JOURNAL
RAIC-IRAC

Donated to R.C. by Dr. Manning

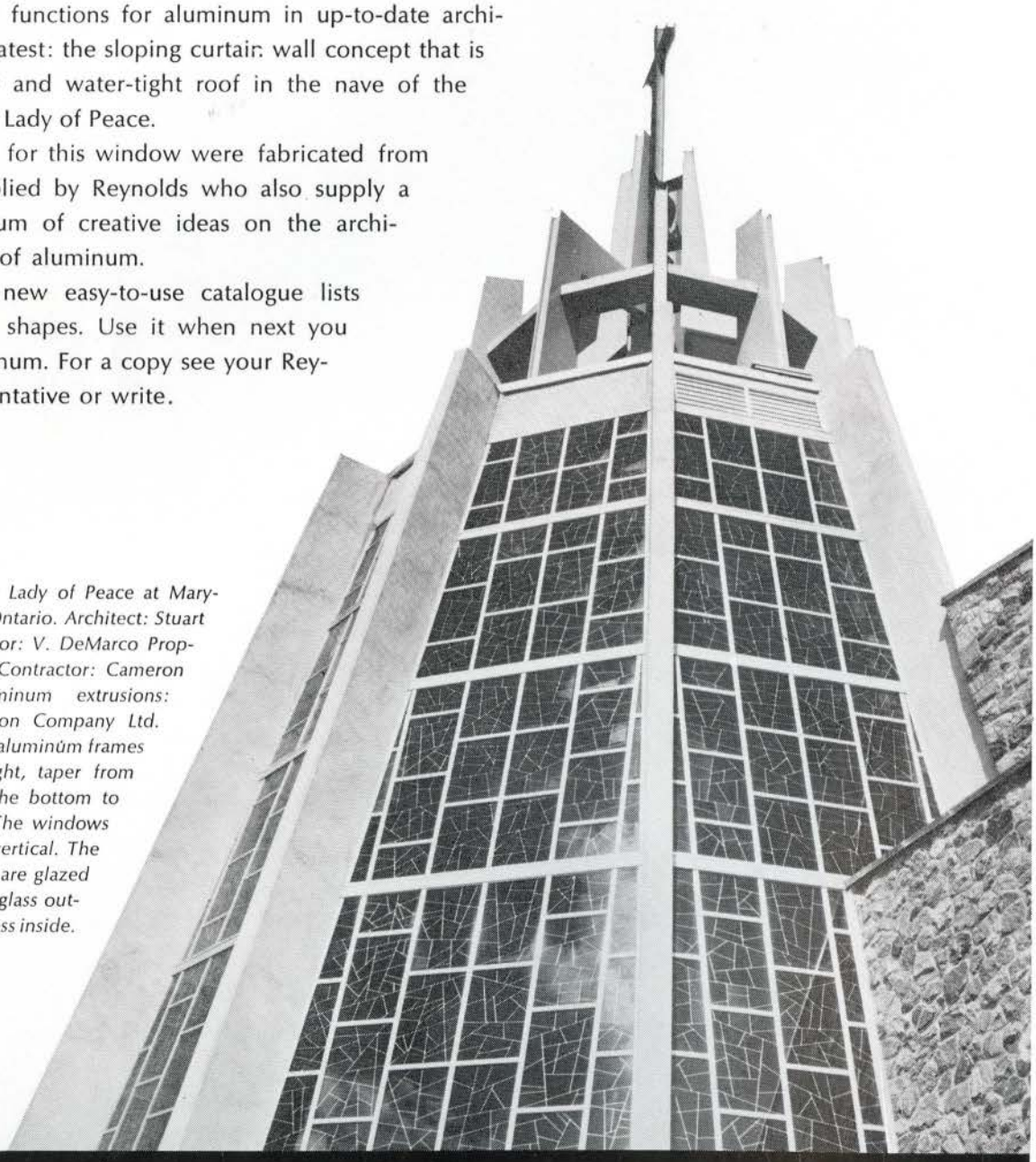
JULY 1965 JUILLET

New form and function for REYNOLDS ALUMINUM

Design flexibility and unique utility have created thousands of forms and functions for aluminum in up-to-date architecture. The latest: the sloping curtain wall concept that is both window and water-tight roof in the nave of the shrine of Our Lady of Peace.

The frames for this window were fabricated from sections supplied by Reynolds who also supply a broad spectrum of creative ideas on the architectural uses of aluminum.

Reynold's new easy-to-use catalogue lists thousands of shapes. Use it when next you specify aluminum. For a copy see your Reynolds representative or write.



Shrine of Our Lady of Peace at Marylake near King, Ontario. Architect: Stuart Cauley. Contractor: V. DeMarco Properties. Window Contractor: Cameron Windows. Aluminum extrusions: Reynolds Extrusion Company Ltd.

The mill finish aluminum frames soar to 65′ height, taper from a 20′ width at the bottom to 12′ at the top. The windows slope 12° from vertical. The insulated frames are glazed with 7/32″ sheet glass outside, cathedral glass inside.

REYNOLDS EXTRUSION COMPANY LIMITED
630 DORCHESTER BLVD., WEST, MONTREAL

Twincoat Beauty with One Coat effort!

NEW! pli-tone Twincoat

PLASTIC INTERIOR WALL PAINT

Advancements . . . Advancements . . . Advancements

Here is a Plastic Interior Wall Paint so advanced, even over its own previous top quality that you will want to check the specs and know the best. You'll be more than satisfied when you specify and use New Pli-tone Twincoat Plastic Interior Wall Paint.

GREATER HIDING

New formula Pli-Tone Twincoat with added hiding power and extra smooth flat finish makes one coat look like two. You can expect greater hiding and reduced labour cost from New Pli-tone Twincoat.

FIRE RETARDANT

New formula Pli-tone Twincoat does not support combustion. Our men will be happy to show and discuss with you the tests undertaken and ratings gained on flame spread, fuel contribution and smoke development.

WASHABLE

New formula Pli-tone Twincoat is immediately washable. (1 to 2 hours drying). There is no waiting period. Laboratory tests with the Gardner Washing Scrub Meter show no appreciable film change after 30,000 strokes of the Scrub Brush.

IT BREATHES

New formula Pli-tone Twincoat will not peel or blister. Vapour meter tests prove unusual water vapour transmission. It breathes. Available in over 900 decorator shades plus standard colours.

Tone-Craft PAINTS LTD.

• BRANCHES AND DEALERS IN MOST MAJOR CITIES IN CANADA

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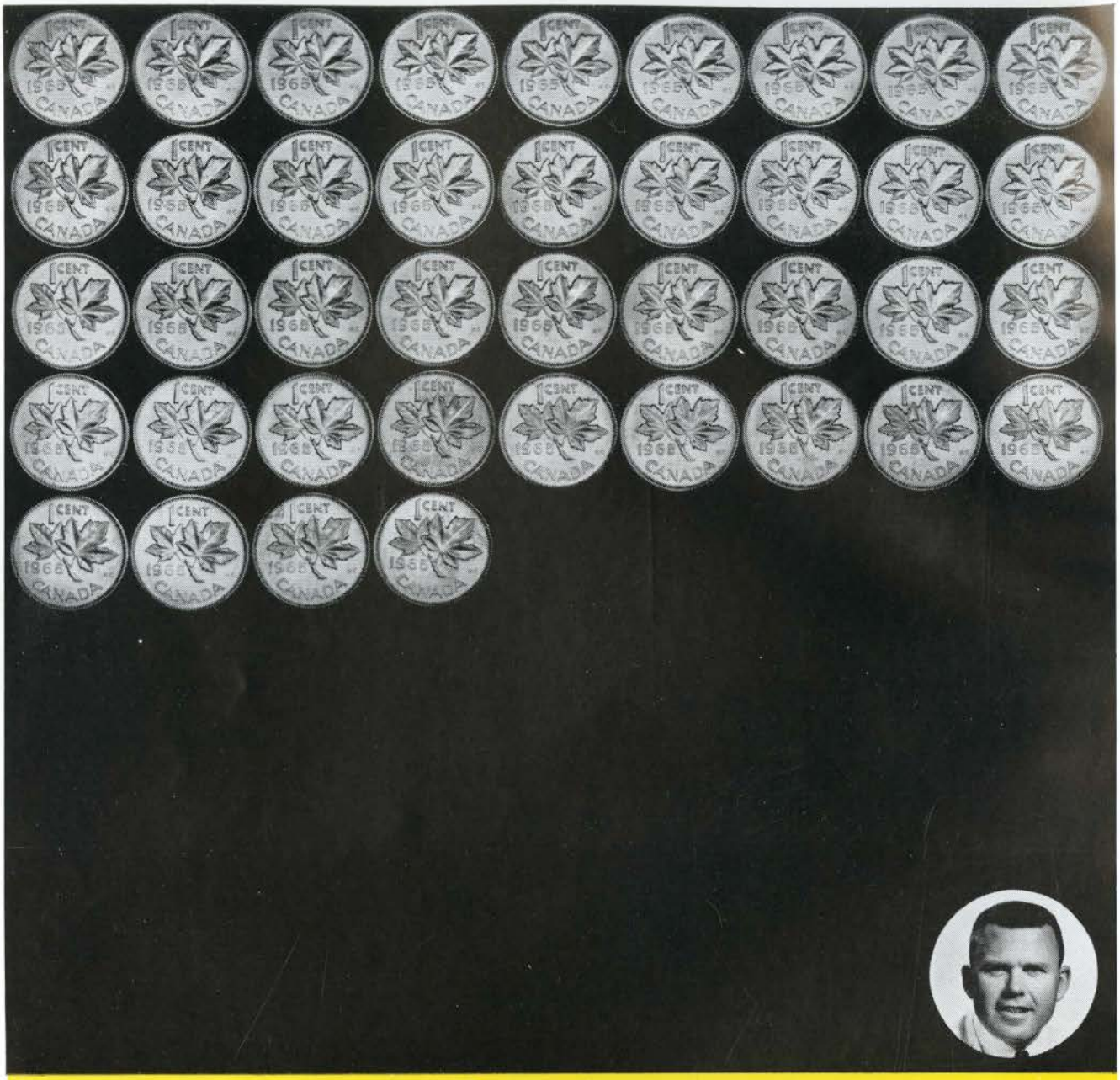

Says architect W. M. Salter of Salter and Allison, Barrie:

"We install electrical heating in a school for considerably less money than a conventional system. Our average saving has been approximately 40¢ net a square foot. We have found operating costs to be competitive with conventional methods."

Mr. Salter gave other reasons for his choice of electric heating in schools. Minimal maintenance. Lower cleaning and re-decorating costs. Individual room temperature control. Space savings and greater design flexibility."

Architects Salter and Allison have designed 47 electrically heated schools and saved an average of 40¢ net a square foot over conventional heating methods.

Before you plan another school, investigate all the advantages of electric heating. Ask your Hydro for detailed information.

ONTARIO HYDRO

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The Royal Architectural Institute of Canada

L'Institut Royal d'Architecture du Canada

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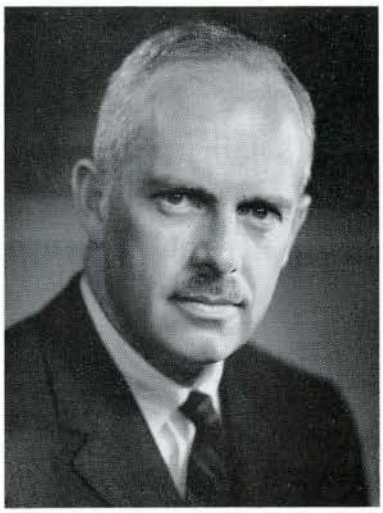


W. N. Greer

HEADS EDITORIAL BOARD

William N. Greer, of Shore and Moffat and Partners, Toronto, has been named chairman of the Editorial Board of the Journal RAIC/L'IRAC. He succeeds H. D. R. Buck, of Page and Steele, Toronto. Douglas B. Brown, of Brown, Brisley and Brown, Toronto, succeeds Mr Greer as vice-chairman. New members include William J. Neish, Toronto, of Smith, Carter Searle; and Harry Mayerovitch, of Mayerovitch and Bernstein, Montreal.

OMRC 1965 AWARDS PROGRAM

The Ontario Masons' Relation Council has sent entry forms for its 1965 Design Awards to all Ontario registered architects. The Awards, inaugurated last year, recognize outstanding architect-designed buildings in Ontario constructed essentially of structural clay materials. Professional Advisor is George D. Gibson *(F)*, and the assessors are James A. Murray *(F)* and Ronald J. Thom.

LA BOURSE FRANCOU

La première bourse Francou, d'une valeur de $2,500, a été décernée à un jeune architecte de Montréal, M. Jean-Guy Théoret, 4421 avenue Charlemagne. M. Théoret ira faire des études de perfectionnement en France.

Cette bourse doit être accordée tous les deux ans aux termes des dispositions du testament d'André Francou, architecte français. Le legs Francou à l'Institut royal d'architecture du Canada a pour objet de fournir des bourses à des étudiants et des diplômés de l'Ecole d'architecture de Montréal "afin de leur permettre de venir en France étudier les caractéristiques de l'architecture française."

M. Théoret a fait ses études aux collèges Saint-Stanislas et Mont Saint-Louis, puis est entré en 1958 à l'Ecole d'architecture (maintenant affiliée à l'Université de Montréal). Il a obtenu son diplôme avec distinction en 1964, en même temps que la médaille de l'Institut royal d'architecture du Canada pour excellence pendant toute la durée de son cours. Il est actuellement au service du bureau d'architecte de M. André Blouin de Westmount.

Dr Charles F. Comfort, RCA, 65, retires this July as Director of the National Gallery of Canada. Prior to heading the Gallery since the opening of the new building in Ottawa five years ago, Dr Comfort taught for 22 years in the Department of Art and Archeology at the University of Toronto. He plans to resume his career as a professional artist and art consultant.

Practice Notes

Dobush Stewart Bourke Longpré Marchand and Goudreau announce the formation of a new architectural partnership. The founding partnerships, Dobush Stewart Bourke and Longpré Marchand will complete their current work at their present locations.

Colin Thomas Bell, 1961 graduate from the School of Architecture of the University of Buenos Aires wishes a position in a Canadian architect's office. Mr. Bell has had one year of experience in San Francisco and two years in Buenos Aires. Write Mr. C. T. Bell, Av.Libertador 930, Buenos Aires, Argentina.

Graduate architect from India, having one year's experience in hospital and medical centre design seeks full or part time employment with a Montreal or Toronto architectural firm beginning sometime this summer. Reply Chinmoy Chatterji, 4112 Centennial Hall, University of Minnesota, Minneapolis 14.

Letters

Mr. W. B. Bowker
Editor, *Journal* RAIC/L'IRAC

On behalf of the Manitoba Association of Architects I wish to acknowledge the excellent coverage of our 50th Annual Meeting in the March issue of the Journal. Council expressed complete satisfaction with the write-up of our Jubilee celebration and asked me to convey the Association's appreciation to you.

(Mrs.) Nora M. Jackman
Manitoba Executive Secretary

1964 Product Literature Awards by Canadian Joint Committee on Construction Materials

Fourteen Certificates of Merit and 13 honorable mentions were awarded in the Fourth Annual Competition for Excellence in Building Product Literature conducted by the Canadian Joint Committee on Construction Materials of the Royal Architectural Institute of Canada, The Association of Consulting Engineers of Canada and the Canadian Construction Association. Representatives of the winning firms were guests of the Joint Committee at a luncheon June 11 during the RAIC 58th Annual Assembly in Montreal. The awards were presented by officers of the three sponsoring organizations, President F. Bruce Brown, FRAIC, of the RAIC; Hugh Montgomery, past president of the CCA; and P. G. Gauthier, secretary-treasurer of the ACEC.

Robert E. Briggs, chairman of the Joint Committee, who presided, announced that the competition will in future be known as the "Peter Barott Awards for Excellence in Building Product Literature" in honor of the late P. T. M. Barott, FRAIC, chairman of the first competition jury and a leading spirit in the work of the Joint Committee.

This year there were 73 entries in five categories, with three awards and four honorable mentions for Catalogs; six awards and five honorable mentions for Brochures and Leaflets; three awards for Installation and Maintenance manuals; two honorable mentions for Samples; and two awards and two honorable mentions for Publication Advertising. The winning literature was on display at the RAIC Assembly.

The 1965 jury was composed of G. R. Arnott, MRAIC, Regina, chairman; R. E. LeMoyne, MIRAC, Montreal; W. A. Gibson, MRAIC, Assistant Chief Architect, Department of Public Works, Ottawa; James Girvan, MRAIC, Montreal; John Brett, P.Eng, Montreal; Gaston Parent, Montreal, representing the Association of Industrial Advertisers.

REPORT OF THE JURY

In the Fourth Year of the Annual Awards Program, the Jury noted a reduced number of entrants in several categories, particularly Class 2 — Brochures and Leaflets and in Class 5 — Publication Advertising. The reduction of a total of 73 entries in all categories from 90 the year before had a direct effect in reducing the number of awards granted. At the same time, the category of Installation and Maintenance Manuals, just introduced in the '64 program, exhibited an increase in quality and numbers of entrants which were satisfying to the Jury.

It was the Jury's opinion that the quality of submissions in the Brochure and Leaflet Class was quite high and indicated more adherence to the objectives that the CJCCM have set for this class of product literature. At the same time, the quality of entries in the Catalogue class seem to be lower than the year before. Despite the number of samples that come to professional offices through the mails and in the course of their work, the scarcity of entries in this category suggests that steps will have to be taken to either increase their number or abandon this category for it to be meaningful in future award programs.

In contrast to 1964 where 23 awards were made in each of the Award and Honorable Mention category, the Awards this year represented a considerable reduction in number.

Although the Jury has continued to be guided by the Joint Committee's "Guide to the Preparation of Effective Product Literature", this year's entries exhibited some confusion in the filing system numbers to use. This is no doubt explainable by the proposed change-over from the AIA numbering system to that of the uniform system for Construction Specification and Data Filing being developed by the Construction Specifications Institute in conjunction with other allied groups. Any direction that the Canadian Joint Committee could give to manufacturers in the preparation of new product literature that would clarify the numbering system to use would no doubt be valuable.

The Jury, on behalf of the Canadian Joint Committee on Construction Materials acknowledges with thanks support of all entrants to the '65 Awards Program and congratulates entrants and award winners alike for their submissions. On behalf of the Joint Committee, your Chairman wishes to acknowledge and thank all members of the Jury and Mr Ernie Mahoney, Secretary, and his staff at Construction House who so capably arranged for receipt of entries, classified them by categories, and assisted in the orderly processing of the judging.

Respectfully submitted,
Gordon R. Arnott, MRAIC, Chairman

Awards by category, and comments on each winner and honorable mention follow:

AWARDS OF MERIT

CLASS 1
CATALOGUES

(aa—advertising agency; d—graphic designer; c—consultant or editor)
Comments of the Jury in Italics

CANADIAN GENERAL ELECTRIC CO., "Underfloor Wiring Systems" (aa—MacLaren Advertising, Toronto) (d—Campbell Creative Graphics Ltd., Toronto) (c—K. D. Beatty, CGE) . . . . *"Complete and well presented catalogue. The technical information is good — layout with photographs and drawings side by side excellent idea."*

ROBERTSON-IRWIN LTD., "Q-deck" (aa—Stone & Hand Ltd., Toronto) (d—Art Associates Ltd., Toronto) . . . . *"The Jury rated "Q-deck" the highest marks available on the basis it complied in its entirety with the Canadian Joint Committee's "Guide to the Preparation of Effective Product Literature". In other words, "Q-deck" is an excellent example of the type of product literature that is useful to architects and engineers."*

J. A. WILSON LIGHTING LTD., "Lighting", (d—Charles Shepherd—Shepherd Designs and Ian G. Nicholl) . . . . *"The Jury found that this was an excellent catalogue. However, it was noted that the comments of the 1964 Jury were not followed with respect to the inclusion of the proper RAIC/AIA file number on the catalogue."*

CLASS 2
Brochures and Leaflets

ALUMINUM CO. OF CANADA LTD., "Shape Design Manual", (d—Frank Lepari, Gazette Printing Co., Montreal) (c—A. Tasso and Miss M. Hummel, Aluminum Co. of Canada Ltd., Montreal) . . . . *"Rates as an expensive manual; a text book covering a wide range of uses to which aluminum shapes can be put and therefore would likely be retained as a reference, especially by an industrial designer. The presentation of the first principles in design of aluminum extrusion etc. The tabulations rated very high, as did the overall presentation."*

What's the difference between the Domtar No. 100 and other demountable partition systems?

Nothing obvious, until it's been around you for a while.

The Domtar No. 100 partition system provides a lasting warmth that cold, thin steel will never have. A comfortable quality that's a natural part of its solid wall construction (the rugged, fire-resistant Gyproc core makes it that way.)

It also comes from the rich tweedy-textured Vinyl-Kote Capilano colors that are tough, washable and scratch-resistant. You can choose from six of them. Even specify different colors on opposite sides of the same panel for adjoining offices.

Its versatility is something else to be admired, too. It adjusts to expanding space problems quite simply. And we can also supply matching trim for your clients' permanent walls. This way, Domtar demountable partitions can look built-in, part of the original interior.

The Domtar No. 100 also makes good economic sense. Because it's completely salvageable. The panels can be used again and again as changing requirements demand. It's a 'non-progressive' system, too. It's easy to create doorways, accommodate custom fittings or various arrangements of glass at time of installation, or later. Repairs, if necessary, are simple. The panels are also interchangeable — and that includes rail, screen (open top and bottom), cornice and ceiling heights. And they're available in almost all heights from 3′6″ to 14′. And in module widths from 2′ to 6′.

We think the Domtar No. 100 will measure up in any company. You may confidently include it in your specifications. (Particularly when you want to cut your clients' space problems down to size — beautifully!)

They're made in Canada, and readily available from stock. Specification literature is yours for the asking.

And if you're looking for an economy demountable partition system, consider Domtar Mova-Wall. It provides many of these advantages and costs a little less.

DOMTAR
Construction Materials Ltd.

DOMTAR CHEMICALS LTD., Canada Creosoting Division "Can-Creo Wood Block Flooring", (d and c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"Colour choice related to product (wood block flooring) is very good. The facts are both solid and well organized. The Jury considered the brochure useful to have in one's files."*

DOMTAR CONSTRUCTION MATERIALS LTD., "Screw-On Drywall Systems", (d and c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"A good brochure retaining company identification. Date of issue recommended practice for all publications. Graphic presentation very close to follow—the choice of type is excellent. DOMTAR's complete "Drywall Series" well organized and if put in a binder would be retained by architects."*

LAKE ONTARIO CEMENT LTD., "Masonry Cement", (c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"The format, indexing, dating and contact information all acceptable. The brochure is readable, with good coverage of technical matter. The only criticism concerns some of the interior photos which were rated as not very pertinent."*

THE STEEL CO. OF CANADA, "Trend-16-19", (aa—McConnell, Eastman Ltd., Hamilton) (d—J. Grant McCallum, Burlington) (c—Prof. E. R. Arthur, Toronto) . . . *"Attractive, colourful design and excellent presentation, which admirably creates imaginative and exciting use of steel. The graphics of a high calibre. Although the actual technical value is low, the material is interesting; Trend could be further improved by some means of classifying and indexing for designers' reference. It is suggested that punching for binder retention in an "idea book" would be useful."*

WYANT & CO. LTD., "Washroom Equipment—Towel Dispensers & Waste Receptacles (Section 2000)", (aa—Puma Ltd., Toronto) (d—Kingsley Owen & Dennis Dunn, Puma Ltd., Toronto) (c—Puma Ltd., Toronto) . . . . *"Colour Coding, File number, date, tables, photos, diagrams, technical data all excellent. The total integration of all factors of highest order. The Jury looks forward to seeing the complete catalogue. Unfortunately contact information is lacking; the illustrations (line drawings) could give more detail for technical information."*

CLASS 3

Installation and Maintenance Manuals

ATLAS STEELS COMPANY, "Cleaning—Architectural Stainless Steel", (c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"The manual is uncluttered, but the typography is very hard to read—reverse on grey against black difficult. It should also be punched for three-ring binder."*

AMERICAN - STANDARD PRODUCTS (CANADA) LTD., "Catalogue 900-65 Prestige Plumbing Fittings Catalogue of Parts", (Reclassified by Jury from Class 1 to Class 3) . . . . *"Good loose-leaf manual that fulfills requirements for maintenance and repair of plumbing fixtures in this manufacturer's line. Although a few of the tables are small (should be 8 point type), the exploded views are easily understood and parts clearly numbered for ordering. Unfortunately the photographic representation of parts is not up to standard, nor is the printing, which is bad and heavy, especially poor on half-tones."*

CANADIAN PITTSBURGH INDUSTRIES, "Architectural Finishing Specifications", (aa—Foster Advertising Ltd., Toronto) (d—Canadian Pittsburgh Industries, Toronto) . . . . *"Overall format and RAIC/AIA Index acceptable, with excellent cross reference. The technical information is complete and easily read. The "specialty products" folder inserted at back of manual not up to the standard of "painting and finishing specs". The spine of the binder is weak, it could have more easily identified title."*

CLASS 5

Publication Advertising

DOMTAR CONSTRUCTION MATERIALS LTD., "Tri-Seal (1)", (aa—Goodis, Goldberg, Soren, Montreal) . . . . *"The Jury rated "Tri-Seal" as the most interesting advertisement entered in 1965. Excellent human interest and story line with good copy. The use of photographs supplements the message."*

STEEL COMPANY OF CANADA LIMITED, "Scope of Steel—(1) English (2) French", (aa—McConnell, Eastman Ltd., Hamilton) (d—J. Grant McCallum, Burlington) . . . . *"Excellent colour photos illustrating message, with good typography. The English version has a good heading. With respect to the French language edition, the Jury recommended rather than use a direct translation an adaptation would be more fitting and accurate."*

HONOURABLE MENTION

CLASS 1

Catalogues

ATLAS ASBESTOS COMPANY, "Atlas Insulations", (aa—Monpar Inc., Montreal) (d—D. A. Campbell, Monpar Inc., Montreal) (c—C. B. Davis, Monpar Inc., Montreal) . . . . *"The Jury rated "Atlas Insulations" close to being of Award calibre but they felt it was limited in its technical use for architects, although it would be useful to mechanical contractors. Additionally some sections of the publication could usefully serve as an installation or maintenance manual."*

BLUMCRAFT OF PITTSBURGH, "Catalogue M-65" . . . . *"The Blumcraft Catalogue is complete and extensive in its coverage of products. The detail line drawings are clear, however, the half-tone illustrations are deceptive. Catalogue lacks RAIC/AIA index and contains limited technical information."*

MASTER BUILDERS CO. LTD., "1965 Catalogue—Sections I, II, III", (aa—Ronalds-Reynolds & Co., Toronto) (d—Jaymie Organization, Inc.) (c—Vern Andrews, Master Builders, Cleveland, Ohio) . . . . *"The catalogue was rated as "good" for content and technical value . With reference to design and readability, the Jury commented that both the typographic and graphics could be improved."*

ROYALMETAL CORPORATION LTD., "School Furniture", (aa—Stone & Hand Ltd., Toronto) (d—Art Associates Ltd., Toronto) . . . . *"The Jury found the photographs and layout excellent, with descriptions clear and concise. However, the catalogue lacked data on performance standards and dimensions for all pieces. Additionally, file numbers missing and punching for a binder would be useful."*

(Concluded on Page 16)

What happens when 24 steel spikes dig into a pure wool carpet?

The Toronto Board of Trade asked this question when they planned the locker rooms of their magnificent new clubhouse. The members wanted the luxury of deep pile broadloom. But the planners knew that every week-end thousands of golf spikes would churn and twist every square yard of carpet.

The solution came from the Eatons of Canada Contract Department. They knew that Brinton "Canadian Gropoint" with its loop pile, high density textured wool yarn could withstand this treatment — for years to come.

When golfers converge from all over the globe to play in the Carling World Tournament in 1967 this Brinton Canadian Gropoint wool carpet will look as luxurious and fresh as the day it was installed.

The secret of the ageless beauty is in the weaving. Brinton has carefully woven each strand of wool through to the back of every Canadian Gropoint carpet. The result is a "Lokweave" loop that won't pull away, won't break. A tribute to wool, to Brinton and, of course, to the Board of Trade Golf Club who are now carpeting the beautiful "Sportsman's Lounge" with Brinton Gropoint.

Brinton Carpets Limited has been licenced by The Wool Bureau of Canada Limited to use this new mark of Pure Virgin Wool on their Canadian Gropoint carpet.

For full details on contract carpeting, call your Brinton contract dealer.

BRINTON

CARPETS SINCE 1910

Progressive ideas in **STEEL...**
showcased in Dofasco's new office building

Perforated steel girders and composite floor

reduce floor thickness and carry mechanical services

Dofasco's new office building is one of the first in Canada to use cellular floor deck with concrete fill, in composition with the floor beams. The structure is a multi-storey rigid frame with 9 bays at 28 foot centres in one direction and with a 56 foot span and a 21 foot cantilever overhang at each end in the other direction.

Plate girders are 42 inches deep. Tie bars at the end of the cantilevers keep deflection within curtain wall tolerances. Cut-outs in the girders up to 24 inches in diameter are spaced six feet apart to carry main mechanical services.

Nelson shear studs were welded to the top flange of the beams through die-punched holes in the cellular floor deck. Three inches of concrete was poured over the tops of the steel deck cells. The floor load is carried by the steel deck, which also provides raceways for electrical and telephone services. The concrete fill serves structurally as the compression flange for the composite floor beams.

Future messages in this series will describe other techniques used by architects, Prack and Prack, to make Dofasco's new office a showcase of steel in modern building. For more data, contact Dofasco or your Steel Fabricator.

DOFASCO
OF HAMILTON

Nelson studs bind cellular floor to plate girders. Concrete was added for structural strength within minimum floor depth. Cellular floor provides raceways for electrical and telephone services.

Cut-outs in plate girders allow passage of over 100 tons of ducts and pipe. This eliminated the need for additional enclosures, resulting in lower cost and total possible concealment of services.

■ **PERFORATED STEEL GIRDERS**

□ INSULATED STEEL CURTAIN WALL

□ STEEL CLAD CEMENT BLOCKS

□ PROGRESSIVE IDEAS IN STEEL

CLASS 2

Brochures and Leaflets

CANADIAN PITTSBURGH INDUSTRIES LTD., "Curtain Wall Systems", (aa—Foster Advertising Ltd., Toronto) . . . . *"The brochure is a well organized presentation of CPI Curtain Wall Systems with logical sequence from photos of an actual application to details of the system. The colour is good and well presented. It is suggested the detailing should be removeable for copying. Chart should show data on deflections, with elimination of stress details, as they are not considered as necessary from an engineering standpoint."*

C/S CONSTRUCTION SPECIALTIES LTD., "Extruded Aluminum Door Louvres", (aa—Thomas F. Clark, Summit, N.J.) (d—Roberts, Reinhardt & Organization, New York) . . . . *"The diagrams and technical information are clear, with sales contact information complete. RAIC/AIA file number should be more legible; cover photograph and technical illustrations could be improved; no effective date; the special applications could also be improved."*

C/S CONSTRUCTION SPECIALTIES LTD., "Sun Controls", (aa—Thomas F. Clark, Summit, New Jersey) (d—Roberts, Reinhardt & Organization, New York) . . . . *"Diagrams and technical data all good and clear. RAIC/AIA file number should be more legible and in two positions. The brochure should be dated. The cover not very attractive; the technical information fairly complete but not easily readable."*

GENERAL CONCRETE LTD., "Precast Reinforced Concrete Lintels", (aa and c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"The overall opinion of the Jury was that the leaflet was effective and worthwhile. The principal problem concerned the choice of colours. The tables would be more readable if the colours were reversed the white on a field of grey is not the most legible combination."*

GENERAL CONCRETE LTD., "Standard Coursing Tables", (d and c—Frost-Fernandez Associates Ltd., Toronto) . . . . *"A well designed and useful brochure with clear graphics; overall good form and use of colour. The punching and file number are well done and the brochure contains valuable reference material. Although the information on the sponsor's product is limited it is expected this is intentional. The brochure however is a little coarse in quality and design."*

CLASS 4

Samples

BUILDING PRODUCTS OF CANADA LTD., "Flortile", (d—Art House Inc., Montreal) (c—A. C. Watson, Bldg. Products Ltd., Montreal) . . . . *"The Jury considered the entry a comprehensive sample book—and an interesting treatment of containing floor tile samples all in one book as opposed to boxes of samples. On the other hand, book form makes it impossible to obtain and use one sample tile at one time; nor is it necessary to have all types of floor tile together (asbestos, rubber, etc.). The cover rated as "jumpy". Typography could be better. The excessive use of colours in printing conflicts with sample colours. Technical data amateurish."*

CANADIAN PITTSBURGH INDUSTRIES, "Architectural Colour Service", (aa—Foster Advertising Ltd., Toronto) . . . . *"The Jury reclassified this entry from Class 1 — Catalogues, where it was originally entered to Class 4 — Samples, on the basis that the book contains paint samples rather than technical data. The binding and overall layout of the book was rated very highly, with the exception of the fold-out colour page which although on linen material was not considered durable—especially the paint chips, which would likely come off through constant use."*

CLASS 5

Publication Advertising

DOMINION FOUNDRIES & STEEL, LTD., "Progressive Ideas in Steel", (aa—Russell T. Kelley Co., Ltd., Hamilton) (d—T. H. Skinner, Hamilton) . . . . *"Photos, layout and choice of type all rated as readable, with the exception of one sheet — too many small photographs. The copy should be corrected with respect to engineering details."*

LAKE ONTARIO CEMENT LTD., "Ads (2)", (aa—James Lovick & Co. Ltd., Toronto) . . . . *"The Jury rated the two advertisements as good stopper ads and reminder advertising of the highest order. They show good imagination of design. The choice of type on second ad was thought to be weak on the heading and the use of red was questioned."*

GLASS

CANTILEVER

FINS SUPPORT

ARMOURPLATE

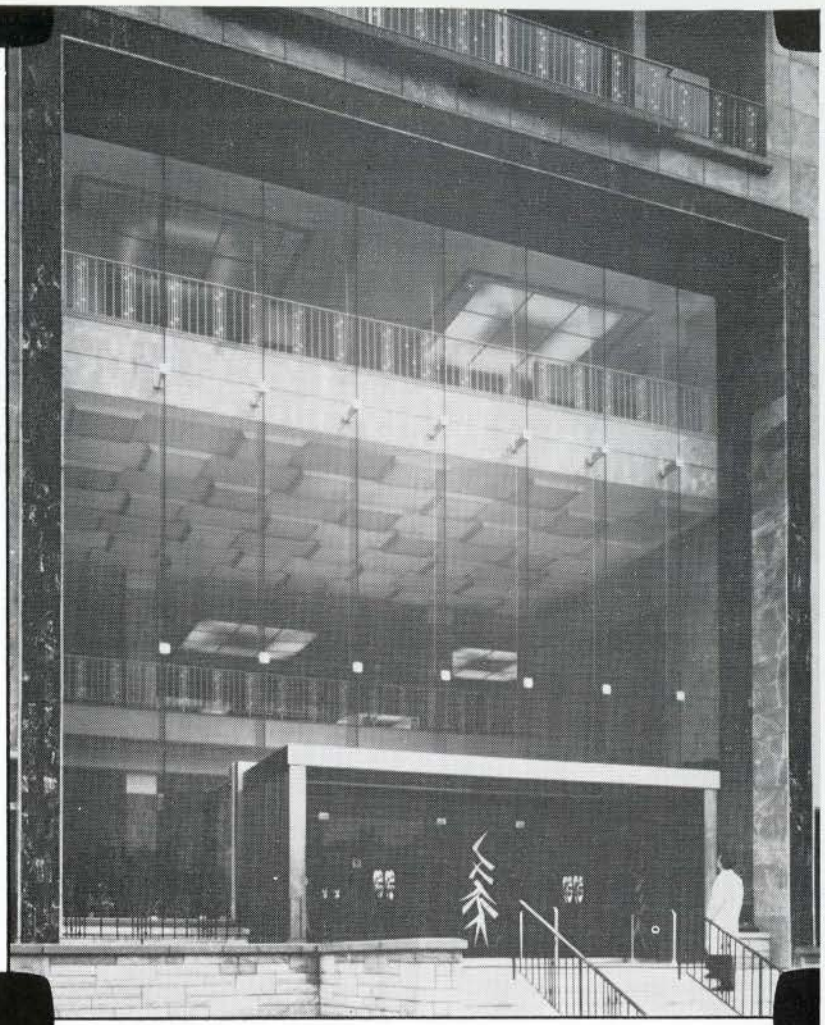
SUSPENDED GLASS

ASSEMBLIES

TO ELIMINATE

VISUAL

BARRIERS



The Suspended Glass Assembly is a method of glazing large openings in buildings without the use of mullions or frames so that there is no visual barrier. The glass itself becomes a load-bearing material in the form of an all-glass facade which may be a large window comprised of toughened glass panels or it may also contain 'Armourplate' Doors. Only glass with the special strength of Pilkington's 'Armourplate' is capable of sustaining the stresses imposed due to its own weight and the wind loads to which it is exposed.

The facade is suspended because if it is built from the floor up, the lower tier of plates would buckle under the weight of glass above them long before the opening was filled. It follows from this that the assembly is carried out from the top downwards and that it is suspended in its entirety from the building itself which must be capable of carrying the additional deadweight.

Design of plates and supporting fins is such that failure of any two plates or members of the structure will not result in the collapse of the remainder. Each plate is attached to its neighbours at the point where the corners come together by small patch fittings of non-ferrous metal in various finishes and at this same point connection is made to the lateral support which must be provided against wind load.

Pilkington
GLASS LIMITED
55 Eglinton Avenue East, Toronto

Please send me a free copy of your colour-illustrated booklet '*Armourplate' Suspended Glass Assemblies* which gives complete details of the process.

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FIRM.....

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CITY.....ZONE.....PROV.....

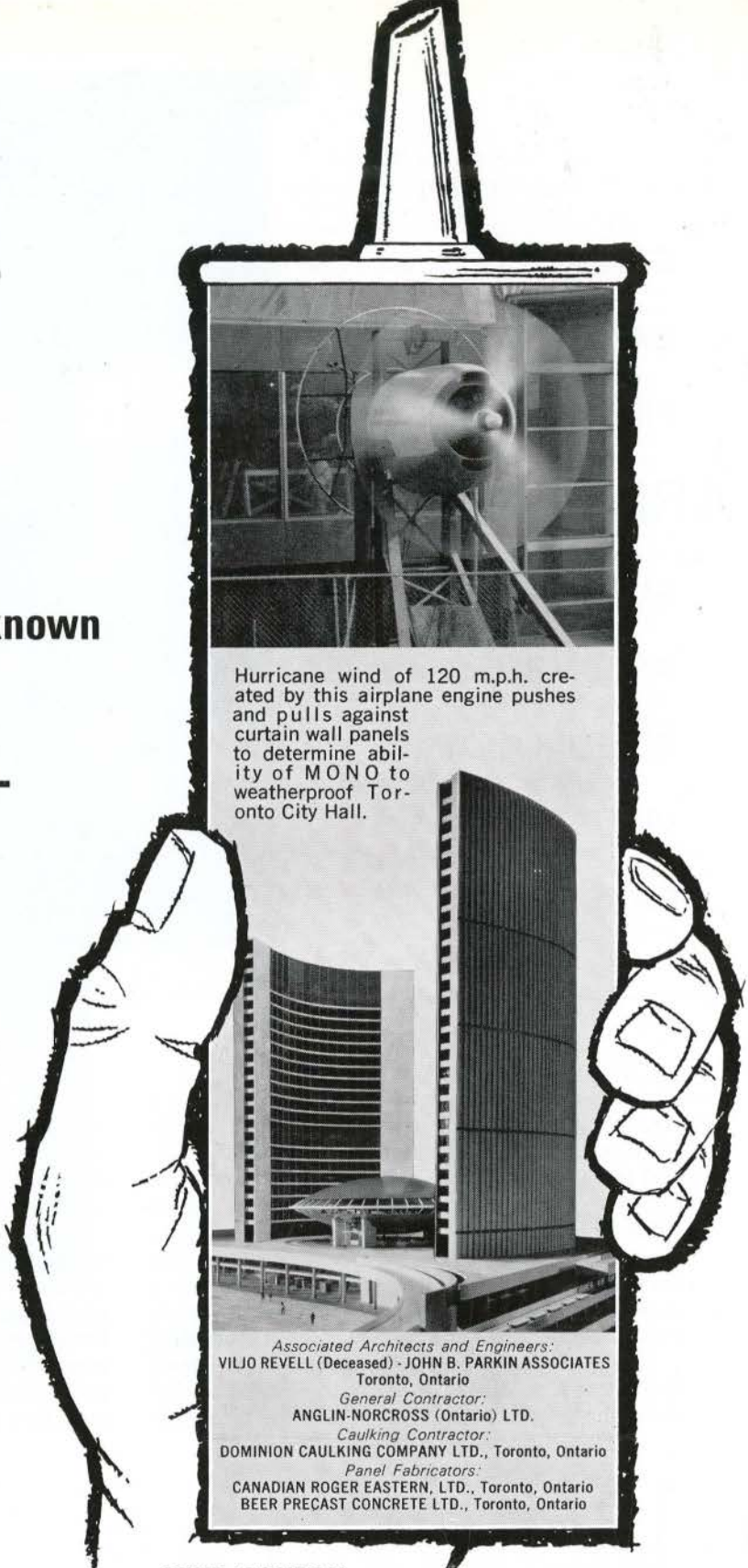
Hurricane wind proves

MONO®

LASTO·MERIC

1-Part Acrylic Terpolymer Sealant

most powerfully-adhesive construction joint sealant known for weatherproofing TORONTO CITY HALL



Hurricane wind of 120 m.p.h. created by this airplane engine pushes and pulls against curtain wall panels to determine ability of MONO to weatherproof Toronto City Hall.

Associated Architects and Engineers:
VILJO REVELL (Deceased) - JOHN B. PARKIN ASSOCIATES
Toronto, Ontario
General Contractor:
ANGLIN-NORCROSS (Ontario) LTD.
Caulking Contractor:
DOMINION CAULKING COMPANY LTD., Toronto, Ontario
Panel Fabricators:
CANADIAN ROGER EASTERN, LTD., Toronto, Ontario
BEER PRECAST CONCRETE LTD., Toronto, Ontario

"92% of sealant failures result from loss of adhesion"

TMC SURVEY

To prevent sealant failure, Mono was subjected to a torture test. Sealed curtain wall panels faced hurricane winds created by a 2000 h.p. airplane engine. Result of this "rugged shakedown": MONO was selected to seal construction joints in the precast panels, stainless steel curtain-wall head and sill joints, also all exterior joints in the metal and concrete towers. Here's why:

- *Security of performance; 20 year minimum life expectancy.*
- *Economical and safe; 1-part factory-mix eliminates hazards and high cost of job site mixing.*
- *Inherently adhesive; does not require primer or surface conditioner to secure adhesion.*
- *Ability to color-match structural material without excessive pigment loading which often results in sealant failure.*
- *Meets government specifications: Canadian 19-GP-5; U. S. TT-S-00230.*

On your next structure, don't take chances with a sealant that lacks inherent adhesion. Specify or apply MONO for **optimum security at minimum cost.**

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PRODUCTS AND TECHNICAL SERVICES FOR BUILDING MAINTENANCE & CONSTRUCTION

For information on Tremco Sealants check SWEET'S

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220 Wicksteed, Toronto 17, Ontario

RAIC-7

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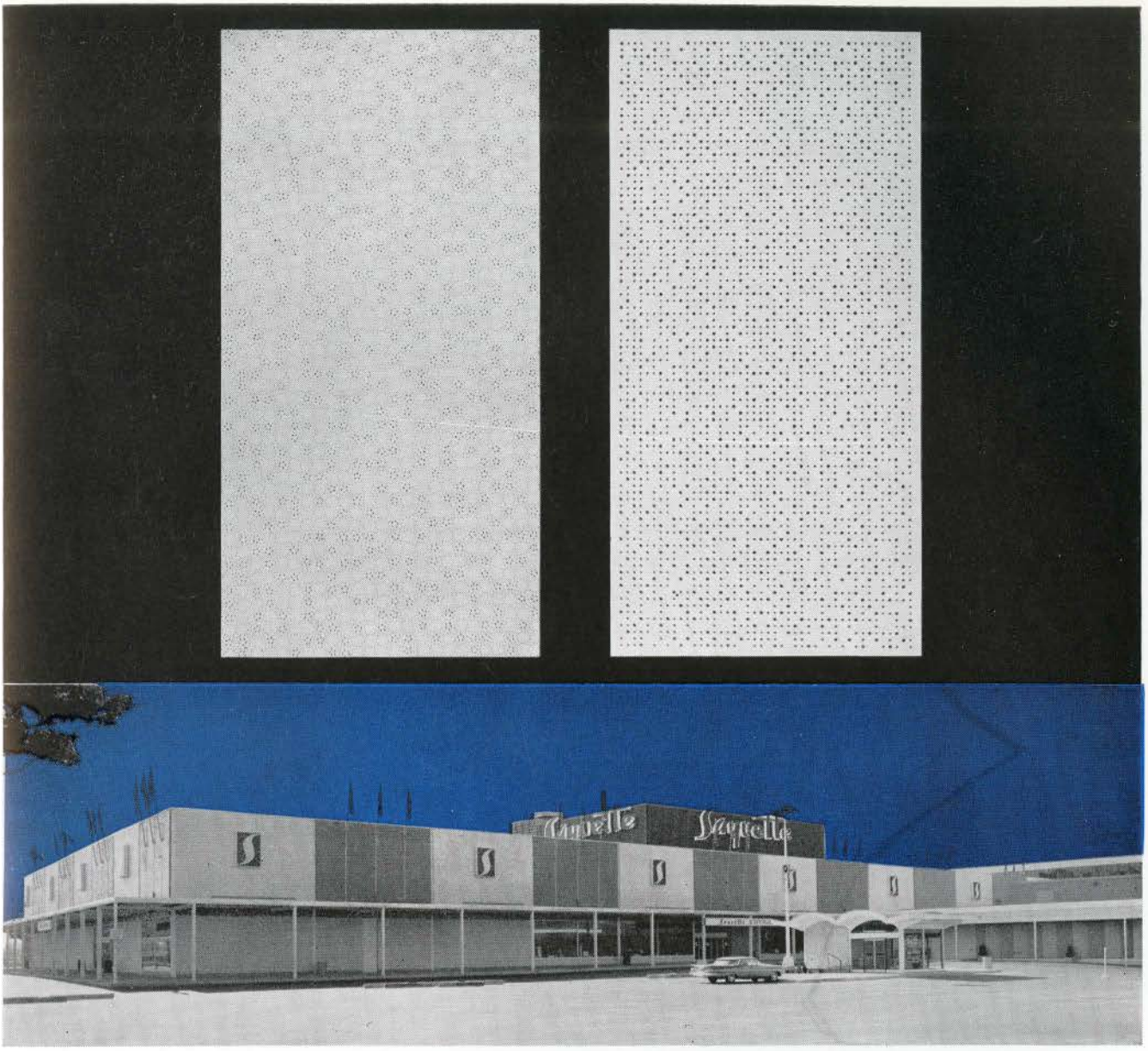


Sayvette's Dixie Plaza Store, one of three in Toronto. Architects for all stores: Mendelow & Keywan, Toronto.

- **ATTRACTIVE**
- **INCOMBUSTIBLE**
- **ECONOMICAL**

CWECO ACOUSTICAL PRODUCTS

installed in all Sayvette Stores

Panels represent the high quality yet economical Cweco Acoustical Products used in ceiling construction for all Sayvette Stores and are designed for sound/sound conditioning, beauty and fire protection. Top Right: Linear Random Mineral Acoustical Panels with Glass Fibre backing; 2′ x 4′ x 7/8″. Left: Embassy Fire Rated Incombustible Panels, 2′ x 4′ x 5/8″.

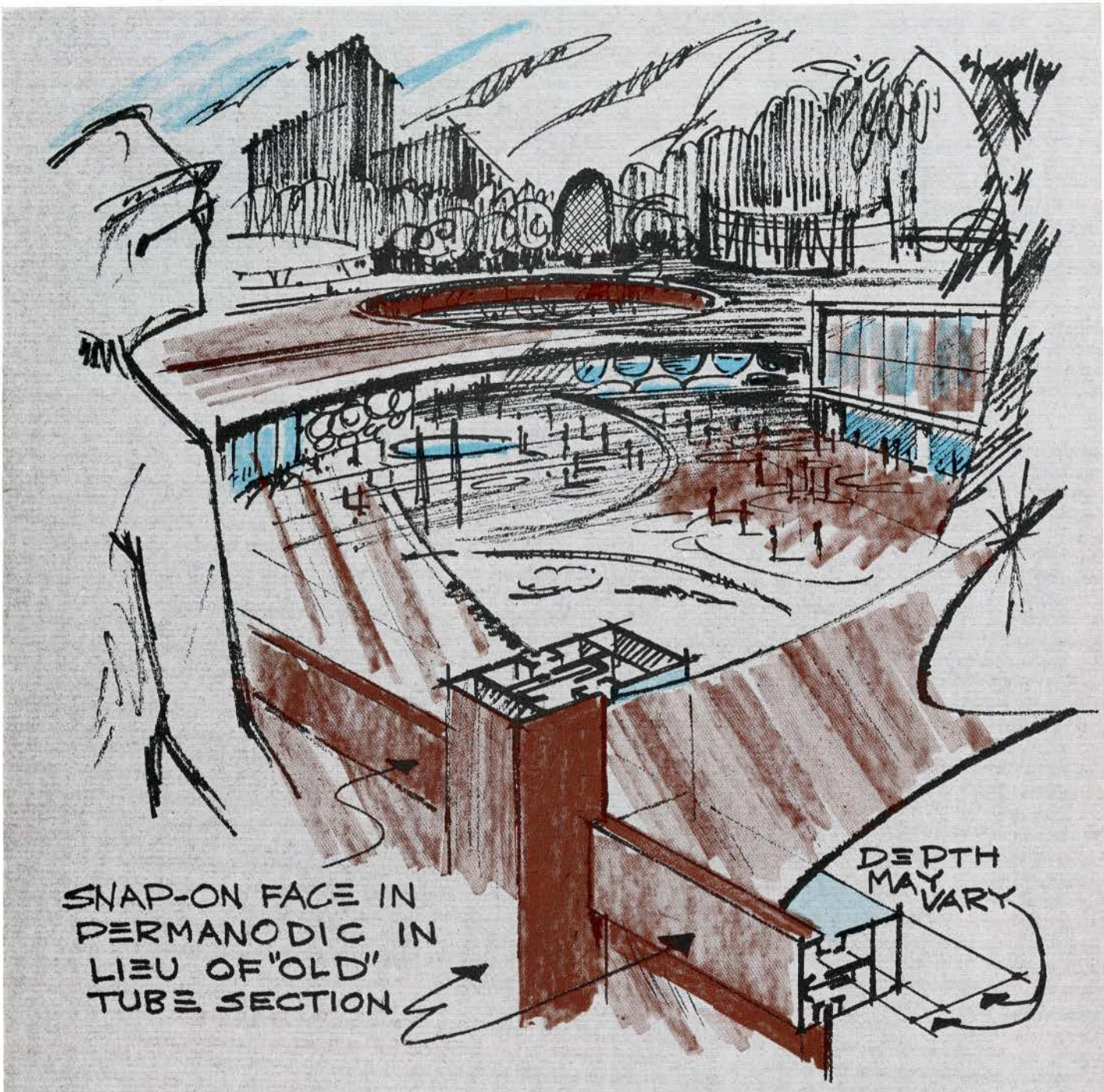
Ask for the Celotex Cweco Acoustical Manual and the Fire/Tested Mineral Tile brochure covering products, specifications and application methods.

FOR SOUND/SOUND CONDITIONING

ACOUSTI-CELOTEX PRODUCTS

CANADIAN **CELOTEX CWECO** INDUSTRIES LIMITED

100 Jutland Rd., Toronto 18, Ont./CL. 5-3407

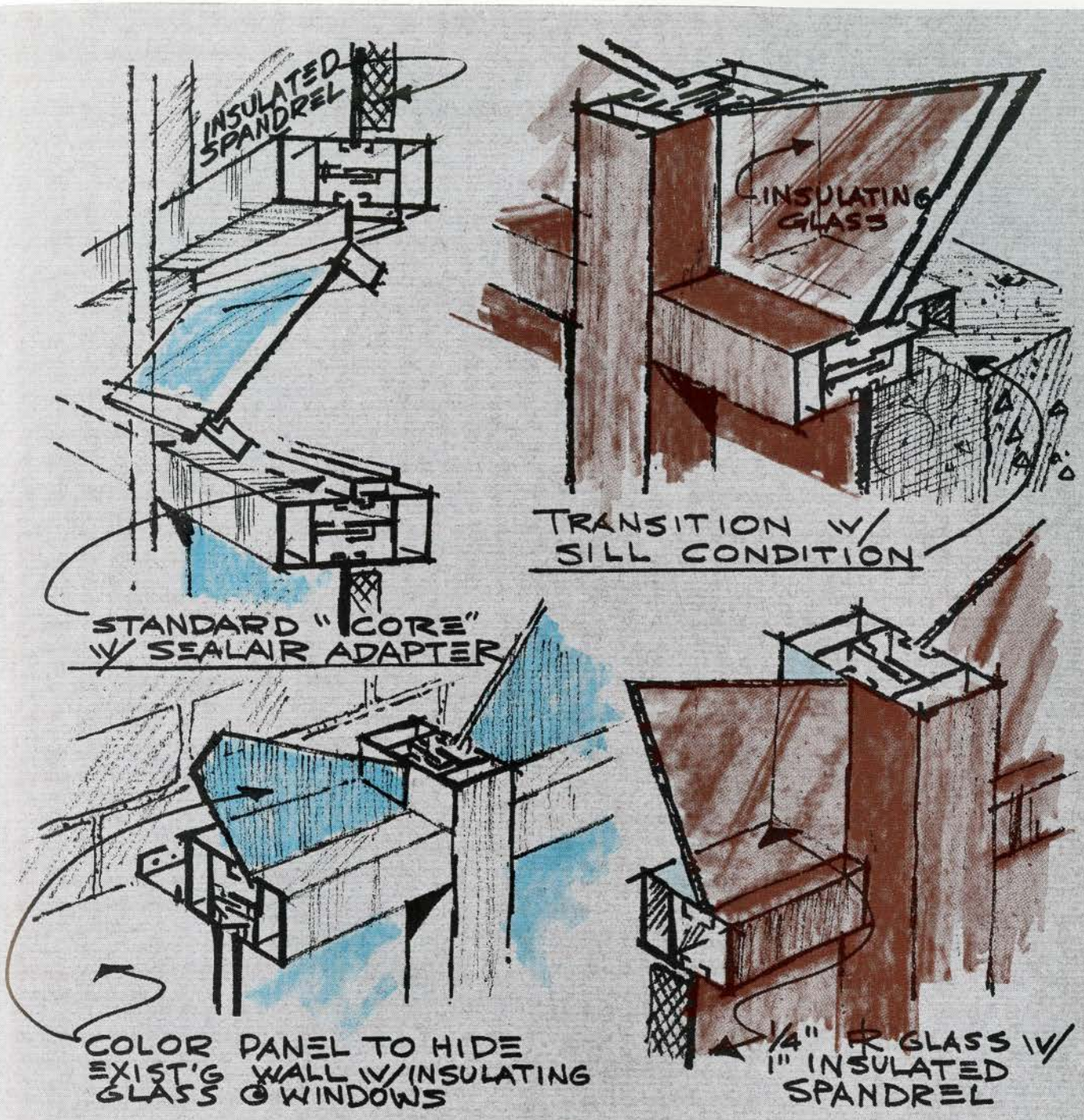


Look at what you can

This patented Aluminum Exterior Building System is a flexible design tool. Permits you to create a variety of grid fronts—each with a unified appearance—for new construction or remodeling applications. Better looking—with crisp, clean lines—and weathering advantages.

We think you'll like working with Core almost as much as a sculptor does with clay, because of the many effects it permits you to create. Where would you like the glass? Up front? Middle? Back? Does your design call for equal or varying reveals? Do you want to accent the vertical mullions or give equal prominence to the horizontals?

This versatile system also permits you to go from ¼ inch glass to 1 inch panels. It accommodates Kawneer entrances, concealed operators and closers, V-6 facings, Colorwall, Sealair windows, insulating glass and panels—all with uniformity. This is true even on tough remodeling jobs, which might otherwise look like a hodge-podge. And Core's "Snap and Lock"



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face glazing eliminates the unsightly clutter of exposed screw and stops. This feature also results in speedier erection and a very favorable installed cost.

*Interesting effects with Permanodic**— Kawneer Permanodic hard color finishes add warmth to your design. You can harmonize with colored lites of glass, panels, and facings. Core permits you to do this economically by combining colored Permanodic finished face members with Alumilite finished gutters.

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Write for Core File. Address Kawneer Co., Canada, Ltd., 1051 Ellesmere Rd., Scarborough, Ont., Canada.

Kawneer

Kawneer Company Canada Limited, Toronto, Ontario
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"But why have famous A.C.Horn Products become Grace Construction Materials?"

A. C. Horn is now part of W. R. Grace & Co. of Canada Ltd's. growing family of construction materials. Famous Horn products such as Hornseal, Hornflex, etc., enjoy broader distribution and greater reliability through the production and research facilities of Grace — one of America's largest chemical companies.

Grace Construction Materials brought together five of the most famous names in the construction specialties field:

DAREX CONSTRUCTION CHEMICALS, SERVICISED PRODUCTS, A. C. HORN, ZONOLITE PRODUCTS and ROCK PRODUCTS CHEMICALS. So when you say "Grace," you're specifying the best in caulks and sealants, flooring conditioners, waterproofing or admixtures. It's one source — GRACE — for the best in construction specialties. A simple way to remember is: "Grace Construction Materials, the complete line of construction specialties."

FOR DETAILS WRITE GRACE CONSTRUCTION MATERIALS, 66 HYMUS ROAD, SCARBOROUGH, ONTARIO

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Excessive noise **here** will not intrude **here**

Confidential matters **here** cannot leak **here**

when **lead** is used for sound insulation

Lead sheet in walls, moveable partitions, ceilings and doors is a practical and economical solution wherever transient noise presents a problem. The distraction of noise invading the privacy of your office can play havoc with your thought processes. Your confidential exchanges "heard outside" can be costly to your personal integrity and to your business. Noise from a concentration of office machines can cost you money by reducing the efficiency of your staff.

Thin lead sheet is a two-way barrier for private offices, meeting and board rooms—it keeps transmitted noise out and confidential conversation in.

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For further information on the use of lead for sound insulation or for advice on your specific noise control problems write to:

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THE CONSOLIDATED MINING AND SMELTING COMPANY OF CANADA LIMITED,
630 DORCHESTER BOULEVARD WEST, MONTREAL 2.
PRODUCER OF TADANAC AND COMINCO BRAND METALS

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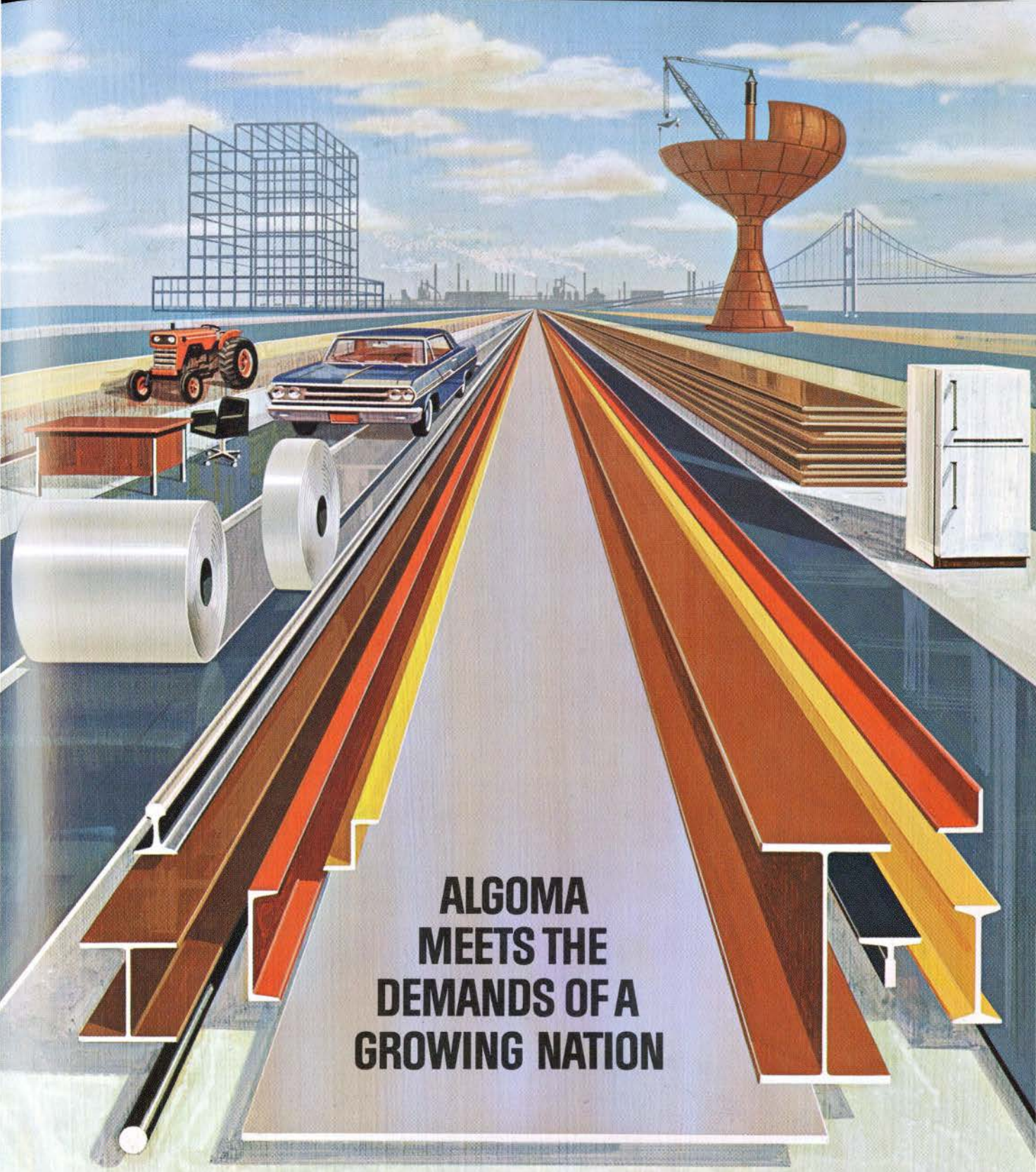

by supplying a wider, more diversified range of rolled steel products than ever before

Algoma produces a wide range of flat rolled and structural steel products to meet most consumer requirements. Its recent major growth has been concentrated on expansion of flat rolled facilities but the sizes of structural sections available have also been extended. △ We at Algoma are confident that an ever-expanding range of Canadian steel products will help to build a better, brighter future for Canadians.

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Officers 1965/66 Direction

Gérard Venne *(A)*, Quebec, was elected President of the Royal Architectural Institute of Canada at the Annual Assembly in Montreal June 9-12. He succeeds Dr F. Bruce Brown *(F)*, Toronto. Other Executive members elected were Charles Fowler *(F)*, Halifax, Vice-President; James W. Strutt *(F)*, Ottawa, Honorary-Secretary; and James E. Searle *(F)*, Winnipeg, Honorary Treasurer.

Mr Venne is a native of Quebec City, and graduated from the Ecole des Beaux-Arts in 1937 with the degree of Bachelor of Architecture. He gained registration as an architect the following year.

During World War II he served in the Canadian Army, and was later Lieutenant-Colonel commanding Laval University Officers' Training Corps.

He entered architectural practice with Pierre Levesque in Quebec, and opened his own firm in 1955. After serving on the Council of the Province of Quebec Association of Architects for some years, he was elected President of the Association in 1958.

Mr Venne was named a Fellow of the Royal Architectural Institute of Canada in 1957. He has served as registrar of the College, and has been a member of the Executive Committee of the Institute since 1959.

He is also well-known for his service club activity, and has just completed a term as District Governor of Lions International.

Au cours de son assemblée annuelle tenue le 9-12 juin 1965, l'Institut royal d'architecture du Canada s'est choisi comme président un architecte de Québec, Gérard Venne *(A)*, succédant au Dr F. Bruce Brown *(F)* de Toronto.

Parmi les autres membres de l'exécutif, on remarque M. Charles Fowler d'Halifax *(F)*, vice-président, M. James W. Strutt *(F)*, d'Ottawa, secrétaire honoraire et M. James E. Searle *(F)* de Winnipeg, trésorier honoraire.

M. Venne, natif de la ville de Québec, a obtenu son baccalauréat en architecture de l'Ecole des Beaux-Arts en 1937, et l'année suivante, il était officiellement reçu comme architects.

Il a fait du service dans l'armée canadienne durant la dernière guerre et, plus tard, il a commandé le Corps-école des officiers de l'Université Laval avec le grade le lieutenant-colonel.

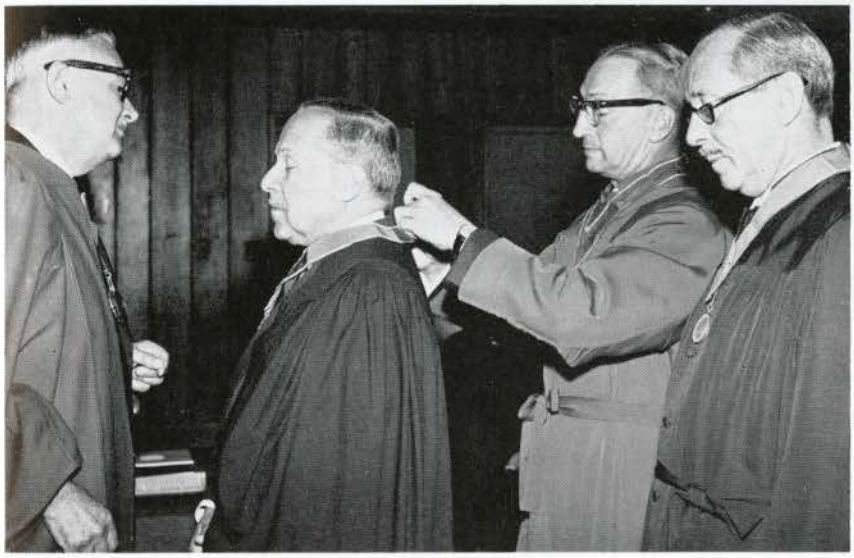
M. Venne a commencé la pratique de l'architecture avec M. Pierre Lévesque à Québec puis, en 1955, il a établi son propre bureau. Après quelques années au conseil de l'Association des architectes de la province de Québec, il a été élu au poste de président de cette association en 1958.

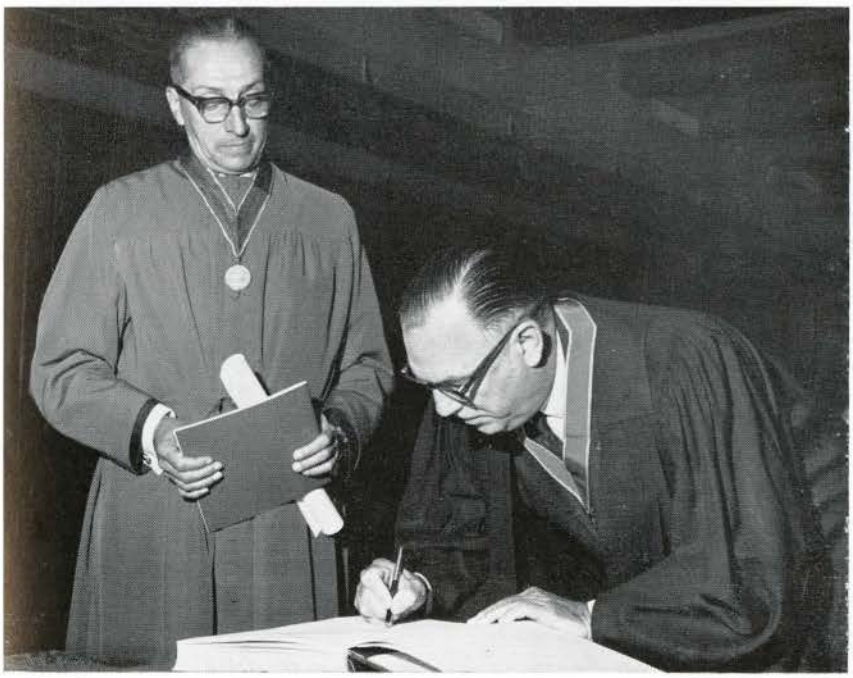
M. Venne est devenu membre du Collége des agrégés de l'Institut royal d'architecture du Canada en 1957. Il a rempli les fonctions de secrétaire archiviste du Collège et de membre du Comité exécutif de l'Institut depuis 1959.

M. Venne est bien connu aussi pour son activité dans les cercles d'entraide. Il vient de terminer un mandat comme gouverneur de districit des Lions International.

Convocation

College of Fellows/College des Agrégés





At this year's Convocation, medallions of Honorary Fellowship were conferred upon His Excellency Pierre Dupuy, CMG, Commissioner-General of the Canadian Exposition 1967, and J. Roy Carroll Jr, FAIA, Immediate Past President of the American Institute of Architects.

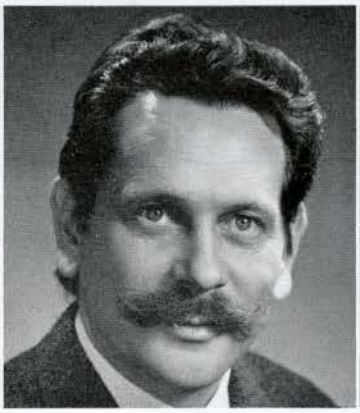
Centre: M. Dupuy receives the medallion from Harland Steele, Chancellor; Gérard Venne, Registrar; and Earle C. Morgan, Dean.

Below: Mr Carroll signs the register.

Top: Neil Stewart, Fredericton, the new Registrar of the College of Fellows.

New Members of the College of Fellows/

James E. Searle



Paul-Marie Côté

James Watson Balharrie

Robert C. Fairfield

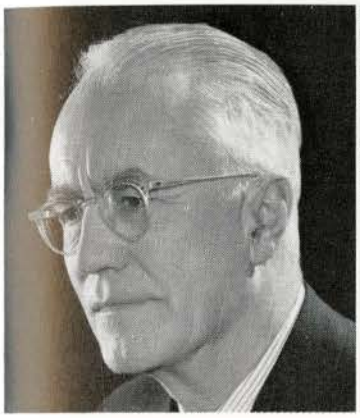
Mr Searle is a partner in the architectural and consulting firm of Smith Carter Searle Associates, established in 1947 with head office in Winnipeg and branches in Brandon, Port Arthur and Toronto. Mr Searle has served on the Council of the Manitoba Association of Architects for eight years and as President in 1959 and 1960. He has been a member of the Council of the Royal Architectural Institute of Canada since 1959, and a member of the Executive Committee since 1961. This year he was elected Honorary Treasurer of the RAIC.

M. Côté a commencé la pratique professionnelle à Chicoutimi. Depuis 1955 il est associé à Léonce Desgagné, membre agrégé de l'IRAC, au bureau Desgagné et Côté. En 1963, M. Côte a été nommé au Comité consultatif chargé de la coordination architecturale et artistique du programme de construction de la cité universitaire de Québec. M. Côté a participé activement au travail de divers comités de l'Association des architectes de la province de Québec. En 1963, le gouvernement de la province l'a nommé membre et president conjoint d'une Commission d'enquête royale sur l'enseignement de l'architecture au Québec. Il a récemment été nommé membre du Conseil des Arts de la Province.

Mr Balharrie became a partner of the firm Abra and Balharrie, Ottawa, in 1946 and is now partner in the firm of Balharrie, Helmer and Associates. He served for three years as a member of the Council and one year as Treasurer, of the Ontario Association of Architects. He is also a member of the Province of Quebec Association of Architects, and has served on a number of Committees of the Royal Architectural Institute of Canada. He is an Associate Professor at the McGill University School of Architecture and is Chairman of the Architectural Associates for the Carleton University project.

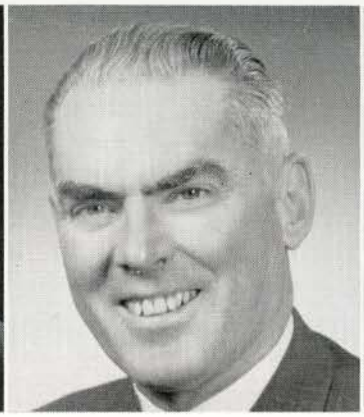
Mr Fairfield became a registered member of the Ontario Association of Architects in 1943, and is a partner in the firm of Fairfield and Dubois, Toronto. He received the Massey Foundation Gold Medal for Architecture in 1958 for his design of the Stratford Festival Theatre, and again in 1964 received a Massey Medal for the Central Technical School Art Centre of Toronto. Included in the architectural work for which he has been responsible are the offices of Oxford University Press, Toronto, the Canadian Ambassador's Residence in Ankara, Turkey, the Province of Ontario Pavilion and Brewers Association Pavilion for the 1967 World Exhibition.

Nouveaux membres du Collège des Agrégés



Percy Roy Wilson

Mr Wilson was elected Associate of the Royal Institute of British Architects in 1925 and an Associate of the Royal Canadian Academy in 1938. He opened his own practice in Montreal and became a member of the Province of Quebec Association of Architects. He has served on the Council and various committees of the PQAA for a number of years, and taught in the McGill School of Architecture from 1930 to 1944 in addition to conducting his own practice. In addition, he has had one man shows of his watercolors and has published etchings and pen drawings.



David Gordon Forbes

Mr Forbes became a partner in the firm of Rule, Wynn & Rule of Edmonton in 1960. He has been very active in the affairs of the Alberta Association of Architects having served in many capacities and as President in 1963. He served on the Royal Institute Council from 1960 to 1963. During the past ten years Mr Forbes has been involved almost entirely in hospital design, being responsible for the Whitehorse Active Treatment Hospital, Royal Alexandra Active Treatment Hospital, the Children's Pavilion for the Royal Alexandra Hospital, among others.

C. F. T. Rounthwaite

Mr Rounthwaite entered private architectural practice in 1947 after a year on the staff of the School of Architecture at the University of Toronto. In 1964 he merged his practice to form a new firm, Marani, Rounthwaite and Dick in Toronto. He has served the Ontario Association of Architects in numerous capacities, including Chairman of the Fees Committee. He is a member of the Council of the Royal Institute, Chairman of the RAIC School Visiting Committee and a visiting lecturer at the University of Toronto School of Architecture.

Harry Mayerovitch

Mr Mayerovitch is a member of the Province of Quebec Association of Architects. He has served on a number of Committees including the Town Planning Committee and the Executive of the Montreal Society of Architects. He has been an active participant at the national level on panels and symposia for the Community Planning Association of Canada and the RAIC. Mr Mayerovitch is active in the arts allied to architecture, having served as art director on the Wartime Information Board 1940-42, as a member of the National Executive of the Canadian Arts Council and as chairman of the Quebec Region of the Federation of Canadian Artists.

58th Assembly/58ieme Assemblée

Queen Elizabeth Hotel Reine Elizabeth, Montreal

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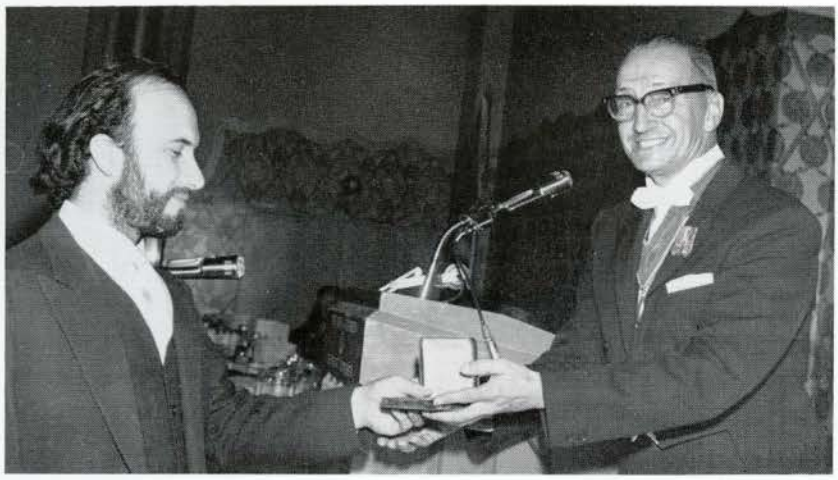

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1. *The newly elected President, Gérard Venne, receives the medallion of office from the retiring President Dr F. Bruce Brown.*
2. *Jean-Guy Théoret receiving the Francou Scholarship from Maurice Payette, Past President of the* RAIC.
3. *The 1965 Allied Arts Medal being presented to Jordi Bonet, Montreal, by the incoming President Gérard Venne.*
4. *Luncheon at l'Ile Sainte-Hélène, site of Expo '67.*
5. *Meeting of the Committee on the Profession. Left to right: W. G. Raymore, H. Mercier, H. H. G. Moody, Chairman; Secretary, P. Thornton, P. Dobush, J. A. Langford.*
6. *Journal* RAIC *Editorial Board Meeting: Left to right: W. Neish, J. A. Langford, L. A. Oxley (F), A. Bowers, W. N. Greer, incoming Chairman; W. B. Bowker, Editor; H. D. R. Buck, retiring Chairman; J. G. Spence, D. B. Brown, Denis Tremblay (F), Annabel Gerald, Assistant to the Editor.*

5

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7. *Mrs Gilles Marchand, Mrs Noël Mainguy, Montreal; Mrs Bruce Brown, Toronto; and Mrs Roy Carroll, Philadelphia at the* PQAA *Hospitality Centre.*

The PQAA *Reception at the Museum of Contemporary Art.*

8. *W. P. de Silva, Mr and Mrs Keith Graham, Halifax and their son, the youngest delegate to the Assembly.*
9. *Mrs J. E. Whenham, Winnipeg; Frank Noseworthy, President of the Newfoundland Association; W. B. Guihan, Past President of the Newfoundland Association; J. E. Whenham, President of the Manitoba Association, Winnipeg; and Mrs Noseworthy.*
10. *Mrs Nobbs and Frank J. Nobbs, President of the* PQAA, *with John L. Davies, Past President of the* RAIC *1963-64.*
11. *John Schrieber and Radoslav Zuk, Montreal.*

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58th Annual Assembly Dinner Address

By his Excellency Pierre Dupuy, CMG, Hon FRAIC,
Commissioner-General of Canadian World Exhibition 1967

Fellows of the Royal Institute, Honored Guests, Mesdames, Messieurs: There was the sky, all blue and down below were human beings, having difficulty in finding the faces of the Gods. Now and then there was a storm, and lightning and thunder would pour on their heads and they felt very miserable until, one day, one of them decided to give to the Gods a more human proportion, and he built a Temple. He was an architect. And today, receiving the great honor of being made a Honorary Fellow of the Royal Institute, I am not only honored — I feel humble, because I feel I am getting near to a semi-divine race — the race of architects. All through history, architects have been building high towers, in the antique times, on the capes, on the mountains — watch-towers. And even today, they can't get rid of this habit, and when you look at Montreal you find towers here and there, new ones going up almost every month, and you ask yourself whether there is any observer watching the horizon or whether, and I think I've discovered a secret, he's observing what we are doing on Sainte Hélène Island.

Sainte Hélène Island, played a role in my life when I was

just a young boy. When I was a good boy, my mother would take me to the Island and there, for the first time, I discovered small crabs that moved in the wrong direction and, when I wanted to catch them they pinched my finger. If I had been clever probably I would have taken that as a warning, as an omen, for my older time. I should perhaps have given more thought, before accepting the responsibility of Commissioner General, to this small animal that grow and can walk backwards and in every direction.

Now, what are we trying to do on these Islands? Of course, there is the usual tradition of fairs and exhibitions where beautiful things are offered to an interested public. But when I was a young diplomat representing Canada on the International Bureau of Exhibitions in the nineteen twenties, I discovered that an exhibition was much more than that. It was an age-old tradition going back to the Greek amphictyonies, seven, eight, nine centuries before our time. I have visited Olympia; I have admired the terrace of treasures, where the Greek cities used to present what they had best to offer in the field of arts and craftsmanship. I visited, naturally, the stadium where the Olympic games started. And I considered that in a world like the one in which we are living, when everything is changing under our very eyes because of all the discoveries of science and inventions of technology, an exhibition should not be limited to the presentation of exhibits. It should register the spirit of our times, of our world, of our moving world, and try to show to the average visitor where we are leading to. The old Greeks used to have the truth for their amphictyonies and their first duty was to honor the Gods together. Well, at the Exhibition which will take place in 1967, all the Christian religions, five Protestant denominations, the Catholics and the Orthodox will come for the first time since the 16th Century under one roof to pray to God together. I think this is an historic event, and in that sense, I think we are maintaining the great tradition of the past.

There were, in Olympia, plays by the great playwrights of the times — Sophocles, Euripides, Aeschelus. We are going to have three theatres — one for plays in the English language, another one for plays in the French language and a third one for plays in the languages of the participating countries, with automatic translation, which means that any country participating will not only be able to reveal what it can exhibit, it will be able to present its soul. Then, in the Greek amphictyonies there was choreography. We are going to have music — a music festival that will last from the first day of the opening on the 28th of April to the 27th of October, 1967. We have arrangements now with the Metropolitan Opera of New York; with the Paris Opera; with the Vienna Opera; with La Scala of Milan; with the Bolshoi of Moscow; with the Beirut Wagners Opera of Germany; and an all-star Canadian opera — which means that for six months Montreal will be the capital of opera performing. And I know people, friends of mine, in London, in Rome, in Paris, who have already rented furnished flats in Montreal to spend these six months here.

I think that the dance also played a big role — choreography — in Greece. We are also going to have ballet. Ballets from England; the 20th Century Ballet from Brussels; ballets from Denmark; ballets from the Paris Opera; ballets from the Bolshoi, etc.

When I was in Africa a few weeks ago, I had a long conversation with the President of the Senegal Republic, with the organizers of the Negro Art Festival, which will take place in Dakar next spring. And I will be going there in order to pick up the best elements for transplanting to Montreal during our exhibition.

Finally, cinema of course, we can't forget that we are living in the 20th Century and that cinema, which was not known in Greece, is an important factor in our artistic life. There will be a six month film festival, divided in portions. Naturally, we will have the usual film stars. I suppose a number of gentlemen would be disappointed if Sophia Loren were not to appear on such an occasion. And we will have scientific films, research films, films on nature for publicizing tourism, art films, films by producers under 30, by lady producers, etc., etc., for children. And so, cinema fans will have plenty to satisfy their tastes during the six months. But to cover all this, we will revive another old Greek tradition. We will have a poetry contest in many languages — in English, in French, German, Russian, Arabic, Italian, Greek, Spanish. And we will invite the leading authors and the leaders of the intelligentsia of the participating countries to come as jury to decide on the best poem submitted. This will give a particular touch, a human aspect to our Exhibition.

Because we are living in a world where machines play a greater role every day, I think we should as far as possible try to restore — notwithstanding the computers, notwithstanding our admiration for their achievements, — which would restore in the eyes of the public the dignity of man, the dignity of those who can still create with their hands, whether it is a symphony, a sculpture, or a beautiful building — the architects.

I could go on for hours talking to you about this Exhibition because I've swallowed the virus and I wouldn't like to communicate them to you because then you might lose a few hours sleep. But I can tell you that what you have seen today during your tour of the site is just what the ground level could offer, except for the bridge, but later on, you'll be seeing a few models and a few designs from architects from all over the world, and we can say that in 1967, there will be a good occasion to take stock of the progress achieved in the field of architecture and the other arts. This, I think, will be my best tribute of gratitude to the architects who were kind enough to receive me amongst their organization today. Thank you.

L'Architecture Fantastique

par André Bloc

L'Architecture Fantastique mérite d'être définie et surtout précisée. Selon nous, elle a pour grand mérite de ne respecter ni les règles, ni les habitudes et de s'opposer à tout conformisme. Elle peut s'exprimer par des dessins, des projets, irréalisés ou irréalisables, quoique aujourd'hui, presque tout soit constructible à l'aide des moyens techniques actuels.

N'est-il pas merveilleux de pouvoir s'échapper vers la poésie, vers un monde imaginé, qui contraste agréablement avec la morne platitude de la plupart des constructions de notre temps. Entre les monuments historiques qui ont eu la grâce d'échapper aux reconstitutions douteuses ou aux ravalements des façades, s'accumulent les constructions "utilitaires", implantées au hasard des terrains disponibles, sans justification d'urbanisme et avec une densification implacable des cités anciennes. Il n'y a plus de place pour l'hygiène et encore moins pour le rêve.

L'humanité se multiplie, recherche la conquête totale du globe, en surface et en sous-sol, exploite au maximum des richesses qui ne sont peut être pas indéfinies. Cette direction est-elle fatale, enrichit-elle tous les vivants et prépare-t-elle le meilleur avenir?

La "Civilisation Machiniste", appréciée par Le Corbusier, mérite-t-elle cette qualification? Peut-on considérer comme parfaitement civilisé un monde essentiellement préoccupé de la recherche de biens matériels? Peut-on s'étonner que quelques esprits mal adaptés aux coutumes actuelles ne tentent de s'en désolidariser. A défaut d'architecture, nous avons trop d'architectes respectueux des règlements et des systèmes imposés par des autorités administratives. Malgré quelques tentatives de mise en ordre qualifiées d'urbanisme, la planification méthodique, mais aveugle du travail, des loisirs et de la vie entière, resque de préparer un monde enregimenté dans un système qui ouvre ses portes à la médiocrité et à l'ennui.
L'Architecture Fantastique connait un succès de curiosité et d'estime, mais bien peu d'architectes, la plupart d'entre eux diplômés, s'égarent dans les chemins du rêve. Ils s'intéressent un moment aux quelques rares expériences tentées par quelques esprits singuliers, mais retournent vite à leurs besognes quotidiennes utiles, mais peu exaltantes. Ils prêtent leur collaboration en toutes circonstances.

C'est ainsi, par exemple, que les plus beaux sites se sont laissés découronner par l'implantation insensée d'immeubles médiocres ou néfastes, sous le prétexte qu'ils répondent à des besoins urgents. On se complait alors à déclarer qu'il faut d'abord résoudre le problème social comme s'il y avait incompatibilité entre l'imagination et l'architecture. Ceux qui ont pour mission de réaliser de l'habitat économique ne devraient pas ignorer que l'exercice de l'architecture n'est pas destiné à constituer un simple métier accessible à tous les postulants. La qualité de l'implantation et de l'édification d'un groupe de

"L'Architecture Fantastique" deserves precise definition. It has the great merit, in my view, of respecting neither rules nor customs, and of being entirely non-conformist. It can be expressed through the media of drawings for unrealized or unrealizable projects — in a day when nearly every project *can* be constructed, with the aid of modern techniques.

Isn't it marvelous to be able to escape in a poetic, imaginary world, in happy contrast with the gloomy dullness of most buildings today? Between the historic monuments which have had the luck of escaping new development projects or new facades, there have grown up "utility" buildings to fill available space without any justified planning, and with relentless density in the older cities. There is no more room for health — and still less for dreaming.

Humanity is multiplying, it is seeking total conquest of the universe, it is exploiting to the full the riches which are perhaps not limitless. Is this direction fatal, does it enrich all human beings and prepare for the best in the future? Does the "Machine Civilization", esteemed by Le Corbusier, merit this qualification? Can we consider as fully civilized a world which is pre-occupied with a search for material things? Should we be surprised if some spirits, poorly adapted to modern customs, try to break away? In place of architecture, we have too many architects who look only to rules and to systems imposed by administrative authority. Despite several attempts at order under the heading of town planning, our methodical planning is blind to the needs of work, of leisure, and of life as a whole. It runs the danger of preparing us for a regimented world and a system which opens its doors to mediocrity and dullness.

"L'Architecture Fantastique" is proving successful as a curiosity, but very few architects have wandered into the pathways of dreams. They become interested for the moment in experiments being tried by singular spirits, then return quickly to their daily tasks — useful, but not inspiring. At any rate, they are lending some support.
In this way, the finest sites have been spoiled by mediocre or ugly buildings, on the pretext that they meet urgent needs. We take delight in declaring that we must first resolve social problems, as if imagination and architecture were incompatible. Those who are charged with producing economical housing should not forget that the practice of architecture is really not a simple trade open to all applicants. The quality of the design and construction of a group of buildings is not a simple matter of credits.
The architect should have enough determination and vision to resist absurd regulations, insufficient funds, inept decisions, and blind manifestations of authority.
You will say that all these propositions have only a distant connection with "L'Architecture Fantastique", where

constructions n'est pas simplement liée aux crédits accordés. L'architecte devrait avoir assez de résolution et de clairvoyance pour résister à des réglements absurdes, à l'insuffisance de moyens, à l'ineptie de certaines décisions, manifestations aveugles du pouvoir. Vous soutiendrez que tous ces propos n'ont qu'un lointain rapport avec l'Architecture Fantastique où l'imagination débridée des auteurs ne peut qu'exceptionnellement s'adapter aux problèmes courants. Ceci nous amène à une tentative de classification d'essais bien différents, réunis fortuitement ou par erreur, dans un titre à la fois faux et exaltant.

L'Architecture Visionnaire

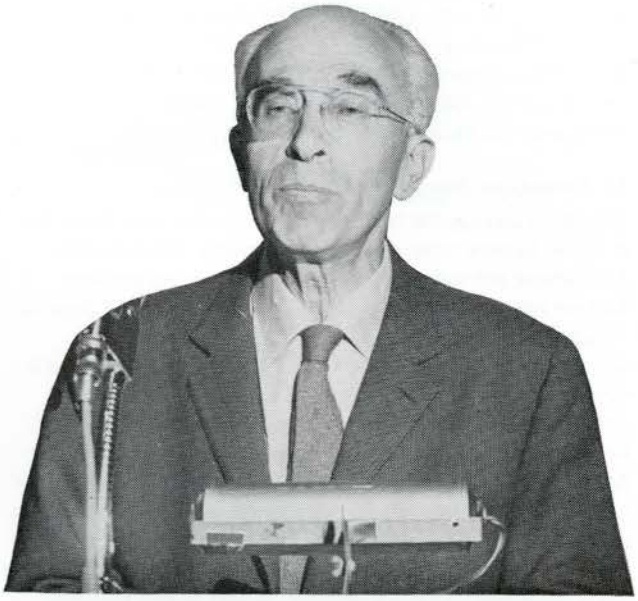
Quelques ingénieurs, quelques architectes s'exercent depuis peu à proposer des solutions neuves basées sur des possibilités techniques. Tange et ses collaborateurs, Maymont, Frei Otto et quelques autres, ont imaginé des systèmes urbanistiques accompagnés de solutions architecturales qui ne manquent pas d'originalité. Elles restent assez proches dans leurs principes des idées directrices de Le Corbusier, avec pour principale nouveauté de modifier fondamentalement l'échelle des constructions et de mettre en oeuvre des procédés techniques connus, mais peu utilisés. On peut reprocher à ces solutions leur systématisme, leur gigantisme et aussi l'absence de vérité en ce qui concerne les dépenses d'investissement, passées sous silence.
Pourtant, elles ont le mérite de suggérer un nouveau milieu urbain sans rapport d'échelle avec les expériences antérieures. Elles s'apparentent beaucoup plus à un monde utopique dans l'immédiat, qu'à de véritables recherches pittoresques et humaines dans le domaine de l'architecture. Elles ont été classées parfois et sans doute par abus, dans le domaine de l'architecture fantastique.

Le Fantastique Dessine

Il est assez important de constater que le fantastique a hanté beaucoup d'esprits, mais surtout depuis l'avènement du machinisme. Les esprits qui ont alors donné libre cours à leur imagination ne se préoccupaient pas de réalisations plus positives et considéraient qu'ils se livraient à des acrobaties graphiques, évoquant un monde bien différent du leur. Leurs images: gravures, lithographies, se rattachaient à un art surréaliste parfois original et mordant, mais ne prétendaient pas être des études pour une architecture éventuelle. Aujourd'hui encore, Pedro Friedberg qui vit à Mexico, nous propose un monde architectural singulier avec des dessins ou l'imagination et la qualité ne font pas défaut.

Le Fantastique Spontane et Construit

Certaines populations bénéficiant de circonstances particulières, ont su utiliser des sites exceptionnels et les matériaux trouvés sur place pour en faire une mise en oeuvre à la fois rationnelle et poétique. On peut en trouver des exemples chez les Indiens du Nouveau Mexique (USA), en Anatolie et aussi dans la région de Guadix (province de Grenade en Espagne). L'accentuation du caractère particulier du paysage et les habitations plus ou moins troglodytiques ont créé tout un monde surprenant, mi-naturel, mi-inventé, d'une variété qui n'a jamais été envisagée par nos constructeurs d'habitations à bon marché. Des populations pauvres ont su dans quelques cas sauvegarder les sites ou même les enrichir tout en



L'orateur du discours-thème de la 58e Assemblée, André Bloc, foundateur et directeur de "l'Architecture d'Aujourd'hui."

the unbridled imagination of designers can only rarely concern itself with current problems. This leads us to an attempt to classify a variety of attempts, brought together rightly or wrongly under a title which is at once false and inspiring.

Visionary Architecture

Several engineers and architects have been working for a while to propose new solutions based on technical possibilities. Tange and his collaborators, Maymont, Frei Otto and others, have designed urban systems with architectural solutions which do not lack originality. They remain close in principle to the ideas of Le Corbusier, with the prime novelty of a basic modification in the scale of construction and in use of technical procedures which are known but rarely used. These solutions can be challenged for their systematic approach, their size, and their failure to face up to the matter of costs.
However, they have the merit of suggesting a new urban setting without reference to previous experience. They belong more to a utopian world than to real human research in the field of architecture. They have been classified critically in the domain of "L'Architecture Fantastique".

The "Fantastique" in Design

It is important to note that the "Fantastique" has haunted many spirits, especially since the coming of the machine age. Those who gave full rein to their imagination were not concerned with its production, only with graphic acrobatics evoking a different world. Their images belonged to surrealist art, not studies of future architecture. Today, Pedro Friedberg in Mexico proposes a strange architectural world in drawings where imagination and quality are not faulty.

The "Fantastique" in Action

Certain peoples, in the light of particular circumstances, have been able to use exceptional sites and materials

utilisant la protection naturelle des parois montagneuses ou simplement de quelques mouvements de terrain.
L'architecture sans architecte n'est donc pas nécessairement déficiente.
Il est vrai cependant que le "fantastique" aussi spontané est dû parfois à l'isolement et à l'ingéniosité inventive, issue souvent de la pauvreté.

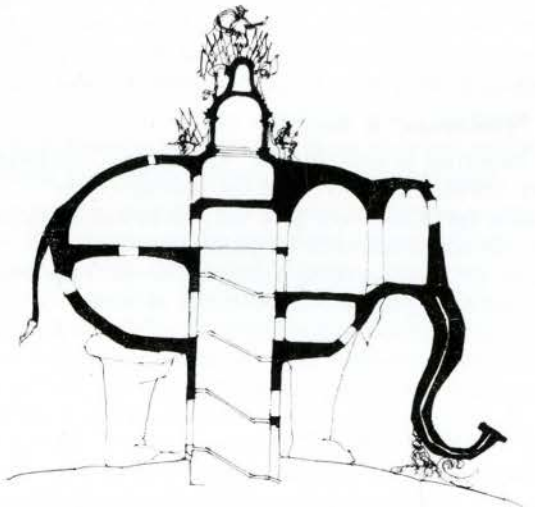
Le Fantastique Issu du Reve Devenu Realite

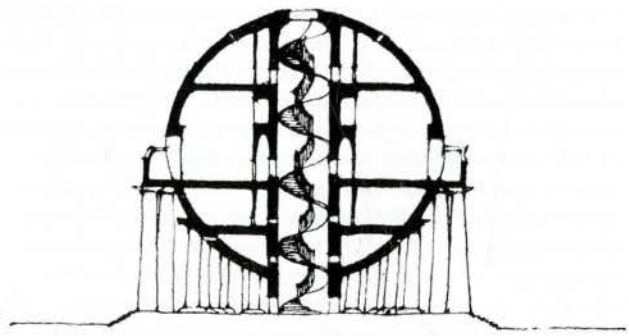
L'histoire étrange du facteur Cheval illustre sans doute de la façon la plus riche et la plus étonnante, l'architecture fantastique entrevue au cours d'un rêve par un modeste facteur rural. Vivant vers la fin du XIXème siècle dans un village nommé Hauterives, ce facteur entreprit de construire le château de son rêve à l'aide de pierres qu'il sélectionnait minutieusement. Il les transportait sur sa brouette, les additionnait les unes aux autres, mais conservait cependant l'initiative de la création. Peut-être le facteur Cheval avait-il déjà vu dans des livres, dans des revues, des constructions qui ont influencé son rêve et sa réalisation, mais celle ci garde la fraicheur et l'originalité d'une oeuvre pensée où les réminiscences ne l'emportent pas sur l'invention, où la variété des formes et des textures concourent à une véritable composition. Comment un tel homme a-t-il pu réussir à donner une forme précise à un monde entrevu au cours d'une des visions nocturnes . . . c'est un cas unique à notre sens dans l'histoire de l'Art.
On continue à qualifier de "naïfs" les inventeurs autodidactes de mondes poétiques. Il s'agit de personnages d'origine la plus humble qui se sont découverts, à des âges très divers, une certaine vocation de peintre et le fait n'est pas rarissime. Une octogénaire vient de commencer à peindre et de découvrir son monde poétique.
On groupe souvent ces véritables artistes dans le vocable de "naïf". Il faut des mots pour les amateurs de classification. Regrettons seulement que cette sorte de naïfs soit plutôt rare. Ils se sont évadés de professions très diverses: charcutiers, femmes de ménage, mécaniciens, peintres en bâtiment, douaniers, facteurs. Mais l'architecture est plus exigeante que la peinture. Les Tours de Watts réalisées en Californie (Los Angeles) par Sam Rodillo ont utilisé les ressources du métal. Elles ont exigé une solution technique délicate qui n'a pas obscurci l'originalité de la création. Tous les moyens étaient bons

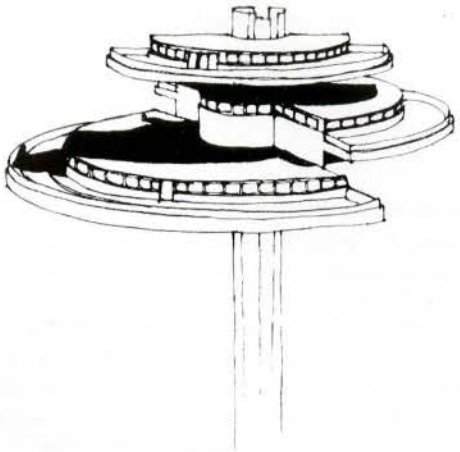
found on the spot to produce dwellings that are both rational and poetic. Examples can be found among the Indians of New Mexico (USA) in Anatolia and also in the region of Guadix (province of Granada, Spain). The particular character of the countryside and the troglodyte dwellings create a surprising world, half natural, half invented, with a variety never envisaged by our builders of cheap homes. These poor people have been able in some cases to save the sites and even to embellish them by using the natural protection of mountain walls or simply by moving some land. Architecture without architects is not necessarily deficient.
Nevertheless, it is true that the "Fantastique" in this spontaneous manner is due to isolation and ingenuity forced by poverty.

The "Fantastique" — Dream into Reality

The strange story of the postman Cheval illustrates in the fullest and most surprising manner "L'Architecture Fantastique", as seen through the dream of a poor rural mailman. Toward the end of the 19th century, in a village called Hauterives, he undertook construction of the castle of his dreams with stones that he selected carefully. He carried them in his wheelbarrow, piled them one on another, in accordance with his design. Perhaps postman Cheval had seen, in books and magazines, buildings which influenced his dream and design; but it keeps the freshness and originality of a thoughtful work where recollections do not take over from invention, where the variety of form and texture come together in a true composition. How did such a man succeed in giving precise form to something seen in nocturnal visions? This is a unique case in the history of art.
We call them "primitives", these inventors of poetic worlds. They are people of humble origin who have discovered, at various ages, a gift for painting. An eighty-year old begins to paint and discover his poetic world.
We group these artists under the name of "primitive". We must regret that this type of primitive is so rare. They come from various occupations: butchers, housekeepers, mechanics, house painters, customs officers, postmen.
But architecture is more exacting than painting. The Watts Towers in Los Angeles, California, by Sam Rodillo used the resources of metal. They demanded a delicate technical







pour Sam Rodillo, qui a employé jusqu'à des assiettes fortement colorées pour obtenir au moment opportun une généreuse polychromie. "La Vallée Heureuse" a été réalisée, il y a une quinzaine d'années au Maroc par un "naïf" colon milliardaire, enrichi par des vignobles prospères à Meknès. L'âme a quelquefois des replis insoupçonnés. L'appétit de lucre laisse parfois à l'esprit un secteur poétique. Ce fut le cas de Pagnon qui, à l'aide de coquillages, de pierres et de plantes sélectionnés, transforma une vallée aride en un jardin que l'on peut situer dans le domaine de l'architecture fantastique: jeux d'eau, cascades, petits édifices ornés de fleurs en abondance et aussi plantes rares soigneusement entretenues. Bien entendu, il ne s'agit pas dans ces jardins d'une transposition de jardins anglais, français ou même orientaux, mais d'une orchestration très libre de formes et de couleurs avec beaucoup de gaucherie, mais aussi de verve sans la moindre référence aux choses vues. La maladresse, parfois enfantine, mais riche d'inventions réussit à transformer un très vaste espace monotone en un milieu vivant où la curiosité est sans cesse tenue en éveil.

Le milliardaire Pagnon et le modeste facteur Cheval auraient pu se comprendre si l'espace d'une cinquantaine d'années ne les avaient séparés.

Le fantastique n'est pas l'exclusif privilège des autodidactes. Nous le trouvons à la base d'une culture raffinée, celle des Indiens Maya en Amérique Centrale. Là, il s'agit d'un fait collectif dont l'origine est indéterminée. Une dictature de prêtres a sans doute imposé tout un système constructif et architectural d'une richesse d'invention plastique qui n'a peut être pas d'équivalent dans l'histoire des civilisations. Jamais l'animation des parois murales n'a été dévelopée avec autant d'intensité. L'utilisation de la sculpture a été organisée chez les Maya de telle façon que les artisans sculpteurs pouvaient procéder à des répétitions d'éléments imaginés par d'autres. Des centaines de ces artisans contribuaient à une création dont ils n'étaient pas toujours les auteurs. Au total, tout un monde riche d'inventions, de mystère et de qualité, prenait possession de vastes espaces arrachés à la jungle la plus ennuyeuse, pour devenir un milieu où la vie se déroulait dans un environnement mystique et poétique. La dignité et l'ampleur de telles conceptions ne pourraient actuellement être envisagées par nos sociétés modernes

solution which did not obscure the originality of the creation. All methods were good for Sam Rodillo, who even used gaily colored plates to obtain a polychrome effect. "The Happy Valley" was achieved about 15 years ago in Morroco by a wealthy "primitive" vineyard owner. The soul sometimes receives unsuspected replies. The desire for wealth sometimes leads into poetic fields. This was the case with Pagnon who, with the help of shells, stones, and selected plants, changed an arid valley into a garden that can be placed in the domain of "L'Architecture Fantastique": waterfalls, cascades, small buildings decorated abundantly in flowers and rare plants, carefully placed. These are not gardens of the English, French or Oriental variety, but a free orchestration of form and color without the least reference to experience. Blunders, sometimes childish but rich in invention, have succeeded in transforming a large monotonous space into a living land where wonder is always kept awake.

The millionaire Pagnon and the poor postman Cheval would have been able to understand each other if the space of fifty years had not separated them.

The "Fantastique" is not the exclusive privilege of the self-taught. We find it as the basis of an advanced culture, that of the Mayan Indians in Central America. There, it is a collective fact of which the origin is unknown. A hierarchy of priests doubtless imposed a system of architecture and construction with rich invention of form which has perhaps no equal in the history of civilization. Never have murals been developed with such intensity. The use of sculpture was such, among the Mayans, that sculptural artisans could repeat designs made by others. Hundreds of these artisans would contribute to a work of which they were not the authors. A world rich in invention, in mystery and quality, took possession of vast spaces torn from the jungle in order to become a setting for life in a mystic and poetic environment. The dignity and the size of such concepts cannot actually be grasped by modern society, concerned much more with immediate material satisfaction than with mysticism and contemplation. "The Machine Civilization" has not been able to find its expression in form. Artists today are reduced to a secondary role likely to interest only a few devoted people, some merchants and speculators,

éprises beaucoup plus de satisfactions matérielles immédiates que de mysticisme et de contemplation. "La Civilisation machiniste" ne parvient pas à trouver son expression plastique. Les artistes sont aujourd'hui réduits à des besognes secondaires susceptibles d'intéresser seulement quelques amateurs, quelques marchands et quelques spéculateurs, tandis que s'édifient dans le désordre les milieux urbains les plus médiocres.

Le Fantastique Contemporain

Dans un monde en proie à des bouleversements politiques et sociaux, sans réaction devant les platitudes de l'environnement, il existe encore de bien curieuses recherches limitées à quelques cas particuliers. Après Gaudi (1852-1926), le célèbre architecte espagnol, épris de toutes les libertés et dont l'oeuvre interrompue, mais pourtant assez abondante, sert aujourd'hui de référence, architecte baroque dit-on, mais parlons donc des architectes classiques, ceux qui se contentent de tirer des barres et des axes? Si l'on excepte Mies van der Rohe, retranché dans la pureté et la sérénité, mais avec le plus grand raffinement, les seuls architectes valables sont plus ou moins épris de fantastique et de baroque. Ils s'appellent: Frank Lloyd Wright, Bruce Goff et surtout Soleri qui écrit:

"La frustration fatigue l'esprit de l'homme et les esprits fatigués éliminent les idées comme des utopies. C'est encore la technologie qui, si on la met au même niveau que le matérialisme sera une inépuisable source de frustration et deviendra ainsi le plus grand obstacle à l'humanisation de l'homme".

Soleri a bien peu construit, mais il a beaucoup imaginé. Peut être s'apercevra-t-on un jour que de tels hommes sont nécessaires au bonheur de l'humanité . . . mais nous n'en sommes pas là.

Se prétendant plus positif, Le Corbusier est avant tout un imaginatif et un romantique. Ses oeuvres d'après guerre n'atteignent pas le fantistique, maise elles sont toujours riches d'invention, quoique entachées parfois de certaines réminiscences. Si l'on peut classer dans le fantastique certaines oeuvres expressionnistes allemandes de: Hans Poelzig, Max et Bruno Taut, Hans Scharoun et Rudolf Steiner, l'auteur du célèbre Goetheanumde Dornach (Suisse), il ne faudrait pas oublier les italiens Michelucci, à Florence, et Enrico Castiglioni.

La Sculpture et le Fantastique

Aujourd'hui, les sculpteurs sont réduits en général à des tâches mineures, mais leur art pourrait apporter une large contribution à la solution des problèmes essentiels posés par l'urbanisme et l'architecture de notre temps.

Quelques rares sculpteurs ont eu la curiosité de procéder eux-mêmes à des expériences, mais leurs propositions sont rarement positives et restent à l'état de projets. D'autres ont fait équipe avec des architectes. La Villa "a Rajada" à Gland (Suisse) due à Hunziker et divers travaux de Kenzo Tange ou de Mayekawa au Japon, ont été réalisés avec une large participation d'un sculpteur. On peut aller aussi de la sculpture à l'architecture en mettant à profit une longue expérience dans les problèmes des rapports de volumes. L'imagination et la poésie plastiques peuvent user des nouveaux moyens techniques, sans négliger pour autant les procédés anciens et les

while the most mediocre urban developments are going up amidst disorder.

The "Fantastique" Today

In a world which is prey to political and social upsets, without reaction from the dullness of its environment, there is still some very interesting research limited to certain fields. After Gaudi (1852-1926), the celebrated Spanish architect, whose work was full of freedom and, while interrupted, is nevertheless abundant, a baroque architect — let us talk of those classical architects who are happy to draw bars and axes. If we except Mies van der Rohe, reduced to purity and serenity, but in great refinement, the only worthy architects are more or less occupied with the "Fantastique" and the baroque. They are: Frank Lloyd Wright, Bruce Goff, and, above all, Soleri, who writes: "Frustration tires out the spirit of man and tired spirits discard ideas as utopias. If we place technology on the same level as materialism, it will be an inexhaustible source of frustration and thus the greatest obstacle to the humanization of man".

Soleri built very little, but thought a great deal. Perhaps he saw that one day such men would be necessary to the happiness of humanity . . . but we are not there yet.

Trying to be more positive, Le Corbusier is above all a thinker and a romantic. Since World War II, his works have not reached the "Fantastique" but they are always rich in invention, although touched sometimes with certain reminiscences.

We can also class as "Fantastique" certain expressionistic works of the Germans: Hans Poelzig, Max and Bruno Taut, Hans Scharoun and Rudolph Steiner, author of the famous Goetheanumde Dornach (Switzerland). And we must not forget the Italians, Michelucci, in Florence, and Enrico Castiglioni.

Sculpture and the "Fantastique"

Today, sculptors have been reduced to minor tasks, but their art could make a big contribution to the solution of important problems posed by planning and architecture today. A few sculptors have had the curiosity to go ahead with their experiments, but their propositions are rarely positive and remain as projects. Others have teamed up with architects. The Villa "a Rajada" in Gland (Switzerland) of Hunziker and some works of Kenzo Tange and Mayekawa in Japan, have been achieved with important participation of a sculptor. One can go from sculpture to architecture, profiting from long experience in solving problems together. The imagination and poetry of form can make use of new technical methods without neglecting old procedures and traditional materials. It is never necessary to do without the resources of any material on pretext that it belongs to the past. The manner of using it can change and thus the architectural expression takes a new character. Errors have sometimes been made in attempts by sculptors. An abstract sculpture, growing to the scale of a building, cannot lead to a true architectural solution. Sculpture deteriorates when it must grow to comply with a precise program, especially by addition of openings.

Centers of experiment should be so organized as to favor the collaboration of artists in works having architectural value.

matériaux traditionnels. Il n'est jamais indispensable de se priver des ressources d'un matériel quelconque sous prétexte qu'il appartient au "passé". La façon de l'utiliser peut changer et aussitôt l'expression architecturale prend un caractère nouveau. Certaines erreurs ont été commises dans quelques tentatives faites per des sculpteurs.

Une sculpture abstraite agrandie à l'échelle d'un construction ou d'un édifice ne peut conduire à une véritable solution architecturale. La sculpture sans destination s'altère lorsque par son agrandissement, elle doit répondre à un programme précis, notamment par l'adjonction des ouvertures indispensables.

Des centres expérimentaux doivent s'organiser pour permettre de favoriser l'intervention des artistes dans l'élaboration d'oeuvres ayant une valeur d'architecture.

L'Architecture dite "Fantastique et l'Architecture Utilitaire

La révolution architecturale qui a accompagné la civilisation machiniste mit fin à l'incohérence plastique du XIXème siècle, déchiré par d'innombrables réminiscences de styles anciens.
A un mauvais décor plaqué, on a justement préféré une sécheresse d'expression limitée volontairement à la mise en évidence du système constructif. A la suite d'Auguste Perret, on a cru découvrir dans le rationalisme et le fonctionnalisme, des vérités essentielles se suffisant à elles-mêmes. Simultanément, des personnalités plus libres comme F. L. Wright et Le Corbusier, ont tenté de démontrer que l'Architecture Contemporaine ne pouvait pas se contenter de réponses positives aux problèmes posés. Pourtant ils ne furent pas entendus immédiatement. Presque tout le monde trouvait son compte dans la simplification proposée: l'économie réduite jusqu'à l'indigence, la médiocrité de certains architectes aisément oubliée, la rapidité de la conception et de l'édification. Après des luttes sévères et des déceptions accumulées, les grands novateurs ont fini par triompher, mais leurs oeuvres devenues objets d'admiration sont bien rares et pour les découvrir, il est nécessaire de voyager.

F. L. Wright disparu, a laissé d'intéressants disciples qui affirment maintenant leur propre personnalité. Le Corbusier a influencé de nombreux architectes qui ont plus ou moins bien développé les intentions de leur maître. Kenzo Tange qui a parfaitement bien compris la leçon de Le Corbusier, ne se contente pas d'imiter, il crée à son tour des oeuvres remarquables. On peut inscrire ses oeuvres ou ses projets dans le domaine de l'Architecture Fantastique.
Ces exemples exceptionnels n'empêchent pas la masse des constructions contemporaines de se multiplier dans l'incohérence urbanistique et plastique. C'est pourquoi, il est indispensable de bien connaître l'oeuvre des chercheurs, non pour les imiter, mais pour que des créateurs de plus en plus nombreux enrichissent notre environnement et découvrent une expression humaine et sensible pour le cadre contemporain de la vie.

Les architectes à l'imagination féconde permettront peut être de concrétiser le monde fantastique qui est aussi celui du rêve et de la poése. Ils façonneront le milieu humain et généreux dans lequel les nouvelles générations pourront acquérir le sens de la dignité et de l'invention. Elles y découvriront les plus belles raisons de vivre.

The "Fantastique" and Utilitarian Architecture

The architectural revolution which accompanied the "Machine Age" put an end to the incoherence of form of the 19th century, made up of innumerable reminiscences of old styles.

In place of a poor veneered decor, we rightly turned to a plain expression placing in evidence the system of construction. Following Auguste Perret, we believed that we had found, in rationalism and functionalism, the essential truths sufficient unto themselves. At the same time, more liberal personalities like F. L. Wright and Le Corbusier tried to show that modern architecture could not be content with positive replies to the problem. But they were not heard at once. Almost everyone found the answer in the proposed simplification: economy reduced to poverty (the mediocrity of certain architects easily forgotten), the speed of design and construction. After hard battles and many deceptions, the great innovators finally won out — but their works which have become objects of admiration are very rare, and one must travel to discover them.

F. L. Wright has left disciples who are now assuming their own personality. Le Corbusier has influenced numerous architects who have more or less developed the intentions of their master. Kenzo Tange, who has learned perfectly the lesson of Le Corbusier, is not content to imitate him, but creates remarkable work in his turn. His work and projects can rightly be placed in the domain of "L'Architecture Fantastique".
These exceptions do not prevent the mass of modern construction from multiplying in incoherence of planning and form. That is why it is absolutely necessary to know the work of these explorers, not to imitate them, but so that increasingly numerous creators may enrich our environment and discover a sensible human expression for the frame of living today.

Architects with fertile imagination may be able to achieve the "Fantastique" world which is also that of dreams and poetry. They can fashion a generous human setting in which new generations may acquire the sense of worth and invention. They will discover there the best reasons for living.

Assembly Report/Rapport de l'Assemblée

by Harry Mayerovitch, FRAIC

The Discussions on the Assembly Theme/Les discussions sur le théme de l'Assemblée

Comments on the Assembly Program/Commentaires sur le programme de l'Assemblée

Perhaps no better person could have been chosen to state the theme of the 1965 Assembly, "Fantastic Architecture", than André Bloc — a distinguished sculptor, a great explorer of form. His plea for a breakaway from materialistic aims, and his call for resistance to "absurd regulations and blind authority" were passionate and inspiring. "Is our search for total conquest of the universe in the material sense fatal — is this preoccupation fully civilized? Should we be surprised if some spirits try to break away?" Were rationalism and functionalism sufficient unto themselves?

It was around these two tendencies in architecture — the search for freedom and the search for order — that the ensuing discussions developed.

Some panelists attempted to shave down the problem to something more manageable by limiting the definition of "fantastic". The elimination of the "primitive", the "non-conformist" and "pure fantasy" left us to deal more exclusively with the "visionary". This did simplify matters.

Thus, with special reference to the Urban Context, "Le visionnaire ne crée pas sa vision gratuitement, pour elle-même, mais à partir d'une réflexion plus profonde et non par un besoin conscient d'originalité. A ce compte, l'architecture visionnaire s'integrerait dans un urbanisme visionnaire et en est indissociable." (Blanche van Ginkel). For Irving Grossman it was a matter of attempting to fuse the dream and the realization — "il y a à la fois des architectes-explorateurs et des architectes-réalistateurs. L'art de bâtir nos villes nécessite l'existence et l'interaction des deux". For Jean-Marie Roy the matter was a process — the creation of traditions arrived at gradually, rather than through explosive revolution. Ian McLennan directed a piercing eye to the future — "notre milieu de demain aura sans doute à devenir plus logique et plus rationnel, ce qui n'exclut pas les solutions d'avant-garde."

The panel dealing with Architectural Research was also plagued by the greed to define. Research, representing conscious thought, was opposed to fantasy — representing untramelled action, the one tending to exclude the other. It was recognized (Henry Elder) that our present preoccupation with "facts" and breaking them down into further "facts" could lead to such fragmentation as would make truly "formative thinking" impossible, and reduce architecture to mere building.

Could fantasy be truly equated with action, and research with thought? And if so — could the inexorable logic demanded by the complexity of 20th century research tolerate the co-existence of free-wheeling imagination? Does fantasy, in fact, have anything to do with research? Is its purpose rather to herald the approach of profound changes in the realm of human values rather than in the world of science?

The conclusion reached, as deduced by the rapporteur, was as follows: "l'assemblée admet en conclusion que l'architecture fantastique nous offre des oeuvres d'un intérêt certain, mais par contre elle ne croit pas qu'elle soit une réponse à la recherche architecturale parce qu'elle ne cherche que d'une façon fragmentaire".

It might have been expected that, in the discussion on Exhibition Architecture, fantasy might have enjoyed a field day. Not so! For Roger D'Astous the approach had to be rational, based on a consciously developed program. G. Macy DuBois likewise insisted that new forms created for their shock value were worse than useless — even dangerous. And for Arthur C. Erickson, exhibition architecture was not necessarily serious architecture. Fairs should be of a temporary nature, to be experienced and removed from the scene. Fantasy was, by contrast, a serious pursuit, although even that was, with the imminent landing of man on the moon, unable to keep up with reality.

The panel on Education also tended to favor the rational approach. "L'architecture n'est pas une affaire de goût, mais une réponse à certains imperatifs de base" — Bruno Zevi's thought was quoted by Guy Desbarats as a legitimate starting point for an educational program. This outlook was shared by Norbert Schoenauer — "La pratique contemporaine s'appuie sur une recherche méthodique qui s'oppose essentiellement à l'invention empirique", and John Andrews drove the point home — "La dernière chose dont les écoles d'architecture aient besoin, c'est bien de la recherche de la forme pour la forme et pour la forme fantastique". Nöel Mainguy, however, stressed the importance of the personal element in a work of architecture and pointed to the need to solve the dilemma between liberty of expression and the rational solution of a problem.

At the end of the series of discussions one had the distinct impression that M. Bloc, almost single-handedly, had been fighting the good fight of fantasy against the architectural profession of Canada as passionately dedicated to sweet reason. It might, however, be possible to conclude that the two ideas, seemingly opposed to each other, were in fact equally necessary tools to be used by man in his endless efforts to extend the boundaries of his knowledge and the control of his universe. Fantasy — to express the infinite goal, and reason — to find the ways of achieving the goal, which, once achieved is again challenged by a new and still more distant dream. Is this process, perhaps, the essence of all human activity?

So much for "Fantastic Architecture". It was a stimulating topic, well prepared by the committee in charge and

seriously handled by the panelists. What a pity therefore that so few Montreal architects found it possible to attend the sessions. This is hard to explain, and it may be useful for next year's Assembly committee to give some thought to the problem.

It may well be that the whole character of our Assembly program should be re-examined. The purposes of our annual gathering seem clear enough:

1. To conduct the annual business required by the RAIC Charter.
2. To offer an opportunity for architects to meet each other socially, to exchange ideas and to see what is happening in other parts of the country.
3. To focus attention and arouse discussion on significant topics affecting the profession.
4. To create an occasion for making the entire country aware of the contribution by the architectural profession to its economic and cultural growth.

No. 1 is mandatory, No. 2 is self-evident, but Nos. 3 and 4 seem to merit exploration.

The last item should perhaps receive special consideration at this time. Our relationship to the public has received increasing attention in the last few years, and I believe the content and form of the Annual Assembly should be so arranged as to contribute to the closer relationships we so earnestly desire. This may involve the selection of topics which would have an appeal beyond the ranks of the profession. It should be possible to find many subjects of current interest and general significance. They might justifiably be related to special problems or areas of interest affecting the community in which the Assembly happens to be held. Special invitations could be extended to groups or individuals whom we particularly want to reach. Our Assemblies could become an *event* in the community. The assistance of the other arts to enrich our program could be sought. Special musical or dramatic programs arranged to coincide with our own contribution could help to emphasize the importance we attach to the inter-relationship of the arts.

Would it be possible, for instance, to sponsor at the 1966 Assembly at Jasper, Alberta, an exhibit of ceramics gleaned from various parts of the country, with prizes awarded by the RAIC? A summer festival now taking place in Finland includes a substantial program of architectural discussion. This may be worth considering also for Canada.

An improvement in our relationship with the press is also indicated. How the press covers our conventions is obviously important. This is of course not something we can control, but it should be possible to make the reporters' task easier by letting them know what aspects of our program and discussions we think particularly significant, and in our opinion interesting to the public. Discussions with the editors of the major newspapers prior to the Assembly might be most useful. Perhaps the release of texts prepared by panelists (or better still a digest thereof) prior to delivery could also be helpful. It is possible that the Montreal newspapers might have used photos of "fantastic architecture" had they been available.

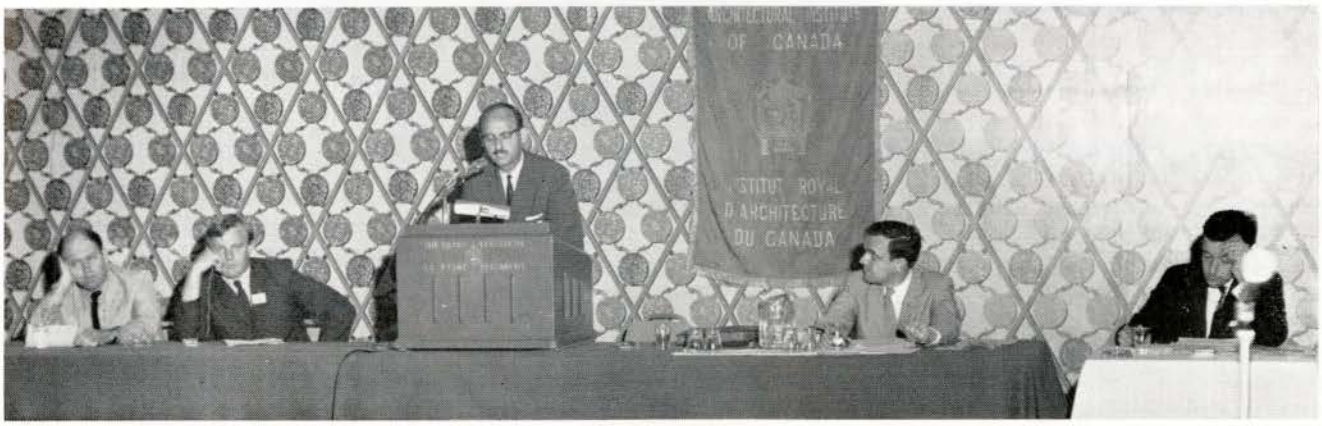
It was regrettable that Peter Desbarats of the Montreal Star, in covering one of the panel discussions, had to find his story in a spirited exchange between Ian Maclennan and Paul Trépanier on a matter having nothing to do with the theme under discussion. It is vital that the profession be presented to the public in a serious way, reflecting our deep concern with the main issues of the day. If this is not implicit in our discussions, it is obvious that the press must make use of the crumbs which happen to fall their way.

I wonder whether it might not have been possible to arrange a feature on "Fantastic Architecture" in, say, Weekend Magazine, to have appeared concurrently with the Assembly date, had we been able to assemble material sufficiently early. Would an exhibition on "Fantastic Architecture" (from the Museum of Modern Art series) have been possible in the lobby of Place Ville Marie?

This is simply to stress that our publicity should be conceived along the broadest possible lines, and in the most explicit and pointed way, with an appreciation of exactly the audience we wish to reach.

The locale of our Assemblies also becomes a very important consideration. When held in large cities, a program of greater scope is possible, notwithstanding the many outside attractions which frequently reduce the attendance at sessions. When held in isolated areas, such as St Andrew's, N.B., or Jasper, opportunities for more intensive or specialized discussions can be exploited. But regardless of locale, the programs should be designed to make the greatest impact *outside* the ranks of the profession.

Discussion group on Architectural Education. Left to right: Panelists Norbert Schoenauer, John Andrews; Guy Desbarats (F), Chairman; Noël Mainguy, panelist; Jean Gareau, rapporteur.



Discussion Groups/Groupes d'étude

Recherche architecturale

"Ce n'est pas la recherche du fantastique qui nous aidera à pressentir l'évolution future." (Jurgen Joedicke)

Animateur, Raymond T. Affleck — Rapporteur, Irénée Goudreau
Panelistes, Henry Elder, Douglas Shadbolt, Ronald J. Thom, Stuart Wilson

M. Affleck ouvrit le débat par quelques pensées de son cru. Pour lui, le mot "fantastique" aurait dû être traduit par "visionary architecture", expression qui aurait mieux rendu l'esprit de l'expression française "architecture fantastique", en faisant mieux comprendre que celle-ci se distingue par son contenu poétique, prophétique et caractérisé par l'imagination débordante.

Y-a-t-il une parenté, se demande-t-il, entre l'architecture fortement créatrice et la recherche architecturale? Il y répond en partie en mentionnant que la recherche peut aussi être une recherche des formes et de la forme. Pour fouiller la question plus complètement, M. Affleck passe la parole à Messieurs les panelistes qui nous proposent les pensées suivantes:

Certaines personnes sont portées à agir, d'autres à penser, et les architectes de par leur fonction doivent agir car ils travaillent sur le concret, mais un jour les meilleurs d'entre-eux doivent se demander la question classique: "Pourquoi!" C'est alors qu'ils abordent la recherche, la recherche en vue de comprendre. Contrairement à d'autres époques de l'histoire, la nôtre attache la plus grande importance *au fait*. Nous les alignons, nous les séparons les uns des autres avec dextérité, nous en déduisons d'autres faits, fragmentaires pour la plupart, et de fragment en fragment nous finissons par les vider complètement de sens. Si nous avons fait des pas de géant, n'avons-nous pas, par contre, laissé le plus important derrière nous?

L'architecte de valeur ne peut se permettre de penser par fragments, car c'est l'ensemble d'un problème qu'il doit résoudre s'il veut produire une oeuvre architecturale plutôt qu'une bâtisse. L'architecture fantastique et la recherche architecturale! Voilà bien réunis les deux opposés. L'action et la pensée; car si la recherche est une méthode de pensée, l'architecture fantastique est le résultat final de l'action. Peut-on les relier? Difficilement, car la recherche que la science a si bien développée s'appuie sur la logique, sur le savoir déjà acquis et sur un système de pensée, produit d'une civilisation, tandis que le fantastique s'appuie sur l'imagination et est une rébellion contre l'orthodoxie, ce qui lui confère un caractère prophétique.

Généralement le fantastique se situe au-delà de la recherche, spécialement en art, car les exemples sont trop peu nombreux pour révéler le fil conducteur.

La grande utilité du fantastique est de nous avertir d'un changement profond qui se prépare. Le monde a compris la leçon: Il sait que la civilisation est en plein changement. Le savant et la science le savent aussi; je ne suis pas certain que nous architectes mesurons la profondeur de ce changement. Peut-être avons-nous besoin d'un plus grand nombre d'oeuvres fantastiques pour nous ouvrir les yeux.

Hors de son intervention, M. Shadbolt commence par une définition de l'architecture fantastique: Celle-ci contredit des notions établies et comporte un élément de prophétie et de non-conformisme. Elle cherche un ordre au-delà de l'ordre des réalités quotidiennes: C'est un fuite de la réalité du monde. On a dit qu'elle s'appuyait sur le côté artiste de l'architecte ou sur son côté planificateur ou encore sur son côté constructeur. J'ajoute qu'elle s'appuie aussi sur son côté ingénieur.

Mais peut-on dire qu'elle est de la recherche? Non, si nous songeons que la recherche est une investigation patiente et diligente visant à trouver de nouveaux critères en procédant du connu à l'inconnu. L'architecture fantastique, elle, cherche de nouvelles valeurs par des chemins vierges. C'est l'image du monde vue par un seul homme et, partant, ce ne peut être qu'une solution partielle.

L'architecture ne asurait se séparer du contexte social, ni du problème social. La recherche en architecture devrait s'intéresser principalement à cette question primordiale: Dans quelle sorte de société devons-nous vivre, quel environnement social désirons nous?

Si nous voulons prévoir l'avenir, nous ne pouvons nous contenter d'une recherche fragmentaire; il nous faut développer en nous l'abilité à synthétiser une pensée complexe et transformer des conditions complexes en un tout unifié.

L'assemblée admet en conclusion que l'architecture fantastique nous offre des oeuvres d'une intérêt certain, mais par contre elle ne croit pas qu'elle soit une réponse à la recherche architecturale parce qu'elle ne cherche que d'une façon fragmentaire.

Le contexte urbain

"N'est-ce pas une décision dangereuse que de faire reposer un siècle de construction à venir sur le désir nostalgique de la stable et symbolique architecture d'hier?"

Animateur, Harry Mayerovitch (F) — Rapporteur, Michel Barcelo
Panellistes, Blanche L. van Ginkel, Irving Grossman, Ian R. Maclennan (F), Jean-Marie Roy

Après avoir présenté le fantastique comme une nécessité fondamentale de la vie, M. Mayerovitch aurait voulu orienter la discussion sur le degré de liberté permissible pour le créateur individuel à l'intérieur de l'ordre urbain; n'y aurait-il pas déjà beaucoup plus de fantaisie et de fantastique dans nos villes que nous n'en désirons?

Pour Madame Van Ginkel, la question posée au panel l'amena à se demander si le passé sur lequel nous prétendons

parfois nous appuyer est celui-là qui a les qualités les plus stables et les plus valables. Après avoir défini et rejeté divers types d'architecture fantastique, non-conformisme, primitivisme, fantaisie pure, elle nous demanda de nous tourner plutôt vers les véritables visionnaires: véritables scrutateurs de l'avenir qui nous apportent des solutions significatives pour demain quoique leur bien-fondé soit souvent difficile à démontrer rationellement. Le visionnaire ne créé pas sa vision gratuitement, pour elle-même, mais à partir d'une réflexion plus profonde et non par un besoin conscient d'originalité.

A ce compte, l'architecture visionnaire s'intégrerait dans un urbanisme visionnaire et en est indissociable.

Encore là, on nous mit en garde contre le visionnaire à tout prix: si nous ne pouvons nous entendre sur une vision de la cité de l'avenir, mieux vaut résoudre aussi simplement et rationnellement que possible nos programmes architecturaux.

Pour M. Jean-Marie Roy, nous sommes dans un contexte où les traditions sont à créer, mais où en même temps le besoin d'une transformation évolutive de nos villes doit remplacer les brusques révolutions. La création d'une architecture fantastique ne peut être un acte gratuit et conscient. Ce n'est pas tant d'oeuvres-vedettes que d'un long entraînement à la grammaire, à la syntaxe et au vocabulaire de l'architecture et de la technique de notre temps, dont nous aurons besoin. Pour M. Grossman, il y a à la fois des architectes-explorateurs et des architectes-réalisateurs. L'art de bâtir les villes nécessite l'existence et l'interaction des deux. Nous manquerions plus particulièrement de réalisateurs capables de convaincre prompteurs et clients de la valeur des idées mises de l'avant par les explorateurs: s'il faut cultiver la fleur exotique, il faut aussi convaincre les clients da sa beauté. Quant à l'architecture fantastique comme expression artistique purement personnelle, sa valeur dans le contexte urbain lui semble plus que douteuse. Pour M. Maclennan, inutile de se tourner vers le passé et de rendre encore plus confus le terme fantastique. Au contraire, notre milieu de demain aura sans doute à devenir plus logique et plus rationel, ce qui n'exclut pas les solutions d'avant-garde, sans pour autant tomber dans le fantastique. Peut-être aussi l'éducation n'arrive-t-elle pas encore assez à faire découvrir à tous la fantaisie et le fantastique de notre vie. M. Trépanier, maire de Granby, nous fit un long pladoger en faveur de l'apogée sociale de la race blanche, et de la mission politique et sociale de l'architecte, ce qui lui semblait beaucoup plus valable que toute recherche du fantastique.

M. Regeristrieff nous fit part de ses doutes sur la possibilité pour un seul créateur de concevoir tout un milieu urbain d'une telle complexité qu'elle dépasse les limites de son intelligence et de sa sensibilité.

Pour Madame Van Ginkel, au contraire, notre vie d'aujourd'hui ne serait pas tellement plus complexe qu'elle ne le fut jamais, et nous avons par ailleurs de nouveaux moyens techniques et de nouvelles visions pour résoudre les problèmes posés par la complexité de notre milieu. En conclusion, il reste à savoir si suffisamment des nôtres seront prêts à transformer ces visions en réalités, à les utiliser partiellement ou en entier dans la réalisation d'une architecture et d'un urbanisme visionnaires et à la fois respectueux du passé.

Education architecturale

"Il est regrettable qu'il n'existe pas encore dans nos écoles d'architecture des ateliers de recherche pure, tel que dirige Robert Le Nicolais à Philadelphie." (Marc Gaillard)

Animateur, Guy Desbarats (A) Rapporteur, Jean Gareau
Panellistes, John H. Andrews, Noël Mainguy, Norbert Schoenauer

M. Desbarats, faisant état des diverses définitions proposées pour le terme "fantastique", a suggéré que les sens divers et d'ailleurs différents qu'a ce terme en anglais et en français y soit pour quelque chose. Il a opposé l'architecture fantastique, architecture de visionnaire, à l'architecture telle que l'a définie Bruno Zevi: non pas une affaire de goût, mais une réponse à certains impératifs de base. La prise de conscience lucide que cette réponse exige a conduit les deux premiers conférenciers à insister sur une éducation qui apprenne à penser tandis que M. Mainguy signalait la difficulté de cultiver l'équilibre entre la liberté créatrice et cette prise de conscience.

A partir d'une définition de l'éducation qui met justement l'accent sur la préparation d'un meilleur avenir, M. Schoenauer a rappelé cependant que cet avenir prend racine dans le passé. Entre l'éclectisme comme on l'a pratiqué et le culte de l'inusité, de l'architecture fantastique, se situe la ligne directrice de l'orientation.

Ce ne peut être que par coïncidence qu'un projet particulier conçu comme architecture fantastique puisse être la solution qui s'impose. La pratique contemporaine s'appuie sur une recherche méthodique qui s'oppose essentiellement à l'invention empirique. Monsieur Schoenauer note enfin les changements inévitables qui caractérisent notre époque et qui conduiront l'architecte de demain à accepter la notion d'équipe. Dans cette perspective l'époque des "stars" et "primas donnas" est révolue. Les conditions de cette collaboration imposent donc une éducation orientée non plus sur la solution à un problème mais sur une méthode d'approche à cette solution. L'architecture qui en résultera aura l'homogénéité de l'architecture traditionnelle dans lesquels les joyaux sont rares.

Monsieur Andrews note l'ambiguité de la citation. Si, comme en témoigne l'orientation de ce congrès, on insiste davantage sur la recherche de la forme pour la forme que sur la forme de la recherche, le conférencier s'inscrit en faux. Cette acception méconnait ce que sont l'architecture et la recherche. L'oeuvre de Le Ricolais en étudiant les principes structuraux de la matière vise à l'économie des moyens. L'invention de nouvelles formes structurales n'y est qu'accidentelle. Et d'affirmer M. Andrews, la dernière chose dont les écoles d'architecture aient besoin, c'est

bien de la recherche de la forme pour la forme et pour la forme fantastique. Le rôle de l'architecte créateur d'un milieu physique, évolue sous la pression d'un besoin de synthèse du travail des spécialistes, synthèse qui tient lieu de l'intuition de jadis. C'est donc à penser que l'éducation doit tendre.
Monsieur Mainguy a mis son auditoire en garde contre le mot "fantastique" qui évoque le rêve et l'irrationnel ou une opposition au conformisme. S'appuyant sur une définition de l'architecture étendue comme l'art d'organiser l'espace en fonction de l'occupant qui a le très grand avantage de faire état de la démarche de l'architecte et de la perception de l'occupant, le conférencier a soutenu qu'une oeuvre architecturale aura d'autant plus de qualité que le créateur aura précédé l'occupant dans l'espace qu'il conçoit. La résonnance éveille chez l'occupant cette qualité "fantastique". Cette qualité n'existe qu'en fonction de la culture ou de l'érudition de l'observateur: c'est ce qui permet d'expliquer la force d'oeuvres aussi différentes que celles de Mies et de Tange.
Ce qui retient l'architecte de donner libre cours à sa poésie intérieure, ce sont les critères de sa formation. De même l'étudiant - architecte qui a un problème à résoudre cherchera plus les critères du jugement auquel son projet est soumi que la maîtrise de lui-même. Monsieur Mainguy a demandé enfin à ses confrères de résoudre ce dilemme entre la liberté d'expression et la recherche rationnelle d'une solution.

Monsieur H. Elder devait proposer que l'éducation architecturale vise à former un jugement, à prendre des décisions et à faire naître la créativité.

Education architecturale

"International exhibitions provide the opportunity to try out new ideas and to seek new forms."

Chairman, Michel Leblanc — Rapporteur, George Steber
Panelists, G. Macy DuBois, Arthur C. Erickson, Roger D'Astous

Roger D'Astous opened the discussion on Exhibition Architecture by stating that an architect's approach to this form of architecture should be basically no different than his approach to any good architecture. New forms and shapes may evolve depending on the program and requirements. The Spanish pavilion at the New York Fair is a successful, comfortable, delightful structure embracing the ingredients of all good architecture. Part of its success is due to the freedom and ease of movement. Spectators can take it in at their own pace. The patterns of movement in other pavilions offer little choice, transporting spectators on moving platforms, etc. This sequence and timing seems unnatural.

Architects must understand their programs first then select the most appropriate solution in terms of materials, light, colour, contrasts, transition.

Exhibition architecture is not serious architecture according to Arthur Erickson. New techniques can produce wonderful structures but not necessarily excellent architecture. Today technologically we know most things are possible. Little can startle or be considered 'fantastique'. Pre-war exhibitions in Stockholm and Paris and the Festival of Britain exhibited new ideas and styles of architecture while New York and San Francisco displayed streamlined superficial architecture. Fairs had a tendency to act as purgatives for designers — a contrast to their routine programmed work.

Fairs should be of a temporary nature to be experienced and then removed. Fantasy is a serious personal pursuit — not really material for fairs. The latter are basically anti-architecture and cannot make a serious contribution to architecture. Flags and tents are the prototype of fairs — being temporary in nature, delightful, gay and fun.

Lausanne was a successful exploitation of this approach. The New York Fair by contrast is a failure because it is gaudy, pop art and unfortunately is taken seriously. It reflects the chaotic and disorderly fringes of American cities. Disneyland, a serious commercial venture, is the dullest advocate of the American scene. We no longer can distinguish between fantasy and reality. With the imminent landing of a man on the moon, the extraordinary, the 'fantastique' no longer exists. We have become blasé.

Macy DuBois objected to the term 'fantastique' which is design for effects sake. To withstand the changes of fashion all good design must be rooted in structure and function. New forms derive from the clear - eyed view of facts. New forms for their shock value are worse than useless, they are dangerous. Lausanne was a very successful total exhibition. It had excellent graphics, circulation and architecture. The spaces were exciting and exuberant — qualities lacking in most permanent architecture.
A series of slides showed what he has planned for the Ontario Government pavilion at Expo. The shapes will be hyperbolic parabaloids of canvas with steel edge reinforcing strips. A serious attempt has been made to integrate the interior and exterior spaces. Mr DuBois felt decidedly that temporary buildings do make contributions to architecture.
In the discussion that followed, Mr D'Astous said that the unfortunate aspect of the New York Fair was that the architects tended to compete rather than contribute to the success of the overall fair. Michel Leblanc remarked that in the instance of Lausanne there was an architect coordinating the relationship between the individual buildings. Another important facet for successful exhibition architecture is the total integration of the exhibits with their structures. At the New York Fair one exhibit medium which was well exploited was photography and films. Proper programming is the main factor in the success of pavilion — or groups of pavilions. Mr Soleri is a disciplined artist - sculptor seeking an integrated environment. His is a personal vision. Macy DuBois felt that Expo had untapped potential and that the generating idea was not big enough. One inventive architect will be placed close to another. The results are unpredictable especially since no overall architectural control is being exercised.

Comment

A critical look at the RAIC Assembly and the combined AIA and Pan-American Congress of Architects Convention, June 1965

by Kenneth B. Smith

Mr Smith is the Real Estate Editor of the Toronto Globe and Mail.

"People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public."

— Adam Smith

The old economist's verdict on groups that underestimate their public responsibility is too harsh to apply undiluted to North American architects, but if one point emerged from the ten days in Montreal and Washington, it was the need of the profession to broaden its vision.

At the RAIC assembly the dominant concern was the prospect of eyeball-to-eyeball confrontation this fall with separatism in the PQAA. Few wanted to talk about the changing role of architects in Canadian society as pointed up by the interim report of the committee on the profession. No one took up the challenge of massive housing requirements foreseen in the report by Joseph Pettick on the International Union of Architects.

Mr Pettick's call to prepare for the day when Canada's international duty would demand assuming much greater responsibility for housing the overcrowded was out of the way quickly. Similarly on opening day of the AIA-Pan American gathering, the call for real internationalism came early and was soon forgotten. Sir Robert Matthew, president of the IUA, told of the desperate shortage of housing, schools and whole townsites, as well as architectural talent and building techniques to match the needs of underdeveloped countries. No one waved a cheque book when he said the annual budget of the world body trying to cope with this problem is a mere $35,000 or less than two per cent of the AIA's.

The main concern of U.S. architects seemed to be with America the Beautiful. A reference to Latin America's housing deficiency — estimated at $40 billion — brought a brief shock, but since the speaker who mentioned it was a top U.S. Government official telling about how well the Alliance for Progress is doing, the architects seemed willing to believe that the alliance would take care of it.

The AIA passed strong resolutions condemning urban ugliness and tax policies that create it; deplored poor transportation planning that allows freeways to carve up areas of good development; and called on municipalities to control signs and put their wiring underground. It prepared to carry a war against ugliness into every community and previewed a film on the subject for showing in schools.

Comparable noise from the RAIC and not just at assembly time would be welcome. The official RAIC position now seems overly Olympian. The word was proclaimed in the report on the residential environment four years ago and that should do it — except for a booklet on appropriate Centennial street decorations to be presented to municipalities. Big deal.

Talk alone will not solve the problems of the physical environment, but silence seems to give consent for the continuation of bad policies.

While the approach of the AIA is deserving of criticism, it still has some good points. The urban environment will continue to get worse unless architects and other professions mobilize the community at large to demand better planning of public and private developments.

August Heckscher of New York, director of the 20th Century Fund and a former White House consultant on art, told one Washington session: "Throughout our society there is a fatal tendency to accept whatever is superficially thought to be necessary and then to supply it with great technical proficiency."

Morris Ketchum, the new president of the AIA thinks the tide is turning against ugliness. Almost every agency of the U.S. Government is coming to the AIA for advice, he told reporters. He seemed to think that the excesses of the private sector were being curbed too. The era of rugged individualism is about over, he said.

Mr Ketchum sounded as if he had been caught down wind in the latest White House snow job.

The folksy President who had always seemed perfectly content with everything American began to sound this spring like a serious critic of the physical environment. A White House conference on natural beauty and a Presidential declaration of war on ugly highway signs preceded his lofty message to the convention.

"If man brutalizes the landscape, said the man who ordered the North Vietnam bombings, "he wounds his own spirit. If he raises buildings that are trivial or offensive, he admits the poverty of his imagination; if he creates joyless cities he imprisons himself." Great stuff, said the AIA, dashing off a similarly high-sounding reply. But Lewis Mumford, the most outspoken man at the convention, refused to join in the hallelujahs. Speaking as president of the American Academy of Arts and Letters, he said flatly that the U.S. Government is neglecting the real problems of its people for overseas military expeditions and the space race. Overgrown cities are places of hostility, blind anger and violence, he said, and life in them can be improved only when governments are willing to spend as much on solving their problems as on trying to get to the moon. He wanted strong federal and state initiatives to redistribute the U.S. population.

The New World to which men came for freedom has produced a mechanical civilization in which cities are designed to fit no human need except what conforms to the machine, Mr Mumford said. Even the bost brilliant architect is in danger of falling into the trap. Even Frank Lloyd Wright, an apostle of individual freedom, was designing at the end of his life a mile-high building that was really just a static space rocket.

It was ironic that the man with the timeliest message for the AIA and the Pan American Congress was not an architect. Technology is not the supreme fact of life, he reminded the architects. It is time to put man back into the centre of the picture.

Art and Architecture

Art and the 58th RAIC Assembly

by Anita Aarons, ASTC

Montreal is an exciting city, perhaps the most exciting city in Canada at the moment in which to hold an architectural convention.

The shot in the arm of building construction redevelopment administered by Expo 67 has, as well as the usual architectural handsprings to be expected, added impetus to the natural growth, of the "Paris" of North America.

The Quebeckers are feverishly clearing and re-planning the crowded overbuilt city squares and reverting to old native practice "Place de Ci", "Place de Ca" of French memory. Since the squares and places can no longer validly offer homage to mother church, the focal points resolve themselves as planned areas of space, gracefully offset with fountains and gardens, with hidden underneath the elevated concrete platforms, crypts of well organised commercialism (like Place Ville Marie). Thus the confessionals and chapels are superseded by the cafes and bars of contemporary urban life. Old concepts (felt deeply, using good planning) have been made to serve as models and master plans for new concepts, rather than in concession and compromise to redundant past.

In these new edifices, Art and Architecture show constant and increasing experiment, and with continuous experience, a dawning of maturity on the decorative side of collaboration and integration. No legislation was necessary to force inclusion of artist and designer into the rebuilding of Montreal.

Anglo-Saxon and French Canadian hieratic bodies of architecture met in Montreal with a satisfyingly imaginative theme, "Architecture Fantastique" as a point of discussion with Andre Bloc, distinguished French artist-philosopher, engineer, architect and man of many parts, as keynote speaker.

Apparently the secondary theme for informal discussion (unrehearsed and certainly not printed on the program) was *(a)* Why I do not speak French. Or *(b)* Why I do not want to speak English.

The irreverent but practical attitude of a "stranger" to the burning question perhaps shocked my new and good friends at the Assembly.

Under compulsion, all of us by accident are compelled to learn and become literate in an accepted language. My own disadvantage was to be born Australian, an entirely English speaking country where the acquisition of a second language or culture is both artificial and difficult. I am fully convinced, in moving around outside Australia, that in the future, intelligent world communication will be helped by the general acquisition of at least three languages — say English and French, with Spanish in the Americas and an Asiatic language for the East. Two at least ought to be obligatory in the education program of all literate countries.

How fortunate are Canadians to be born into a bilingual atmosphere. A new educational policy rather than a new flag would effect a more real composite abstract symbol of fleur de lis and maple leaf. Canadians have a natural "language" advantage in bilingualism. Commercial grocery packaging proves the problem to be easily surmountable and a solution not impractical.

Talking of symbols, the delightful and charming pin designed by Michel Lacombe, and given to all the ladies attending, was an excellent example piece of craft "integration".

The Assembly theme, l'Architecture Fantastique, in the hands of capable and inspiring Andre Bloc may or may not have been well understood. For my part I was fascinated by the erudite papers and arguments "defining" the word fantastique and reducing the argument to a "sensible" and measurable rational category rather than imaginative flight of fancy. I congratulate the speakers on the adroit manner in which their own hobby horses were ridden through metaphysic argument, scattering the metaphysic sod here and there with rational hoof beats. Research, education etc. were good counters to imaginative impulses. However, fortunately the artists responding to the Art and Architecture Exhibition at the Museum of Modern Art did not miss the point by any pedantic definition.

Waspish though it may sound, when an architect remarked on the "fantastic fine weather Montreal treated us to", I did not rebuke him with a dissertation rationale on weather prediction. When the expected rational rises to a sense of wonder and delight beyond normal, one does not trace the root cause but responds with imagination and sensual pleasure.

Many aspects of this very enjoyable and well organised Assembly are appreciated. The architectural documentation was overwhelming, especially in reference to Expo '67. One hopes to read at least a third of it before the next Assembly. The host province with such a cuisine and exemplary weather for country and outdoor activities, must surely be unsurpassed. For the writer, there were five highlights:

1 The subject of the seminar, L'Architecture Fantastique brought into perspective the relationship of metaphysic thinking and imagination and architecture, and, alas the revelation of how misunderstood such a term can be.

2 The excellent exhibition of artist-architect collaboration in photographs and models at the Museum of Modern Art, arranged by the RAIC and the Museum with Jean Louis Lalonde, member of the PQAA as prime mover and organizer. This exhibition is all the writer could wish for, and it is to be hoped will serve as a continuing pattern for other assemblies to follow.

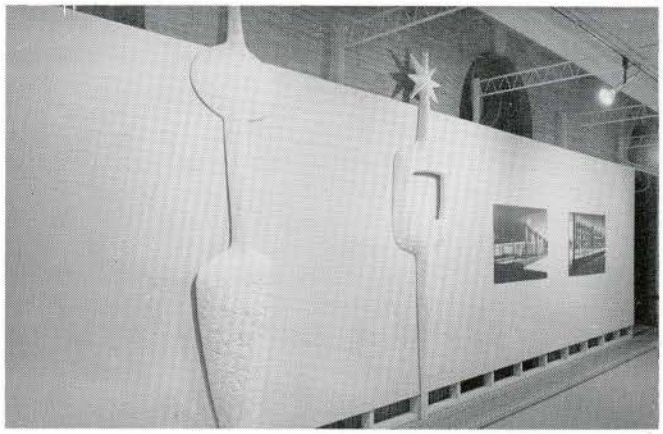
3 The Award of the RAIC Allied Arts Medal for 1965 and the nature of the work of the recipient Jordi Bonet.

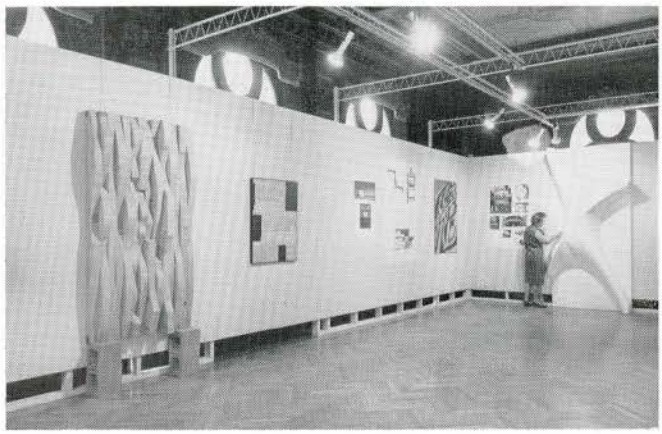
4 The Handcraft Exhibition and the need for better organization in this field.

5 The general survey of art integration in architecture in Montreal.

The Art and Architecture Exhibition

The artists and architects who, responded to the invitation sent out by the Institute are to be congratulated.





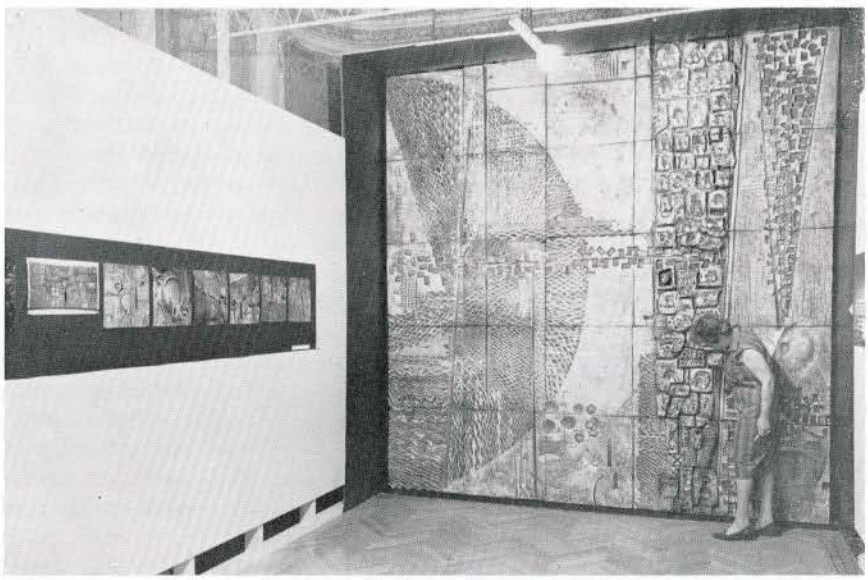
Left: Archambault screen with actual scale module. Right: Wood element extract, by Ted Beiler in foreground; Wood element extract by Ulysses Comtois at rear. The panelling is temporary, the walls of the building are to be restored.

Well set up are temporary walls by the museum staff, the exhibition was fairly comprehensive of all provinces although many notable commissions we know of were not submitted by the architect's concerned. The show is, I believe to tour the provinces.

The decorative embellishment of screens, walls and mural attachments showed an increasing ability by the artist and architect — (self selected for collaboration) to resolve their differences and add non-functional interest to both public and private enterprise.

Synagogues, churches and public buildings included contemporary idiom in the decor. Latin and non-Latin joined forces as artist and architect. New material was exploited in a resourceful and tasteful manner.

Sculptor Ted Beiler and Architect Irving Grossman adventurously collaborated to exploit the advantage of light weight and large scale in the use of foam materials to create large sculptural motifs for a wall. Archambault and his works, fast becoming a familiar part of Canadian decor, had displayed his very successful screen for Gilleland and Strut in the



Centre: Jordi Bonet's "Cabbilistic" Ceramic Tile Wall

Bottom: Bonet's white cement "Crypts"

(The RAIC emblem on page 46 is from a pin by Michel Lacombe, Montreal.)

Ottawa Air Terminal. Excellently presented in photograph with the addition of two full size plaster prototypes to give kinetic experience of actual scale to the onlooker — an excellent exhibition trick also employed by Beiler with his foam form, and by Ulysses Comtois and the extract of his wooden wall decoration for B'nai Beth David Synagogue, Irving Grossman Architect.

The stimulating use and return of the hand crafted ceramic tile — if one can so call some of the large mosaic sections, are created to become walls rather than decorate them. True disturbed textures growing out of the elemental material, rich with glowing and subtle colored glazes, are being used as perhaps one of the most exciting medias to offset technological skill. Many other artists and architects exhibited essays in various media; concrete, wood and metal, and photographs. Where it was possible to visit the actual building and see the original work in place, the projects appeared more intruiging and well integrated than photographs revealed, especially the ceramics.

On the whole, all were of a high and professional standard and well presented; tasteful enough and technically proficient, most preserved a healthy vitality. Not all however, were as successful as examples of integration. Merola's disturbing "optical" fantasies are good geometric alternatives to organic humanism, and his forthright contributions to a classic point of view will prevent a development of "sameness" otherwise likely to happen. Unfortunately, his fugue-like wall for a gymnasium in the restless setting was rather too much. Sad to relate, the three dimensional responses of free sculpture were hardly comparable to Andre Bloc's own "habitat" themes. The decorator is finding his architectural feet, but the "shrines", becoming more ornate, are empty of worthy icons. External sculpture in relation to architecture was unhappily extraneous and inept in scale.

Glass chandelier for Place Victoria extending 47 stories. Luigi Moretti, architect, designer. Carried out by Roberto Morisi.

The Allied Arts Medalist

This brings me to the most exciting exhibitor, Jordi Bonet, with his tour-de-force of "sarcophagus" rooms and cells, plus versatile essays in wall decorations commissioned at home and abroad in ever increasing numbers. The pleasure in the actual experience of being "involved", both within and confronted by, three or four rooms of exciting evocative works both in photographic record and reality, is difficult to transmit. Sensual shock and delight is an actual experience not transmitable. Other works were good and competent but so many lack "excitement" and personal contribution.

Unaware at the moment I experienced his work that Bonet was the "man of the hour" the work forced itself on my attention by personal merit and I was able to assess the impact apart from public acclamation. The cataclysmic development of this artist is apparent. The cheerful fact is that Bonet's work, always interesting but rather derivative and decorative, was not, two years ago, anywhere near the calibre of what it is today. Full and complete rapport with his material, plus a burning passion and expressionism have given him supremacy as a decorator. It is an early maturity, for he is still young. No longer are the symbols charming jewels and decorations, but have become evocative caballistic cryptograms declaring walls as sacred sepulchres for bodies and gods yet uninterred. His Spanish "love of death" is manifest.

He is not a God maker . . . would that he were but a John the Baptist in the Allied Arts preparing sacred walls as architectural crypts. A truly exciting artist, he is equally so as a sensitive and warm person. The Quebeckers have adopted this Catalan and in return his death wish sepulchres have taken on a Gallic joie-de vie.

Above all, by collaboration with architects he excites the designers and elevates the building beyond function to true architecture. The most important factor is that architects have recognized the worth of this passionate artist to excite *them* and by material recognition, say so. True collaboration is more dependent on spirit than techniques and ways and means. Bonet, truly professional, rises above competence and by inspiration can give heart to other metaphysic designers, for such approval lends new heart.

The Handcrafts

Unhappily, the opposite can be said about the Handcraft Exhibition. Ineptly and inexpertly shown and displayed in the Assembly Hospitality Room. Obviously hastily gathered and surely not representative of the best Montreal work, it revealed the sad fact, noted in the previous column in handcraft, that the dead albatross of amateurism hangs heavy around the neck of the few competent professionals. I hope for the sake of handcrafts and integration with architecture, that a few really professional performers will take over the liason tasks necessary from the well meaning but incompetent amateur bodies at present responsible. Individual examples could be praised but the total effort was not guaranteed to impress or invite future collaboration with architects.

Art with Architecture in Montreal

Last but not least, Art with Architecture is abundant in Montreal, Place des Arts, banks, contemporary churches, cafes and new buildings can boast continuous effort to carry along artist with architect in a contemporary manner.

Further reviews will be necessary to cover the many new works, as in Place Victoria, with its fascinating glass candelebra "sculpture". Vancouver and places west, from evidence at the exhibition, show also that Canada is more active than the old world in experimenting with art integration.

What is lacking in most cases is genuine public "confrontation" and totemic interest. Decorative elements are maturing. Painting and sculpture of significant conceptual worth has not yet emerged in the architectural scene. It is up to sculpture to break the chrysalis and emerge with significant forms of worthy scale to excite and make the architect forget his budget and functional inhibitions and move to greater realisations.

Perspectives

From RAIC Headquarters

RAIC Annual Meeting, June 10-11, 1965

Following a message of welcome from Host Committee Chairman Gilles Marchand, President F. Bruce Brown called for presentation and discussion of the Annual Reports by Officers and Committees. The Treasurer explained the item of loss on disposal of investments, in his report, as the difference between the selling price (market value) and the original purchase price (book value) of our bonds. "The decreasing market value and the low interest on the old bonds are the reasons for the re-investment program effected by our investment counsellor as in the best interests of the Institute". The net result of the year's operations showed a surplus of $1,615.46.

The Executive Director referred to the new Experience Record Book, now in use by seven Provincial Associations. He announced publication of a new brochure, "Planning to Build?", prepared by PQAA for the benefit of all RAIC members. Another brochure, on the organization of the RAIC and the Provincial Associations, is being prepared for the Institute by the Manitoba Association of Architects. Professor Henry Elder outlined program for Research Committee study as follows: "That we have accepted the method of working of the architect from the time that he receives instructions to the time that the building is completed, and we have divided this into a linear pattern at each portion of this pattern is open for some investigation. This investigation will take place at the level of the provinces, both in the Schools and the provincial societies, and also at the level of professional research, i.e., Division of Building Research and any other bodies that we can draw opinions from".

Professor William Goulding reported on Preservation of Historic Buildings and stressed their concern with preservation and restoration of "areas of buildings" in addition to single buildings. The Committee calls for more general interest in the old city of Quebec as a national monument, and in restoration aspects of the Norwich Plan.

Joseph Pettick reported that the four voting delegates appointed by RAIC to the Union Internationale des Architectes in Paris next month are Noel Mainguy, John L. Davies, James W. Strutt, and himself. About twenty Canadian architects will be in attendance.

H. H. G. Moody reported that the Committee on the Profession is continuing work on its report, on the basis of the 1964 questionnaire to all members and the tour of Professor Raymore and Colleagues. They hope to have the final report in the hands of all members before the 1966 Assembly. In response to a question, Professor Raymore assured the members that their study was taking into con-

Du Siège Social de l'Institut

Assemblée annuelle de l'Institut les 10 et 11 juin, 1965

Après quelques mots de bienvenue de la part de M. Gilles Marchand, président du Comité d'accueil, le président de l'Institut, M. F. Bruce Brown, passe à la présentation et à la discussion des rapports des dirigeants et des comités. Le trésorier donne des explications au sujet de la perte figurant dans son rapport au titre des investissements. Il s'agit de la différence entre le prix de vente (valeur marchande) et le prix initial d'achat (valeur aux livres) de nos obligations. "La baisse de la valeur marchande et le faible taux d'intérêt sont les motifs qui ont milité en faveur du programme de réinvestissement mis en oeuvre par le conseiller en investissement dans l'intérêt de l'Institut", dit-il. Les opérations de l'année se sont soldées par un excédent net de $1,615.46.

Le Directeur administratif mentionne le nouveau dossier de l'expérience acquise maintenant employé par sept Associations provinciales. Il annonce la publication d'une nouvelle brochure "Si vous bâtissez" préparée par l'Association de la province de Québec à l'intention de tous les membres de l'Institut. L'Association des architectes du Manitoba travaille à la préparation, pour le compte de l'Institut, d'une autre brochure, sur l'organisation de l'IRAC et des Associations provinciales.

Le professeur Henry Elder expose dans les termes suivants les grandes lignes du programme du Comité sur la recherche: "Nous avons accepté la méthode de travail de l'architecte depuis le moment où il reçoit ses instructions jusqu'à celui de l'achèvement du bâtiment et nous avons divisé le tout selon un plan linéaire; chacune des parties exige de la recherche qui sera poursuivie au niveau des provinces, dans les écoles et les associations provinciales, et au niveau de la recherche professionnelle, c'est-à-dire de la Division de recherche en bâtiment et de tous les autres organismes dont nous pourrons obtenir des opinions".

Le professeur William Goulding présente un rapport sur la préservation des édifices historiques et signale que le Comité s'intéresse à la conservation et à la restauration non pas seulement d'édifices particuliers mais aussi de "zônes de bâtiments". Le Comité désire qu'il y ait un intérêt plus général à l'égard de la vieille ville de Québec, à titre de monument national, et aussi à l'égard des parties du plan Norwick visant la restauration.

M. Joseph Pettick annonce que les délégués avec voix délibérative choisis par l'Institut pour le représenter à l'Union internationale des architectes à Paris le mois prochain sont MM. Noël Mainguy, John L. Davies, James W. Strutt et lui-même. Une vingtaine d'architectes canadiens assisteront à cette réunion.

M. H. H. G. Moody déclare que le Comité sur la profession

sideration the role of architectural assistants and technicians. Dr Howarth expressed the hope that the final report would be published and in the hands of all members in sufficient time for careful study, before the next Assembly, and that reports on it would be prepared by all Provincial Associations for presentation at that time. Warnett Kennedy supported this suggestion, and expressed the hope that the report would be widely debated. C. F. T. Rounthwaite called for reinforcement and support for the work of this vital committee by the Provincial Associations. Marcel Jetté suggested the need for a thorough study of the working conditions of salaried architects.

The President reported on the first Annual Meeting of the RAIC Foundation, which has been formed to further architectural education in Canada and to encourage gifts and bequests towards this aim, providing tax exemption on such gifts and bequests. Consideration is now being given to applying the funds of the Foundation towards scholarships. Ronald Nairne presented a resolution proposing a special type of membership in the RAIC for former members resident outside Canada. At the request of the President, RAIC Solicitor John Nelligan gave an opinion, suggesting that the purpose of the resolution could be implemented by using the existing classification of "Honorary Corresponding Member". There were several protests over this use of the term "Honorary", where no honor as such is intended. The resolution was approved in the following wording: "That the Council be requested to consider creation of a classification of membership entitled *Corresponding Member,* available to former members of the RAIC resident outside Canada."

Jean-Charles Martineau presented a resolution proposing formation of a committee to study the aims and functions of the RAIC and the advantages of membership in the Institute from legal, professional, cultural and administrative points of view. Frank J. Nobbs, speaking in support of the resolution, said that we should have a clear understanding of the respective purposes and responsibilities of the RAIC and the Provincial Associations. The PQAA is studying this at present, and it will be of help to all Associations if the RAIC can study and report on this from the national standpoint. Paul Lambert also supported the resolution, as a step in aiding the work of the PQAA study in this field. For this purpose, there should be at least an interim report by September. Harry Mayerovitch pointed out that in the deliberations which will be taking place in the PQAA, it would help greatly to have clarification from the RAIC on the possibility of action or change which may be feasible or legally acceptable. A completely objective approach is required by the Committee that may be appointed. H. H. G. Moody pointed out that the RAIC is primarily a grouping of Provincial Associations; American architects look with great envy on the professional organization in Canada, where every registered architect is automatically a member of the national body. Any attempt to change this would be a retrogressive move. Randolf Betts and Douglas Johnson also spoke in support of the resolution. Mr. Martineau's resolution was approved in the following wording: "In accordance with article 8 (2-B) on the RAIC Charter, I propose that the Executive Committee form a committee to study:

continue son travail de préparation de son rapport à la lumière des réponses données au questionnaire qui a été envoyé à tous les membres en 1964 et des résultats de la tournée du professeur Raymore et de ses collègues. On espère que le rapport final sera envoyé à tous les membres avant l'assemblée de 1966. En réponse à une question, le professeur Raymore dit que dans les études on a tenu compte du rôle des aides et des techniciens en architecture. M. Howarth exprime l'espoir que le rapport final sera publié et envoyé aux membres assez tôt pour que ceux-ci puisse en faire une étude soignée et que les Associations provinciales puissent préparer leurs propres commentaires avant la prochaine assemblée annuelle. M. Warnett Kennedy approuve ces paroles de M. Howarth et ajoute que le rapport devrait faire l'objet de discussions approfondies. M. C. F. T. Rounthwaite demande l'appui des Associations provinciales au travail de ce comité de toute promière importance. M. Marcel Jetté pense qu'il faudrait une étude détaillée des conditions de travail des architectes salariés.

Le président présente un compte rendu de la première assemblée annuelle de la Fondation de l'IRAC. Cette Fondation a pour objet d'aider à la formation des architectes et d'encourager, par l'exemption de l'impôt, les dons et les legs à cette fin. On songe en ce moment à appliquer les fonds de la Fondation à la constitution de bourses d'études.

M. Ronald Nairne propose l'établissement d'une catégorie spéciale de membres dont pourraient faire partie les anciens membres de l'Institut vivant à l'étranger. Invité par le président à exprimer son avis, le conseiller juridique de l'Institut, Me John Nelligan, dit qu'on pourrait peut-être répondre aux objets de la résolution au moyen de la catégorie des "Membres correspondants honoraires". Plusieurs membres s'opposent à cette solution, disant qu'il ne faut pas employer le terme "honoraire" à moins qu'on ne veuille réellement conférer un honneur. La résolution est adoptée, ainsi libellée: "Le Conseil est prié de songer à la création d'une catégorie spéciale de membres connue sous le titre de "Membres correspondants", dont pourront faire partie les anciens membres de l'Institut demeurant en dehors du Canada".

M. Jean-Charles Martineau propose la création d'un comité spécial chargé d'étudier les objets et les fonctions de l'Institut ainsi que les avantages découlant de la qualité de membre, des points de vue juridique, professionnel, culturel et administratif. A l'appui de la résolution, M. Frank J. Nobbs dit que nous devrions avoir une idée claire des responsabilités et des objets respectifs de l'IRAC et des Associations provinciales. l'Association de la province de Québec étudie cette question en ce moment et il serait utile à toutes les Associations provinciales que l'Institut en fasse également une étude et présente un rapport du point de vue national. M. Paul Lambert est également en faveur de la résolution; il y voit un moyen d'aider l'Association de la province de Québec dans son étude. A cette fin, il faudrait au moins un rapport provisoire pour le mois de septembre. M. Harry Mayerovitch se dit d'avis qu'au cours des délibérations qui auront lieu à l'Association de la province de Québec, il serait utile d'avoir des précisions de l'Institut quant aux mesures et aux changements possibles et légalement acceptables. Le futur comité devra faire une étude absolument objective. M. H. H. G. Moody rappelle que l'Institut est avant tout un groupement d'Associations provinciales. Les Américains voient avec beaucoup d'envie l'organisation de

CANADIAN

BUILDING DIGEST

DIVISION OF BUILDING RESEARCH • NATIONAL RESEARCH COUNCIL CANADA

FUNDAMENTALS OF ROOF DESIGN

by G. K. Garden

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A roof is constructed to protect a space from some aspects of the natural environment. At its simplest it is required to provide shelter from rain or shade from the sun. As the requirements of the space beneath it become more complex, however, so does the function of the roof. Its general functions are similar to those for exterior walls (CBD 48), with loads, allowance for traffic and rain penetration control the main differences.

Function of a Roof

Basically, a roof, in conjunction with exterior walls, must enclose space in such a way that environmental conditions can be regulated within acceptable limits. In this context environment must be regarded in the broadest sense to include not only temperature, air movement, humidity, precipitation and radiation, but also such factors as noise, fire, dust, odours, insects, plants, animals, and people. To accomplish this basic function the roof system must perform as a barrier or selective separator; it must prevent, limit or allow flows of mass and energy, depending upon the environmental differences and the degree of separation required.

Requirements of a Roof

A roof must be structurally sound, aesthetically pleasing, economical, durable, and provide the required degree of environmental separation. Requirements can be considered individually, but because there is a strong inter-relationship they must also be considered collectively.

The *Roof Structure* must be designed to support or withstand all loads that may be applied to it without risk of collapse or structural failure. It is the foundation upon which all other elements and materials of the roof are supported. Excessive structural movements that might impair the performance of any of these elements must not occur, and expansion joints through the entire roof system should be incorporated where major movements are anticipated.

Most roof structures, although structurally sound, do suffer movements that may cause failures in other elements of the roof system. These take the form of deflections (CBD 54) and differential movements arising from loads, shrinkage, creep, warpage, thermal variations, moisture changes and the form of the structure. Cracks, which may be of no structural significance, often play an important role in producing failures of the roof system by tearing bonded membranes or by permitting increased heat flow and air and vapour migration. Deflections also may induce sufficient stress in a membrane to cause its rupture. Near-flat roof surfaces, through deflection, may fail to drain and allow ponding of water, which can cause accelerated deterioration of the roof materials.

Deflections and differential movements in a roof structure should be anticipated and their magnitudes estimated. It is particularly important to recognize and provide for the long-term behaviour of materials under load, especially creep in concrete and wood, because

total deflections can be several times the elastic deflection. Locations where minor cracks in the structure can be expected should be established and precautions taken to prevent the occurrence of undesirable conditions in other elements of the roof. If adequate allowance for movements cannot be made through the use of slip sheets, expansion joints, and increased slopes to drainage, the structure should be redesigned to reduce movements and deflections to an acceptable value.

Flat or near-flat roofs are frequently required to serve as traffic decks, promenades and roof gardens. Where such multi-use is to occur all loads must be duly considered in the structural design. With roof terraces it is common to find one section of the structure more heavily loaded than an adjacent area. In such a case it is of the utmost importance that the differences in total, long-term deflections between one member and another be considered. Roof terrace design will be the subject of a future Digest, but the fact that the waterproofing membrane is normally buried under expensive surfacing materials, making it relatively inaccessible for maintenance, demands that all precautions must be taken to prevent damaging it.

The *Aesthetic* values of a roof are the particular responsibility of the building designer and as such are outside the scope of this Digest. The preservation of the building's appearance, however, is dependent upon the technical performance of the total construction and is best achieved through compliance with good technical design. Aesthetic qualities of roofs can normally be varied through a wide range, but insistence upon technically undesirable features can result in unsatisfactory solutions.

The requirement for *Economy* is an overriding consideration that influences and is influenced by all the requirements of a roof. Maintenance costs are largely dependent upon technical design and must be considered in conjunction with initial cost; some initial savings may result in excessive maintenance or early obsolescence of a building. Through a knowledge of building science, however, economies can be made without degradation of the system or, at worst, with full cognizance of the problems to be expected and the maintenance required. As most buildings are constructed at considerable cost to meet a need, their components should be durable in order to obtain the best return on the investment.

Durability, more properly called "service life," is not an inherent property of any material; it is determined by the properties of the material and the environment in which it is required to serve. It is a rough measure of the time through which materials or combinations of materials continue to perform in a satisfactory manner. In complex constructions such as roofs, the performance of any one material influences the environment and the performance of all other materials in the system.

Service life is of such major importance that an understanding of all the factors affecting the durability of all components of the roof system is essential. The properties and behaviour of materials can be established by test and many materials have been discussed in past Digests. The environment in which any one must serve is determined by the environments being separated, the properties of all the materials in the system, their relative positions, and the behaviour of the roof structural system. By judicious selection and arrangement of materials the roof designer can greatly ease the requirements of the various elements and thus broaden his choice of materials and methods of construction to gain a durable system.

The *Separation Of Environments*, as the prime function of a roof, must receive particular attention, especially since the effects associated with performing this function normally determine the service life of the materials in the system. Exposure to the exterior environment may produce deterioration of a material, whereas heat, air and moisture flows affect the behaviour of all materials in the roof system.

Separation of Environments

As a selective separator of dissimilar environments a roof system is subjected to variations of almost all the environmental factors; the differences from one side to the other determine the duties of the roof and the proper-

ties it must possess. The environmental differences of greatest importance to the durability of a roof system relate to rain penetration, heat flow, vapour flow, air flow, radiation and fire, all of which involve actual or potential flows of mass or energy. The transfer of heat and radiation represents energy flow, whereas air and moisture movements represent mass flow. Flow takes place at a rate dependent upon the difference of potential and on the resistance offered by the medium, in this case all the materials interposed between the environments being separated. The potential is temperature for heat flow and pressure for air and vapour flow. The potential for liquid water flow may be kinetic energy, capillary suction, gravity and air, vapour or hydrostatic pressure. Water may also be induced to flow by thermal, electrical or chemical effects. In all cases flow is from the higher to lower potential, and the net result is a tendency to equalization of potentials.

Most materials offer resistance to flow, and gradients of potential occur across materials or constructions interposed between dissimilar environments. Previous Digests have discussed temperature (CBD 36) and vapour pressure gradients (CBD 57); the effects of thermal bridges (CBD 44); and the nature of air leakage (CBD 23). A knowledge of the gradients resulting from separation of environments permits a designer to determine the environment in which each material must serve.

Exposure to the Exterior

The effects of exposure to the exterior environment are dependent upon the material and the nature and degree of exposure. Absorption of solar radiation (CBD 52) can result in surface temperatures of over 200°F, producing expansion and accelerated deterioration of exposed materials. Radiation to a clear night sky may cause roof temperatures to drop below the ambient air temperature, with accompanying contraction and possible wetting by dew. The extreme temperature variations between night and day in a black roof material over insulation can exceed 140 F deg and the seasonal variation may be over 250 F deg. Atmospheric pollutants contacting roof materials, especially when combined with water, can accelerate deterioration. Traffic of any type on a roof may cause physical damage that will impair its performance. An obvious solution to some of these problems is to shade or protect materials that may be damaged with materials not so vulnerable to the rigours of the exposure (CBD 65).

A roof should be designed to shed water as readily as possible, because accelerated membrane deterioration occurs at the edges of shallow ponds. Ponds also provide a large volume of water to produce major damage if a leak does develop, and the expansion and contraction of ice may contribute to membrane failure. There are, however, situations where intentional ponding of the roof may be employed to minimize heat gain within the building or to shade the membrane from direct solar radiation. Such a roof must be specially designed and constructed, because the water depth is quite critical and the effects of a failure can be severe.

Rain Penetration Control

Rain penetration occurs when there is water on the roof surface, openings through which it can pass, and forces acting to move it inwards. If any one of these conditions is eliminated, it cannot occur. Obviously if the roof is never wet, rain penetration is not a problem. Similarly, if there are no openings, leakage cannot occur. It is also true, but not so widely recognized, that even with water on the roof and openings through which it can pass, rain penetration will not occur if all the forces acting to move it inwards are controlled (CBD 40).

Shingled and tiled roofs seldom leak despite the many openings through them because the forces acting to move water inward are controlled. Rain penetration due to kinetic energy is prevented by overlapping the shingles. Capillary suction acts only to draw and hold water into the capillary spaces between them. An air pressure drop through the roof acts to move water toward the interior, but it is resisted by the force of gravity acting to pull it outward, down the slope. Leakage of shingled roofs is prevented as long as the height through which the water must be raised is greater than the air pressure difference measured in inches of water column. Leakage through joints in some roof tile systems is prevented by the inclusion of a space,

too large to produce capillary suction, which is open to the outside, with air leakage resistance provided inward of the cavity. In this situation there is no inward air pressure drop nor capillary suction at the wetted end of the potential leakage path. This approach can be employed at any line of potential leakage, but it must be remembered that all forces acting to move the water inward must be controlled. Shingled roofs that have sufficient overlap for their slope normally leak only after severe damage or when ice dams prevent the required drainage.

To prevent rain penetration through very low-sloped and flat roofs a completely continuous membrane, through which there are no holes to permit leakage, must be provided because the forces acting to move water inwards cannot be controlled. Not only is this perfection in water tightness difficult to achieve, it is more difficult to maintain over a reasonable service life without frequent maintenance. Because of the inaccessibility of most roofs this maintenance is seldom provided. Imperfections in workmanship, deterioration of materials and minor failures resulting from deflections or small differential movements in the structure can produce severe leakage through any membrane whose success is dependent upon perfection, especially when ponding is also permitted.

It is obvious from this discussion that roofs designed to function despite openings are less susceptible to failure as a result of accidental openings than systems where a perfect seal is required; and that greater deflections and differential movements in the structure can be tolerated without risk of leakage.

There are many products used to produce water-tight membranes; all may have individual design, installation and maintenance problems, but they can provide a reasonable service. These membranes will perform most satisfactorily when they are protected from the mechanisms that cause their deterioration. This may be accomplished by selecting the material best suited to the environment in which it must perform, or by modifying this environment. A knowledge of the environment, therefore, is essential for the selection of materials and roof design analysis.

Workmanship is always of considerable importance in producing successful roofs. It is of greatest importance in flat roofs. Design, however, is still the basis of success.

Conclusion

Most problems with roofs can be eliminated, or at least minimized, by compliance with the following principles for roof design:

1. Consider all requirements, both individually and collectively, and do not sacrifice one requirement for another without recognizing the consequences of such a decision.

2. Design the structure to keep movements and deflections to an economic minimum, and make allowances in the associated constructions for those that will inevitably occur.

3. Know the environment in which each material must serve and its effect upon the material.

4. Ease the duties imposed on each material by judicious selection and positioning in the assembly.

Through systematic, rational analysis the pertinent factors affecting the performance of roofs can be recognized and the probable performance of a total system determined. This capability makes it possible to discriminate between various systems for particular applications and, even more important, to develop improved designs.

1. The aims and functions which the RAIC has or should have.

2. The Advantages or disadvantages from a — *A* — Legal, *B* — Professional, *C* — Cultural, *D* — Administrative point of view, that the RAIC is a grouping of provincial associations rather than a grouping of individuals.

3. The advantages and disadvantages from a *A* — Legal, *B* — Professional, *C* — Cultural, *D* — Administrative point of view, of a liberty of membership to the RAIC of individuals who are already members of a provincial association: And that they present an interim report to the Executive Committee before September 15, 1965, and a final report at the next Annual Meeting of the RAIC."

A resolution was presented by Michael Ellwood, proposing change in the By-Laws to allow payment of Per Capita dues by component associations to the RAIC in two instalments, the first half by March 1, and the second half by August 1. The resolution was supported by RAIC Treasurer James W. Strutt, and was put to the vote and carried unanimously.

RAIC Council, June 9 and 11

H. H. G. Moody reported on plans ahead for the Committee on the Profession. The Council expressed appreciation and commendation to Mr Moody for the work of his Committee.

On the invitation of the President, Journal Committee Chairman Loren Oxley reviewed the present organization of the Journal Committee and the Editorial Board. He outlined a proposal put forward by the Journal Committee to change the By-Laws in order to provide one committee, to be called the "Journal Board".

John L. Davies explained that the existing By-Law governing constitution of the Standing Committee on Architectural Education is extremely restrictive and difficult to implement. The Architectural Education Committee feel that there should be only two conditions required: that the Head of each School of Architecture be on the Committee, and that there be one representative of each Provincial Association. His motion to this effect was approved, to be effected by amendment procedure.

The Council discussed plans for Annual Assemblies in 1966 (Jasper), 1967 (Ottawa) and 1968 (Regina). An invitation from the Manitoba Association of Architects to hold the 1970 Assembly in Winnipeg was accepted unanimously.

A letter from the Architectural Woodworkers' Association advised of its recent formation, with principal aims to promote the use of woods of all kinds for the decorative or functional interior of buildings, to preserve or raise the standards of quality by proper technical assistance to architects, engineers and designers, and to establish a quantity surveyors system in conjunction with a bid depository for quotation purpose. The Association also hopes to develop specialists in woodworking who can supply technical advice required by architects.

Executive Committee, June 9 and 12

The Executive Director reported further developments on the question of salaried architects, and continuing close liaison with the Canadian Council of Professional Engineers.

la profession au Canada où chaque architecte reconnu devient automatiquement membre de l'association nationale. Tout changement serait un pas en arrière. MM. Randolph Betts et Douglas Johnson se prononcent aussi en faveur de la résolution.

La proposition de M. Martineau, libellée ainsi qu'il suit, est approuvée: En vertu de l'article 8 (2-B) de l'Acte d'Incorporation de l'IRAC, je désire soumettre une proposition à l'Assemblée Annuelle: Je propose que le Conseil forme un comité pour étudier:

1. Le but et les fonctions qu'a, ou devrait avoir, l'IRAC.

2. Quels sont les avantages et désavantages du point de vue *A* — Légal, *B* — Professionnel, *C* — Culturel, *D* — Administratif, que l'IRAC soit un groupement d'associations plutôt qu'un groupement d'individus.

3. Les avantages et désavantages du point de vue *A* — Légal, *B* — Professionnel, *C* — Culturel, *D* — Administratif, d'une liberté d'appartenance à l'IRAC à titre d'individu qui est déjà membre d'une association provinciale.

Et qu'il fasse rapport au Comité exécutif avant le 15 septembre 1965.

M. Michael Ellwood propose que le Rèlement soit modifié de façon à permettre aux Associations composantes d'acquitter les cotisations individuelles en deux versements égaux, le premier le 1er mars et le second le 1er août. La résolution est appuyée par le trésorier de l'Institut, M. James W. Strutt, et, ayant été mise aux voix, adoptée à l'unanimité.

Conseil de l'Institut, les 9 et 11 juin

M. H. H. G. Moody expose les projets du Comité sur la profession et le Conseil lui exprime ses remerciements et ses félicitations pour le travail de son comité.

A la demande du président, M. Loren Oxley, président du Comité du *Journal*, fait un exposé de l'organisation actuelle de son comité et du Conseil de rédaction. Il donne aussi les grandes lignes d'une proposition émanant de son comité et visant à faire modifier le Règlement de façon à réunir ces deux organismes en un seul sous le nom de "Conseil du *Journal*".

M. John L. Davies signale que l'article actuel du Règlement régissant la constitution du Comité permanent sur la formation des architectes est extrêmement restrictif et difficile d'application. Le Comité estime que les exigences devraient être réduites à deux, soit l'inclusion comme membres du Comité du chef de chacune des écoles d'architecture et d'un représentant de chacune des Associations provinciales. Le Conseil approuve la motion de M. Davies en ce sens, à laquelle il sera donné suite par voie de modification.

Le Conseil étudie ensuite les plans des assemblées annuelles à Jasper en 1966, à Ottawa en 1967 et à Regina en 1968. Il accepte à l'unanimité l'invitation de l'Association des architectes du Manitoba de tenir l'assemblée de 1970 à Winnipeg.

Lecture est faite d'une lettre de l'Association des Ateliers d'Ebénisterie Architecturale, donnant avis de la formation récente de cet organisme dont lés principaux objets sont de stimuler l'emploi du bois pour tous les travaux décoratifs et fonctionnels à l'intérieur des bâtiments, de maintenir ou de relever les normes de qualité par une aide technique appropriée aux architectes, aux ingénieurs et aux compositeurs

In connection with architects in Federal Government Service, a meeting has been arranged with the Chairman of the Civil Service Commission, June 16, to discuss the standards of professional competence of architects engaged by the Government of Canada and the general welfare of architects in the public service. Arthur Davison, Chairman of our Committee on Salaried Architects, will act as Institute spokesman. While the subject of collective bargaining legislation will likely not come up at that time, Mr Davison's committee is following this development closely. The report of the Visiting Committee on the 1964 visit to the Nova Scotia Technical College School of Architecture has been completed. A report on the visit to the Laval University School of Architecture this month is now being prepared.
John L. Davies, reporting for the special committee on Council Reorganization, noted that the Executive Committee now has members from all Provincial Associations.

"Changes in travel have made it possible for members from all over the country to meet frequently on Institute affairs . . . The situations that made an Executive Committee necessary have disappeared and the affairs of the Institute should be governed directly by a Council. This would mean that at Annual Assembly we would be able to do away with long, complicated, and at times farcical business of the Executive Committee meeting, then the Council ratifying acts of the Executive Committee, yet having very little time to discuss fully what has been done and what is to be done . . . With the abolition of the Executive Committee, the Council would meet and then report directly to the membership; the membership in Assembly would give directions to the Council who would then meet and plan their actions for the next year . . . We therefore recommend that the present Executive Committee become the Council of the RAIC with only slight changes from its present constitution. It will be impossible to make such a small Council representative of the varying strengths of the Provincial Associations across the country, in the way that the present Council does. It is therefore proposed that the present Council be retained, but in the form of a Council of electors, who would, in turn, appoint and vote on a small Council or Executive Council in the same way that the present Executive Committee is elected".

It was agreed that By-Law changes be drafted to implement this policy and that they be considered by the Executive Committee at the next meeting.
James E. Searle reported that the National Joint Architect-Engineer Committee is now completing a document on Interprofessional principles of Practice, for general publication. Suggested performance standards for joint use have been sent to all Provincial Associations for views on their application to architects, but few replies have been received. The RAIC is assisting the Engineering bodies in developing procedures for competitions. The Executive Director will discuss plans of the new Science Council of Canada with Dr Robert Legget of NRC/DBR.

Letter was read from the Secretary of RIBA expressing complete understanding of our desire to sever formal relations with RIBA, due to the advent of the new Commonwealth Association of Architects.

et d'établir un système de mesure des quantités en rapport avec un dépôt d'offres aux fins de soumissions. l'Association espère aussi former des spécialistes dans le travail du bois capables de fournir les renseignements d'ordre technique requis par les architectes.

Comité exécutif, les 9 et 12 juin

Le Directeur général présente un rapport à jour sur la question des architectes salariés. On continue à maintenir d'étroites relations avec le Conseil canadien des ingénieurs professionnels. Pour ce qui est des architectes au service du gouvernement fédéral, on doit rencontrer le 16 juin le président de la Commission du service civil afin d'examiner les normes de compétence requises et les conditions générales de bien-être matériel des architectes dans la fonction publique. M. Arthur Davison, président du Comité sur les architectes salariés, sera le porte-parole de l'Institut. Il est probable que la question de la loi sur les négociations collectives ne se posera pas à cette réunion, mais le comité de M. Davison se tient au courant de la situation sous ce rapport. Le Comité qui a visité l'Ecole d'architecture du Nova Scotia Technical College en 1964 a maintenant terminé son rapport et celui qui a visité durant le mois courant l'Ecole d'architecture de l'Université Laval travaille à la préparation du sien.

Au nom du Comité spécial sur la réorganisation du Conseil, M. John L. Davies rappelle que le Comité exécutif comprend actuellement des représentants de toutes les Associations provinciales. "Par suite de changements dans les modes de transport, les membres de tout le pays peuvent se réunir fréquemment pour discuter des affaires de l'Institut . . . Les conditions qui ont imposé la création du Comité exécutif n'existent plus et les affaires de l'Institut devraient être dirigées directement par un conseil. Ainsi, à l'assemblée annuelle, on pourrait éviter ces longues réunions compliquées, et parfois dérisoires, du Comité exécutif, à la suite desquelles le Conseil ratifie tous les actes du Comité executif sans avoir eu le temps d'étudier à fond ce qui a été fait et ce qu'on se propose de faire . . . Si le Comité exécutif était aboli, le Conseil ferait rapport directement aux membres qui, à l'assemblée annuelle, lui donneraient des directives. Celui-ci se réunirait alors afin de préparer ses plans d'action pour l'année à venir . . . Nous proposons donc que le Comité exécutif actuel, très légèrement modifié, devienne le Conseil de l'Institut. Avec un Conseil aussi restreint, il sera impossible d'accorder, comme nous le faisons aujourd'hui, aux Associations provinciales une représentation selon leur importance relative. Nous proposons donc que le Conseil actuel soit maintenu mais sous la forme d'un Conseil d'électeurs qui, choisiront, par vote, un petit conseil ou un Conseil exécutif, de la façon dont sont choisis les membres actuels du Comité exécutif".

Il est convenu de faire rédiger les changements requis au Règlement pour donner suite à cette proposition et de soumettre les textes ainsi rédigés à la prochaine assemblée du Comité exécutif.

M. James E. Searle annonce que le Comité national mixte des architectes et ingénieurs est à mettre la dernière main à un document sur les principes interprofessionnels de pratique, qui sera publié dans le *Journal*. Des projets de normes de pratique à l'intention des deux professions ont été

The Executive Director reported that a Committee on Compus Planning has been formed under the sponsorship of the Canadian Universities Foundation, with Dean John A. Russell as Chairman. The Committee includes several architects engaged in university work, and the Executive Director.

A financial report by the Committee on the Profession showed total expenses to date at $10,591.28. Proposed budget for the next twelve months is $10,400.00.

The Executive Director presented a resolution approved unanimously by the Public Information Committee at its June 9 meeting, as follows: "*(a)* The RAIC abandon the project of the proposed Centenary Film dealing with the nature of the profession. *(b)* Some effort be made to approach the National Film Board or some other agency to undertake a film on architecture". This resolution was approved.

After considerable discussion and long-distance telephone conversations, it was decided to invite Howard Bouey of Edmonton to chair the Special Committee on the Aims and Functions of the RAIC, to implement the terms of the resolution approved the previous day. Mr Bouey will be provided with a budget to enable him to travel and engage clerical help, in order to present an interim report to the next meeting of the Executive Committee in September, and a final report to the 1966 Assembly.

FRED W. PRICE
Executive Director

envoyés à toutes les Associations provinciales avec une demande d'expression d'opinions quant à la possibilité d'application aux architectes mais les reponses reçues jusqu'ici sont encore peu nombreuses. L'Institut aide les groupements d'ingénieurs à mettre au point des procédures visant les soumissions. Le Directeur aura des entretiens au sujet des plans du nouveau Conseil scientifique du Canada avec M. Robert Legget de la Division de la recherche en bâtiment du Conseil national de recherches.

Lecture est faite d'une lettre dans laquelle le secrétaire de RIBA dit qu'il comprend très bien le désir de l'Institut de rompre ses relations formelles avec RIBA par suite de la création de la nouvelle Association des architectes du Commonwealth.

Le Directeur exécutif annonce qu'un Comité sur l'aménagement des campus a été constitué sous la présidence de M. John A. Russell, avec le concours de la Foundation des universités canadiennes. Le Comité se compose de plusieurs architectes intéressés aux travaux universitaires ainsi que du Directeur général.

Selon un rapport financier, les dépenses du Comité sur la profession s'élèvent jusqu'à présent à $10,591.28. Le budget proposé pour les douze prochains mois est de $10,400.

Le Directeur général présente la résolution suivante approuvée à l'unanimité par le Comité sur l'information publique à sa réunion du 9 juin: *"a)* Que l'Institut renonce à son projet d'un film sur la nature de la profession à l'occasion du Centenaire; *b)* Que l'on fasse des démarches auprès de l'Office national du film ou un autre organisme en vue de la réalisation d'un film sur l'architecture". Cette résolution est approuvée.

Après une longue discussion et des entretiens téléphoniques interurbains, il est décidé d'inviter M. Howard Bouey, d'Edmonton, à présider le Comité spécial sur les buts et les fonctions de l'Institut afin de donner suite à la résolution adoptée hier. M. Bouey obtiendra un budget qui lui permettra de voyager et d'engager du personnel de bureau, afin de préparer un rapport provisoire pour la prochaine assemblée du Comité exécutif en septembre et un rapport final pour l'assemblée de 1966.

Management Practices

Edited by James Vair

Records Management

by Harold A. Moulds

Mr Moulds is President and General Manager of H.M. Record Services Ltd, in Cooksville.

To the architect and his staff, time is money. Time wasted in looking for misplaced records, time taken to reconstruct dog-eared drawings, time required to separate the important from the unimportant records, is seldom given the serious consideration it deserves.

In this day and age, concern suddenly has turned to the disease that threatens virtually every organization, "*paperitis*". Like the common cold, it seems to be accepted as inevitable. The disease challenges the community and suddenly the market is flooded with all types of home remedies. Such remedies run the gamut from the cheapest and favourite prescription, "the waste paper basket", to the more expensive long-range treatments involving the most elaborate surroundings, expensive equipment and modern time saving devices. All these remedies tend to make coping with the disease "a little easier" but, like the common cold, none eliminates it altogether.

No matter what the size of a firm, the problem of coping with paperwork and all its headaches exists. Few organizations have shown the same farsightedness in planning their paperwork requirements as they would in programming the work entailed in a clearly defined project. Few organizations indeed become aware of their folly until they are faced with major surgery. Then the treatment becomes an expensive necessity. Without such treatment the paper monster becomes a malignancy.

Once the disease is diagnosed, and the basic needs for a strong paperwork programme is established, the only requirement for the future is consistent attention and regular treatment.

Facetious though the foregoing remarks may appear, the fact remains that little has been done to date to control the burden of "paperwork". Of course there are the most up-to-date equipment items and many work simplification "gimmicks" on the market, but all are geared to a basic assumption — namely, that the records they accommodate are essential in the first place.

Paperwork ill managed can be killing, and who wants to be so virtuous as to die for a pile of paper!

Paperwork needs to be controlled. From this concept, evolves one of the fast growing needs of the day — RECORDS MANAGEMENT. Just what is Records Management? In one word it is control. It is the control over the entire life cycle of all your business records — from their *creation* through the period of their every day *use* and *maintenance* to the point of assessing their need for *preservation, retention* or *disposal* and carrying out the decision regarding their future value.

To understand the management of records it is necessary to appreciate the definition of the word record.

A record may be defined as: "Any paper, book, photograph, file, microfilm, map, drawing, chart, card or other document or any copy thereof, received by any branch, division, department, or unit of a firm, and retained by such office or its successor, as evidence of its activities or because of the information contained therein".

The birth certificate, graduation diploma, marriage certificate, and death certificate are all part of the maze of paperwork controls that govern our very existence.

As in our own lives, control begins at the birth of the record — the acceptance of the record as a necessity in the first place. Once accepted, the control over the use of the record, the maintenance of it, and the ultimate preservation or destruction become the headaches of management. It is much more difficult to get rid of a record of doubtful value years after it was created than it is to destroy a paper known to be useless before it gets to the file.

Previous articles have dealt with Organizational Sturcture, the Corporate Image, and the General Records of the Architects' Office. An intelligent appreciation of these facets provides the foundation on which a realistic Records Management program can be built.

Building such a program in the office of the architect is very similar to the challenge the architect himself accepts when he contracts to design a building.

The topography of the chosen land, the wishes and requirements of the client, the attitude of the client to modern business development, and the extent of the project must be firmly established before the architect puts pencil to paper.

So it is in establishing the proper paperwork controls for the individual office.

What are the areas of paperwork control that may be your concern in the day to day operation of the architectural firm? What about the accumulation of and reference to correspondence files, working drawings, job papers? What about the duplication of papers throughout the files? And what about the storage of the records themselves? Are the files maintained in any type of standardized way? Do you ever have trouble locating the records you need *when you need them?* Have you solved the problem of storing reference material and data? Have you any established pattern for destroying inactive and obsolete records? Have you ever considered what would happen if you had a fire? What time do you lose searching for old records? What space must you maintain to house them? Is the equipment you now use in keeping with your proven operating needs?

These may appear to be a lot of unrelated and somewhat impertinent questions. Nevertheless, all of them are the vital concern of an organized Records Management program.

In the modern architectural office, it would appear that Records Management should entail a planned program for the establishment of:

1. Correspondence Controls. A simple but effective file control outline that would provide for a uniform treatment of all routine correspondence and operating records as they pertain to client projects and the routine administration of the firm at large.

2. A Records Retention Schedule. An approved schedule listing all types of records created and maintained on a repetitive basis. Such a schedule would indicate the firm's approved retention period for each record listed. These retention periods would take into account the administration, legal, and research value of each record.

3. A Vital Records Protection Program. A protection program to cover the vital records of the firm.

4. A Microfilm Program. The use of microfilm systems geared to fast information retrieval from drawings and specifications without direct access to the originals.

In most offices this may seem like a tall order, and it certainly cannot be accomplished overnight. To develop any one of these projects may take infinite patience and diligence on some one person's part. Each project must be fitted to the proven needs of your firm. These needs will involve: staff who use the records, staff to service them; the consideration of time spent in searching for misplaced records; the time taken to get from the higher floors to the basement to pick up and return records in a multi-storey building; the time in filing the records themselves, a close study of the proven needs for equipment to house both active and inactive records; procedures for controlling the files, for destroying them, for preserving them; and last but not least, consideration must be given to the space requirements for the equipment involved in the project, and the space for the staff using the equipment.

It is a challenge that cannot be ignored.

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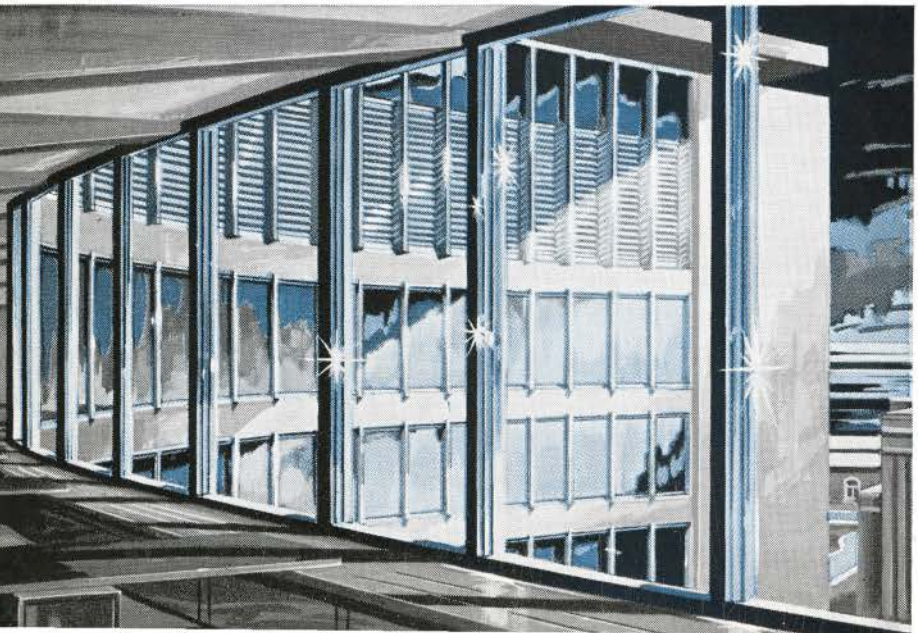

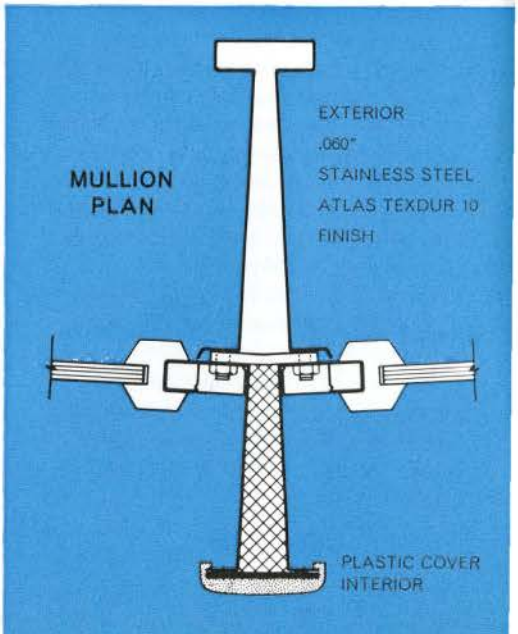

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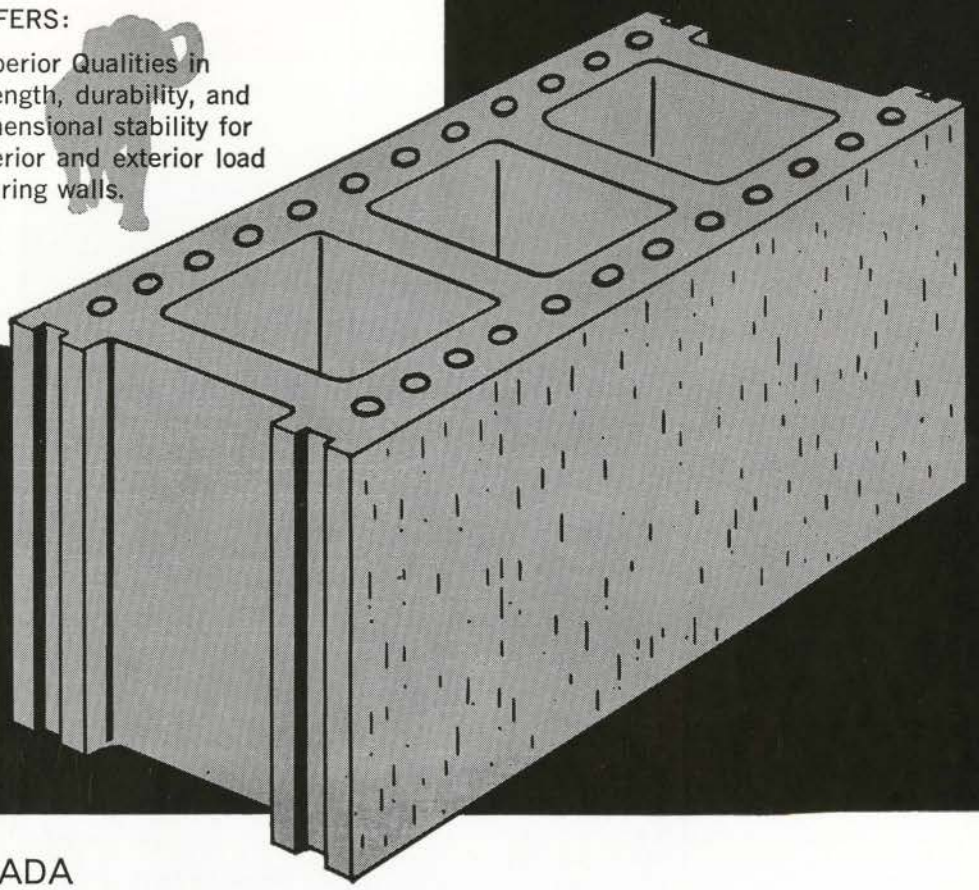

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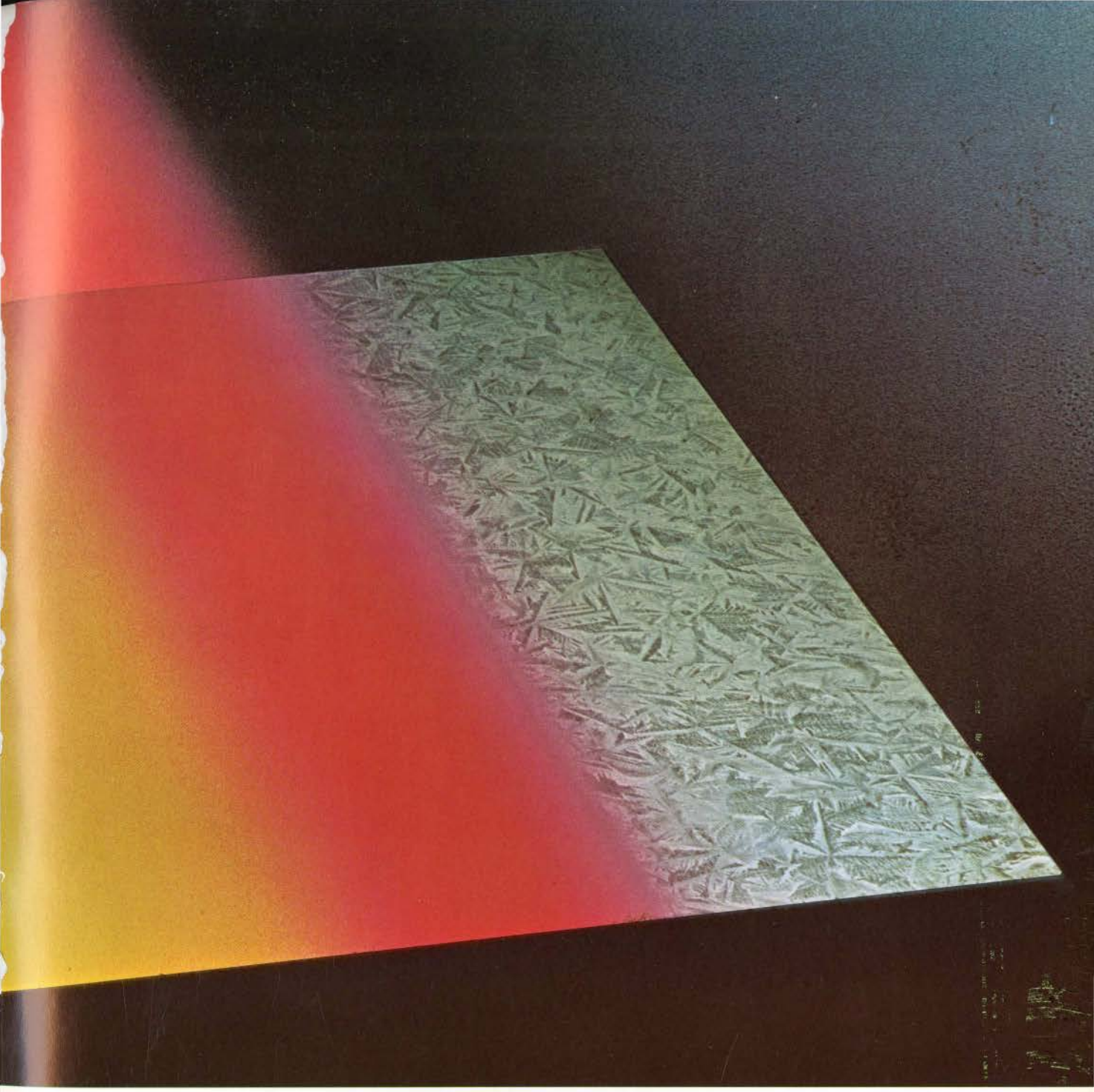

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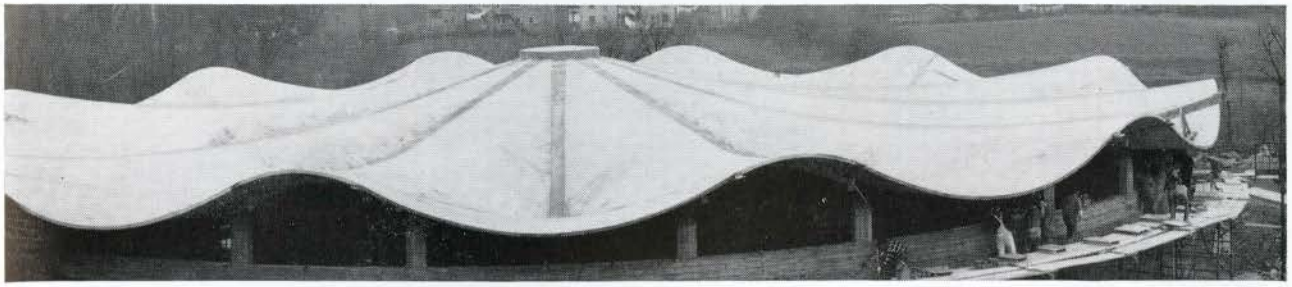

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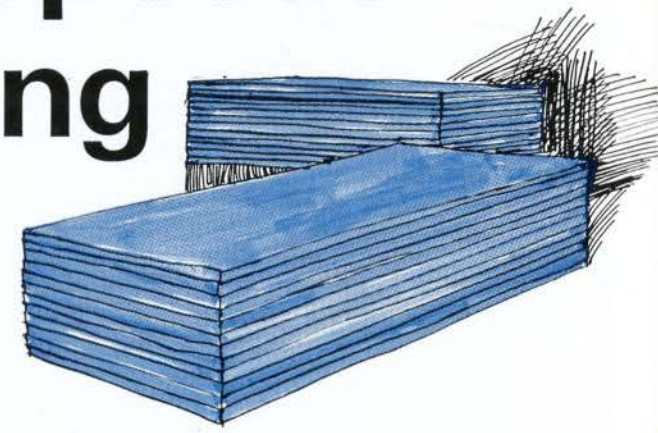

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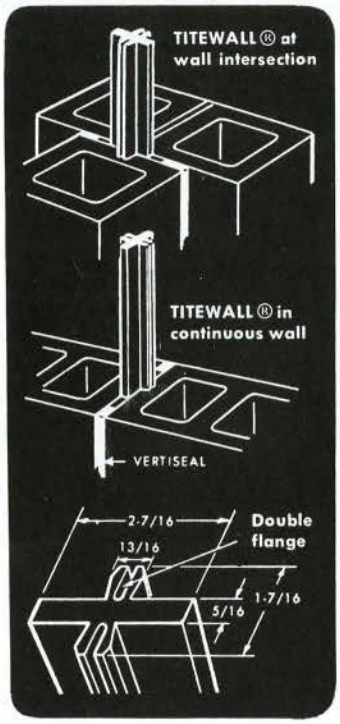

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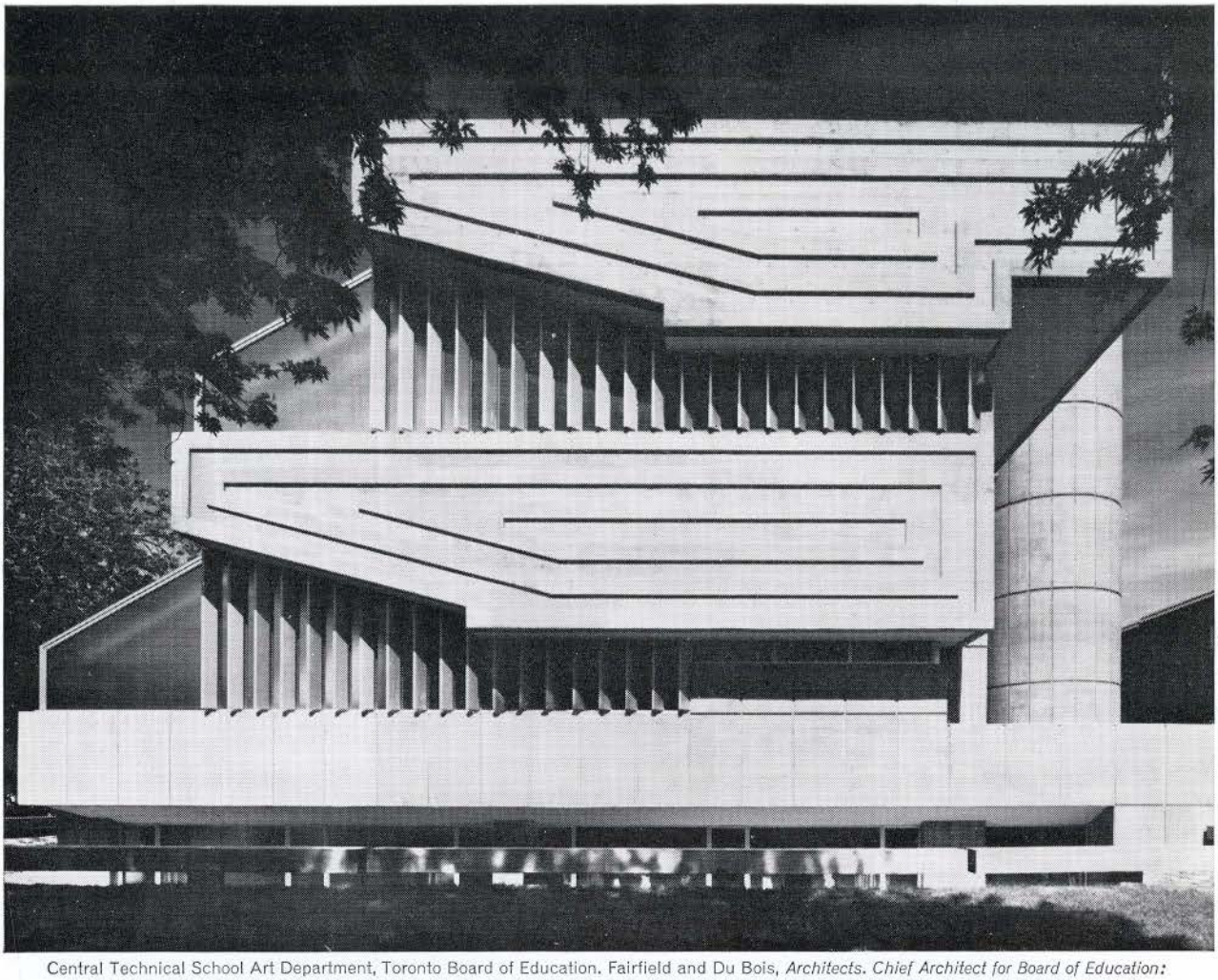

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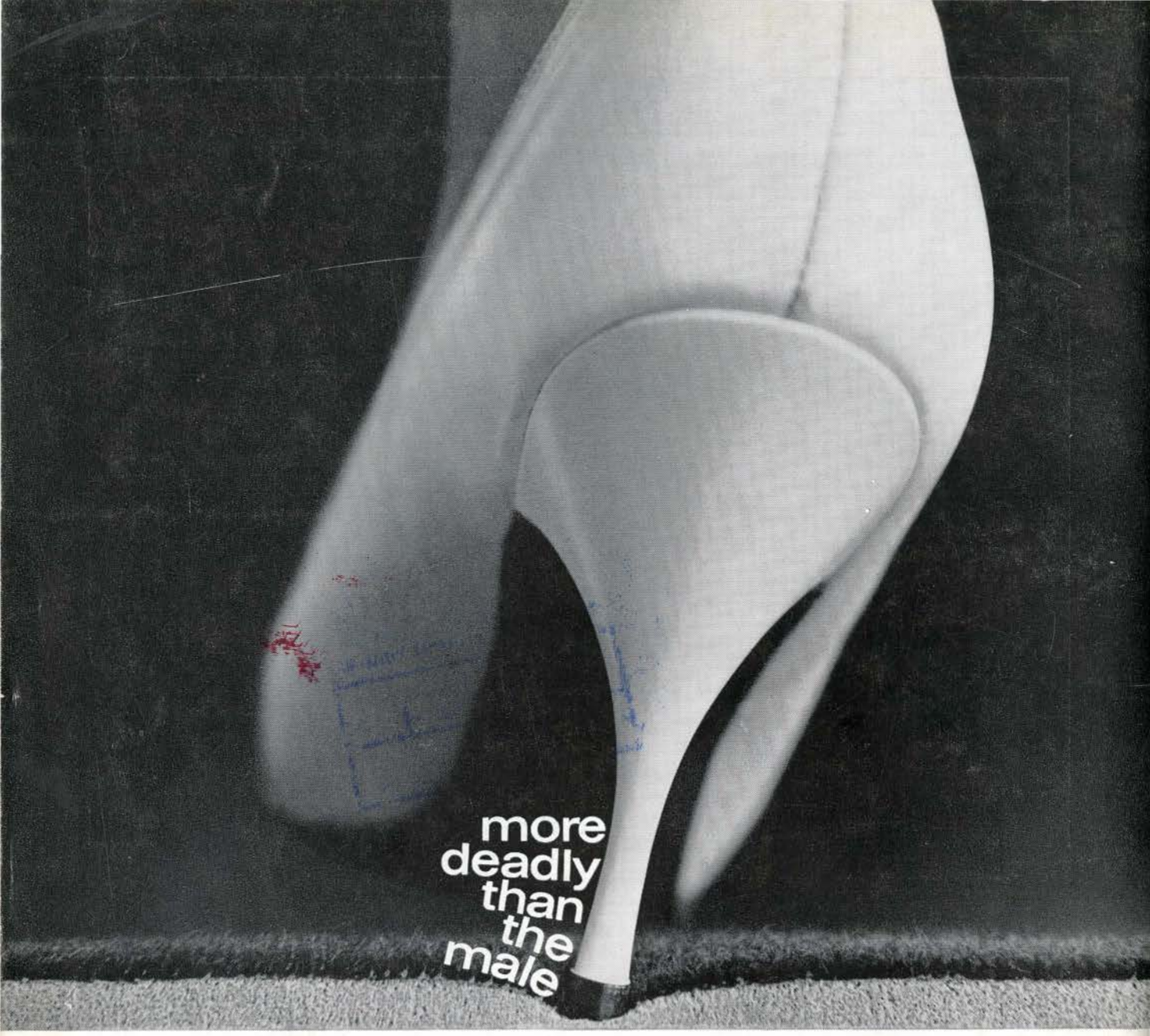

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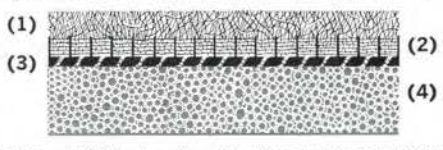

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