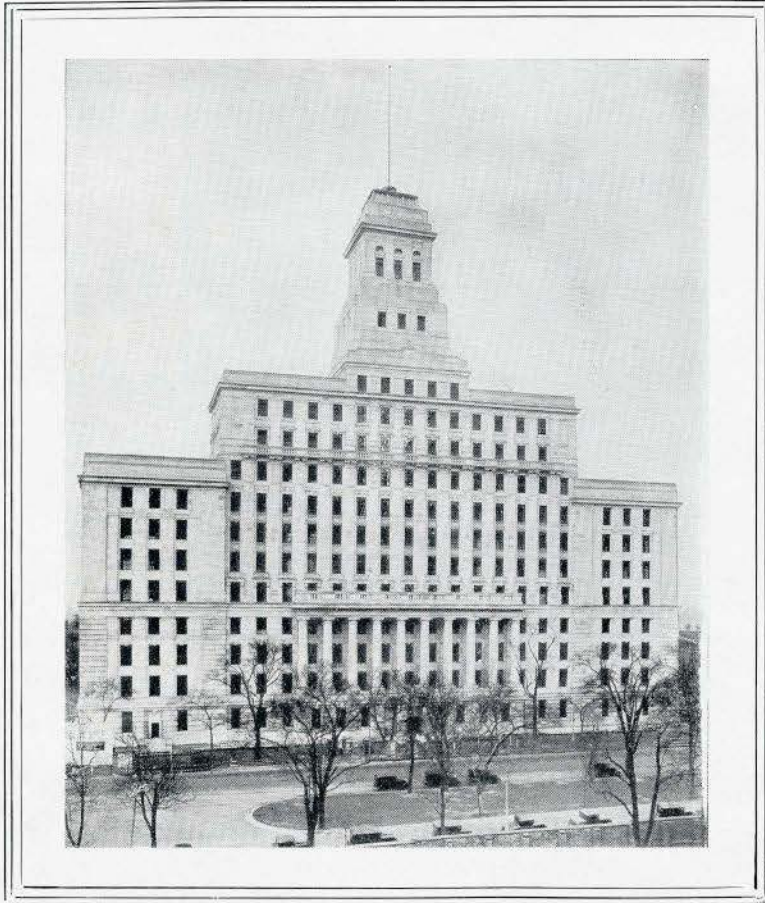
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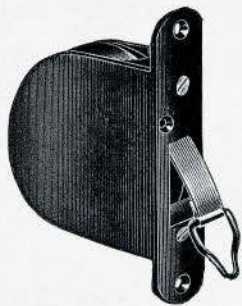
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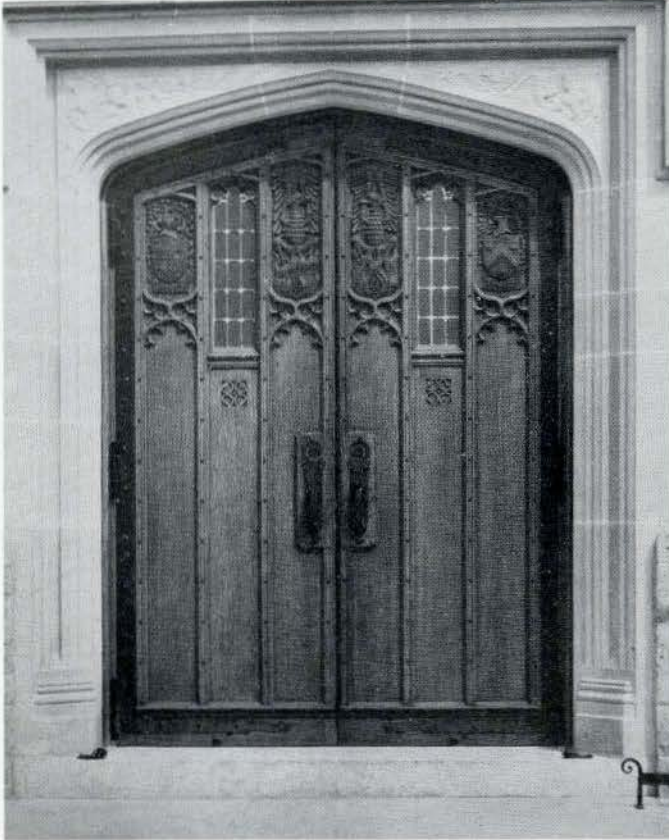
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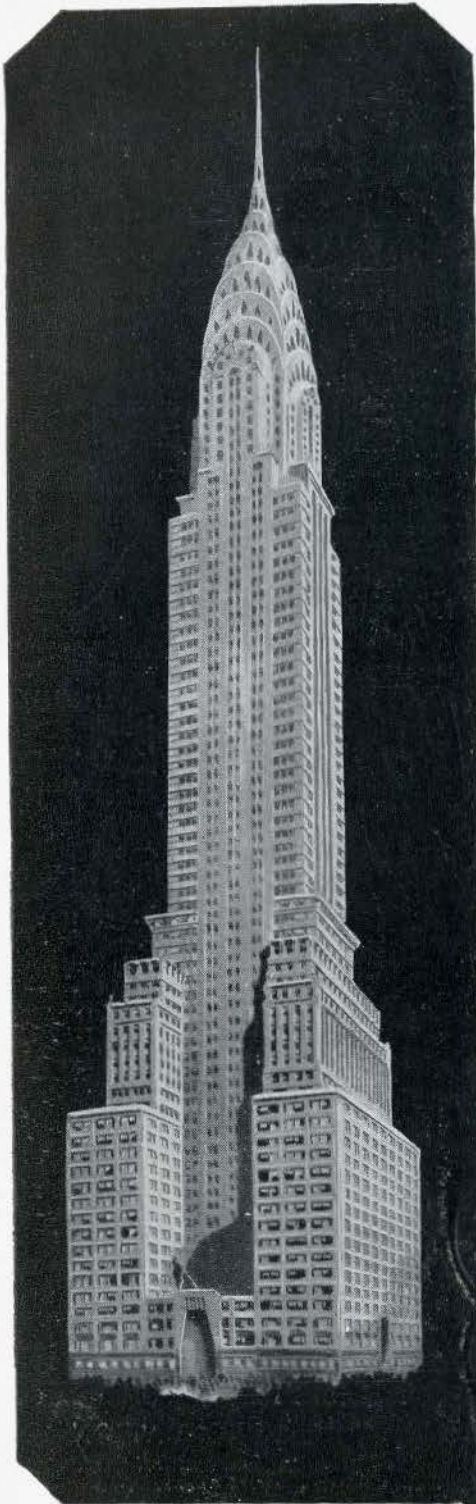
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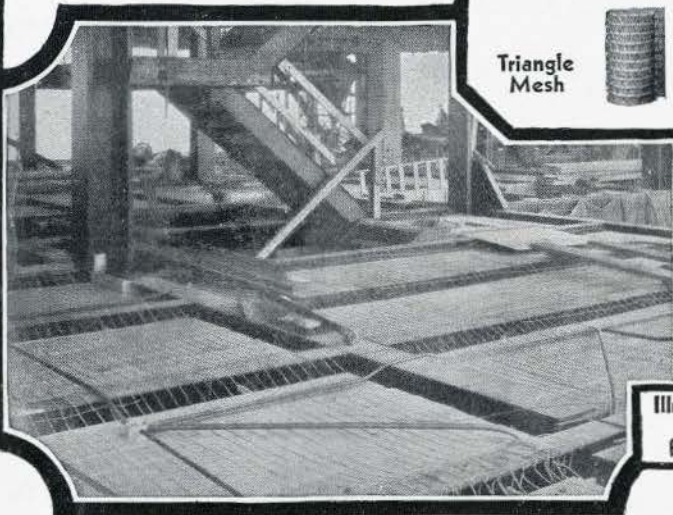
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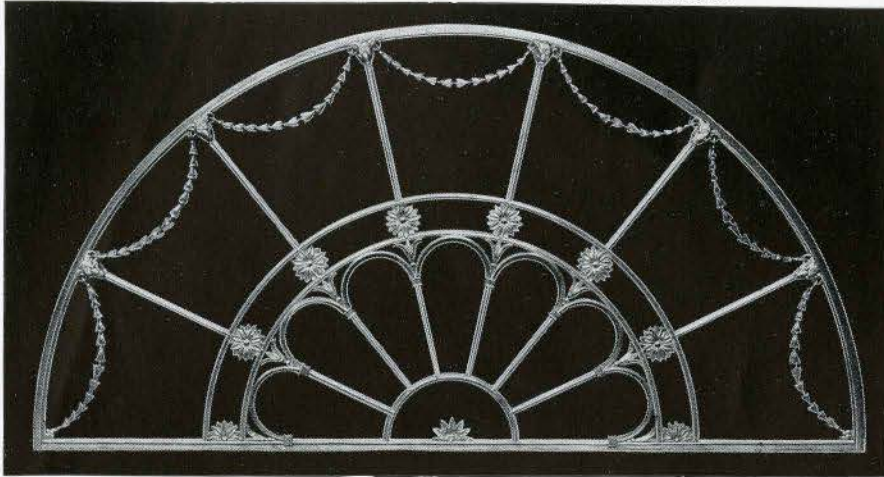
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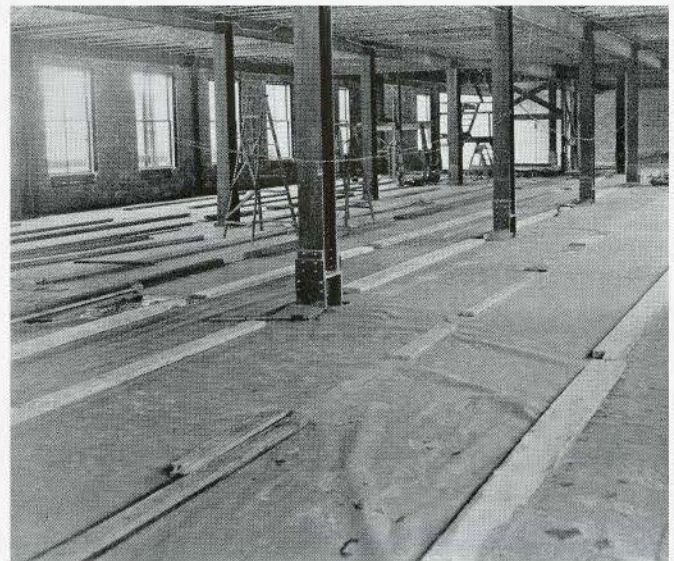
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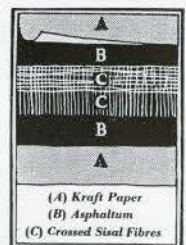
Write for the illustrated folder on the protection and curing of new concrete floors.

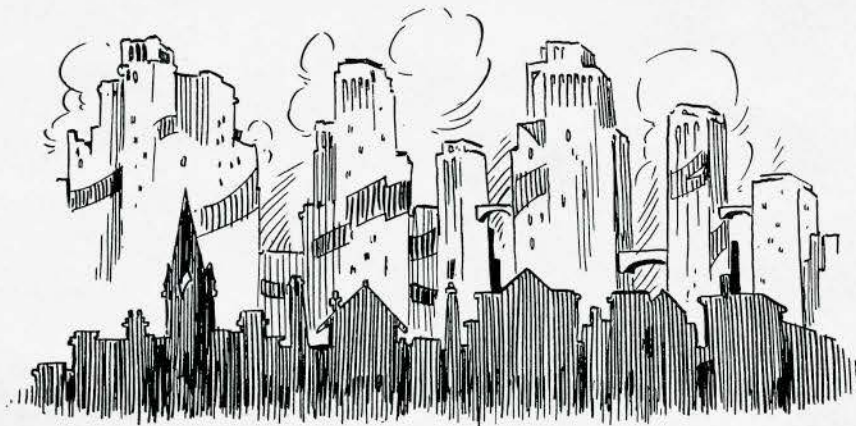


Capitol Theatre, Halifax, N.S.—21,000 sq. ft. of Sisalkraft used for protecting and curing concrete floors. Architect: Murray Brown Toronto. Associate Architect: S. P. Dumaresq, Halifax.

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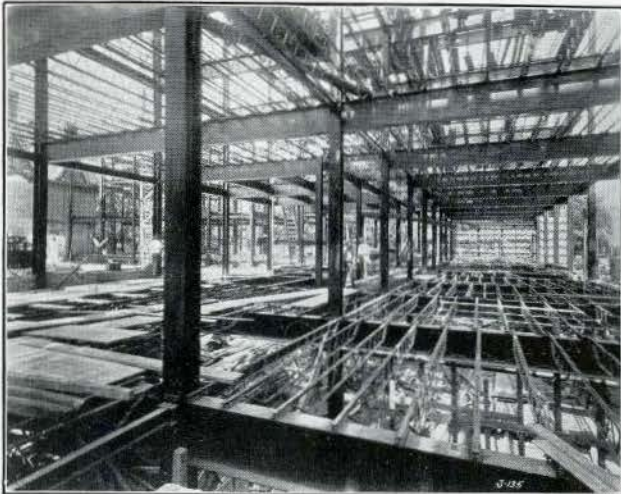
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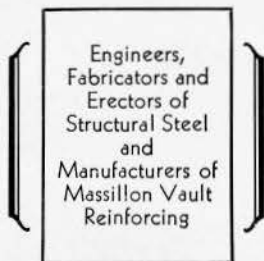
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Bridges

Our illustration shows Bridge No. 13, Welland Ship Canal, a Direct Lift Skew Bridge with a span of 231' and a lift of 120'.

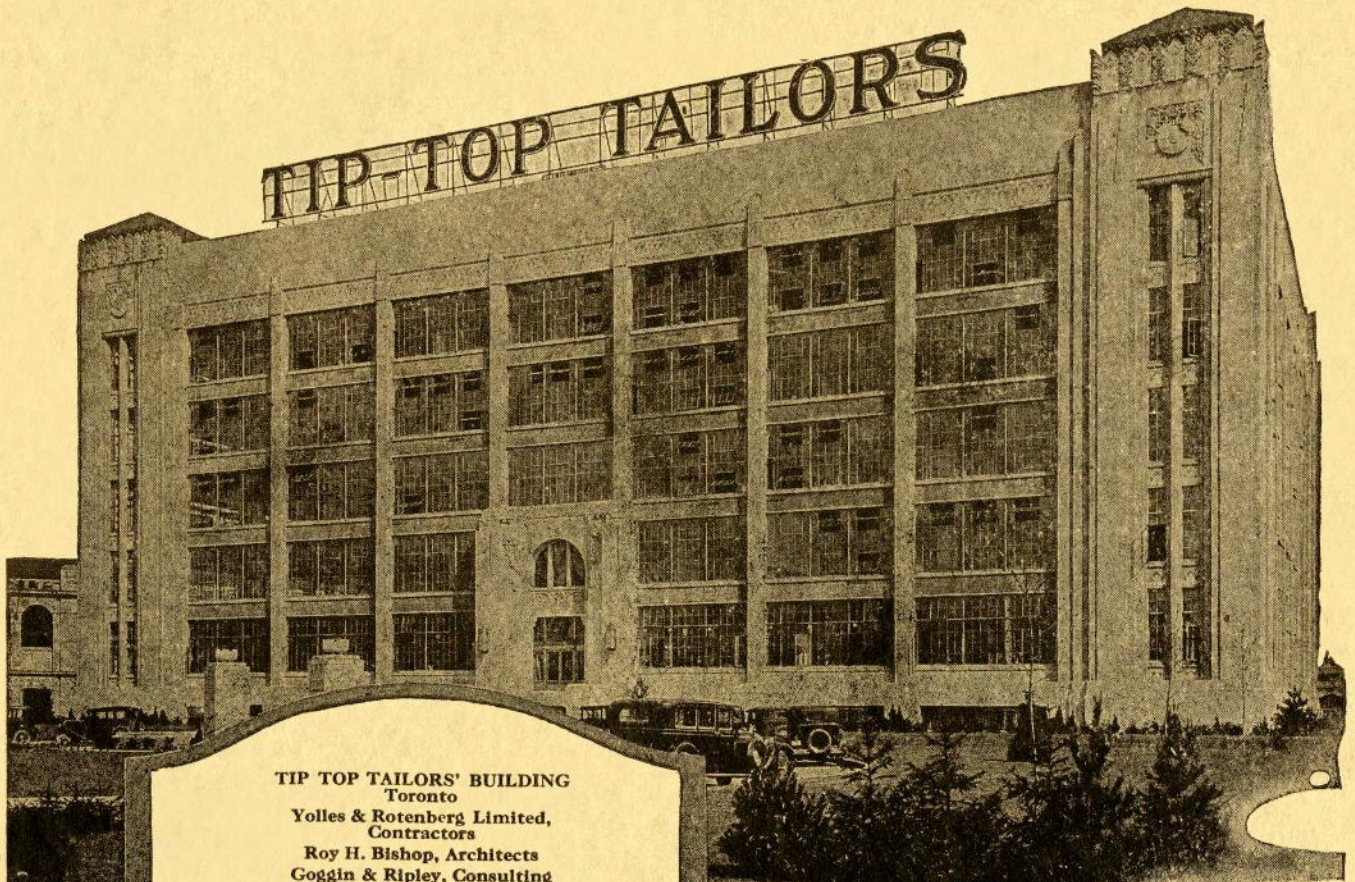
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