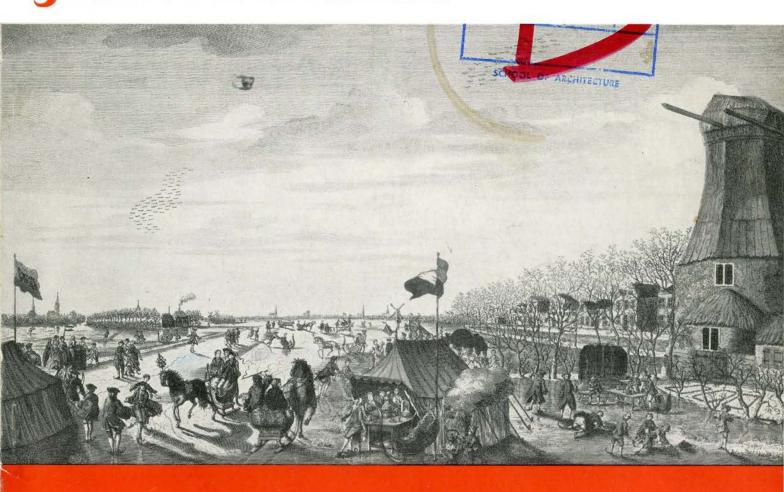
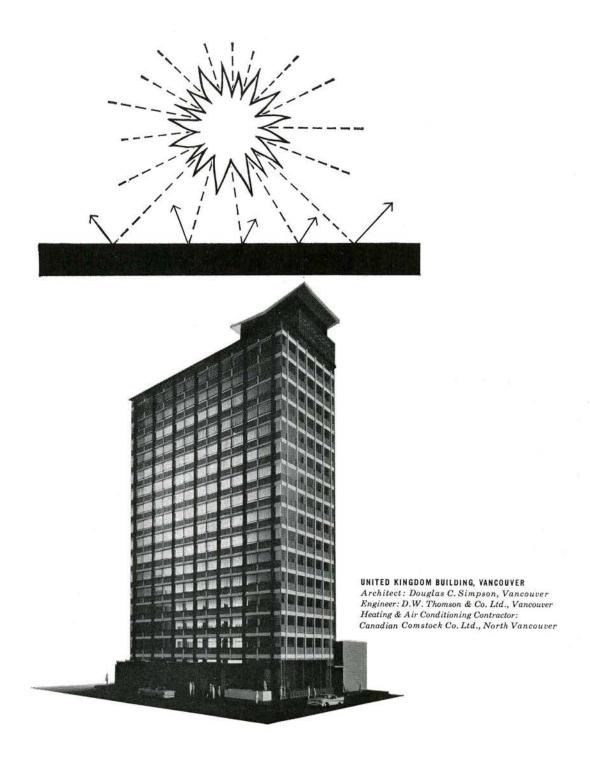
ROYAL ARCHITECTURAL INSTITUTE OF CANADA IOURNAL



JANUARY 1962

ROYAL ARCHITECTURAL INSTITUTE OF CANADA INSTITUT ROYAL D'ARCHITECTURE DU CANADA

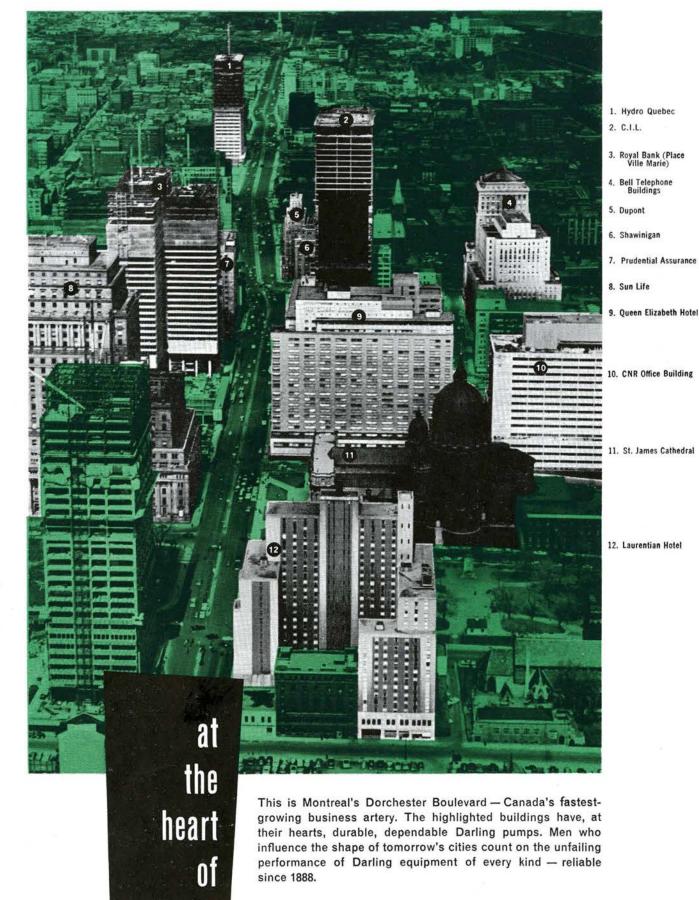


HOW TO OUTWIT THE SUN...AND COOL A BUILDING A Trane zoned heating and cooling system is used in this handsome new Vancouver building. It automatically supplies just the right proportion of tempered air, to maintain an ideal climate—heated air in winter, cooled air in summer. Sun deflecting louvres are used to obtain greater economy of operation—and to "outwit" the sun! Result? The staff enjoys a year-round perfect working climate. Discover the advantages of TRANE heating and air conditioning in your new or present building. For perfect climate every hour of the day, contact your local TRANE office.

TPJ60-1

TRANE COMPANY OF CANADA, TORONTO 14, ONTARIO Manufacturing engineers of air conditioning, heating, ventilating and heat transfer equipment. Branches in all principal cities.





DARLING BROTHERS LIMITED

140 PRINCE ST., MONTREAL and throughout Canada.



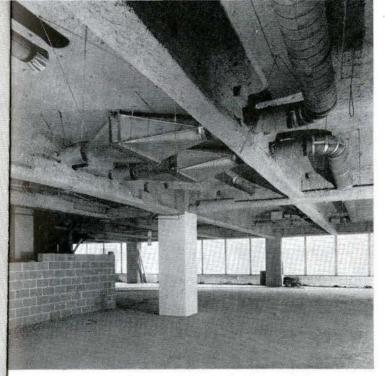
progress



Reinforced holes in beam sections will carry services.

Eliminate waste space

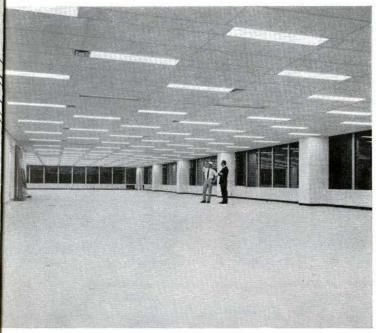
Waste space costs money to enclose and maintain. In multi-storied steel frame buildings, floor thicknesses including services are at a minimum. Air conditioning and other services go through the steel beams. The whole building is lower and lighter and less exterior surface material is required. These are some of the savings you get with steel—savings that must not be overlooked when framing prices are considered.



ir conditioning ducts go through the steel beams.



Steam and water pipes are carried through the steel.



Steel permits longer spans for a given beam dimension than is practical with other materials.



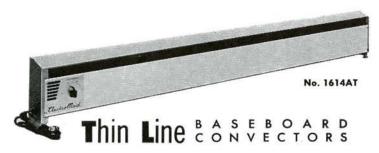
Haunched steel columns in this multi-storey hotel allow a greater rentable floor area.

USE STEEL

If you are planning construction, consider carefully the merits of steel. Dominion Bridge has design engineers and fabricating facilities in most of the major cities. The extent of their experience and the quality of their performance have few equals in Canada.

Structural Division DOMINION





Available in sizes from 30" up to 108" long. Capacity of: 500W, up to 3,000W. Voltage both 120 volts and 240 volts. It is absolutely fireproof, absolutely quiet. The heating elements are guaranteed by a 5-year protection plan. Supplied with or without thermostat. Full details in general catalogue.



UNIT HEATERS

Propeller type shown

Capacities from 1500W up to 60000W. Any voltage up to 575 Volts, as specified. Propeller and Blower type Unit Heaters for various industrial applications.



ELECTROMAID

Combination 3 in 1 Unit

Refrigerator — 5 cubic feet

Stove - 3 Burner

Sink — Stainless Steel

A real space saver, this is a complete kitchen unit, ideal for apartments and motels. It won a National Design Award in 1955. This is part of a line manufactured by us in Canada, one of the most versatile in the country.

Our line of ventilators, illustrated in part at right, is nationally known and distributed from coast to coast. This company, Canadian Armature Works Inc. has served Canada for over 25 years.

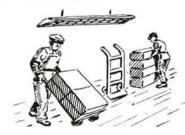
Cooperation on projects with architects and their consultants is our specialty.



Ask for Bulletin 113FG for performance data and complete model information.

RADIANT SPOT HEATING FOR INDOORS & OUTDOORS

The directed rays from a Spot Heater heat persons and objects, and not vast wall surfaces and large quantities of room air. For this reason, heating with Spot Heaters is very economical, and since the heat is instant its use is recommended for rooms infrequently occupied. Spot heating is healthy and natural, heats like the sun or like fire in a fireplace.



- Radiant
- Corrosion Resistant
- Modern Appearance
- Fully protected
- Easily installed
- Safety wired
- Sun's wonder rays

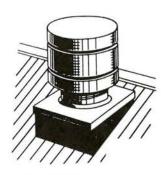
SPUN LINE VENTILATORS



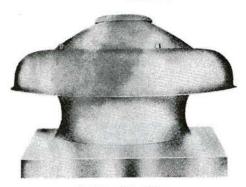
Centrifugal Roof Ventilator MODEL C



Centrifugal Sidewall Fan MODEL S



Industrial Roof Ventilator MODEL UNC



Axial Roof Ventilator MODEL A

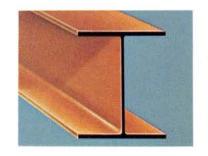
CANADIAN ARMATURE ELECTROMAID DIVISION ST. URBAIN ST., MONTREAL CR. 3-1591

Write for our catalogue describing our complete line of products.



ALGOMA PRODUCES THE FIRST WIDE FLANGE BEAMS IN CANADA

Algoma's new Universal Beam Mill, entirely Canadian built, makes available a range of Wide Flange Shapes up to 24" x 12" x 120 # and to a maximum weight of 12" x 12" x 190 #. These modern facilities are a tribute to the ingenuity and skill of Canadian equipment builders and workmen. By maintaining a large tonnage inventory of Wide Flange Beams Algoma assures good service and prompt shipment.





Sault Ste. Marie, Ontario

Select a chalkboard with confidence and accuracy!

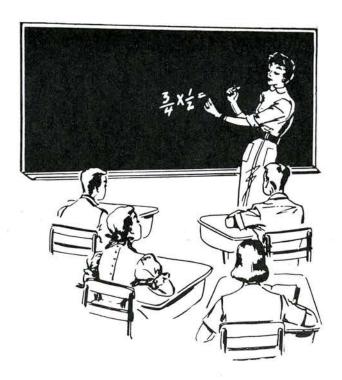
Chalkboard, in the final analysis, is a writing and erasing surface. As such it is a teaching tool — just as much as a map or globe. It is not a building material. It is not a structural part of the school building and should not be considered or purchased on this basis.

How then can you wisely select the best chalkboard for the school? Chalkboard should be selected on its writing and erasing qualities while being assured that the company from whom it is being purchased will stand behind the quality of the writing and erasing surface. Ensure that the company supplying the chalkboard can accept responsibility for the complete chalkboard program in the school system—such as product and installation information, maintenance and cleaning materials that will be required as well as the correct white and coloured chalk (harmful chalk can ruin chalkboards).

On what test should you examine a chalkboard? A basic raw materials test or a laboratory test may show that two chalkboards have the same physical properties, yet differ greatly in actual use. This is possible because the real basis of value is not in the material used but rather in the treatment of these materials to receive, to produce and retain a good writing and erasing surface. The best test for any chalkboard is the test of time — the test of actual classroom use. You can make this test easily by insisting that you be given the location of an installation which has been in service for many years. The time and effort thus spent will be amply rewarded in the knowledge that you have made the only accurate test on chalkboard.

The new school — whether it be large or small — is a source of community pride. But impressive walls of masonry, steel, aluminum and glass do not of themselves make a fine school, for the heart of the school is the classroom where teachers and pupils spend so many hours. Adult education, PTA and numerous community interests bring grown-ups, too, into the classrooms on many occasions.

Chalkboard is a key area in virtually every classroom. It is important, visually, and influences the child's physical welfare; its writing and erasing qualities may be a source of satisfaction or daily annoyance; and finally, it is a focal point to which all eyes turn, and a backdrop for virtually all classroom activity.



Important though it is, the very finest chalkboard represents only a small fraction of 1 percent of the cost of the new school. It would seem only logical, then, to insist upon the chalkboard that looks better, serves better and is your assurance of added years of economical classroom use.

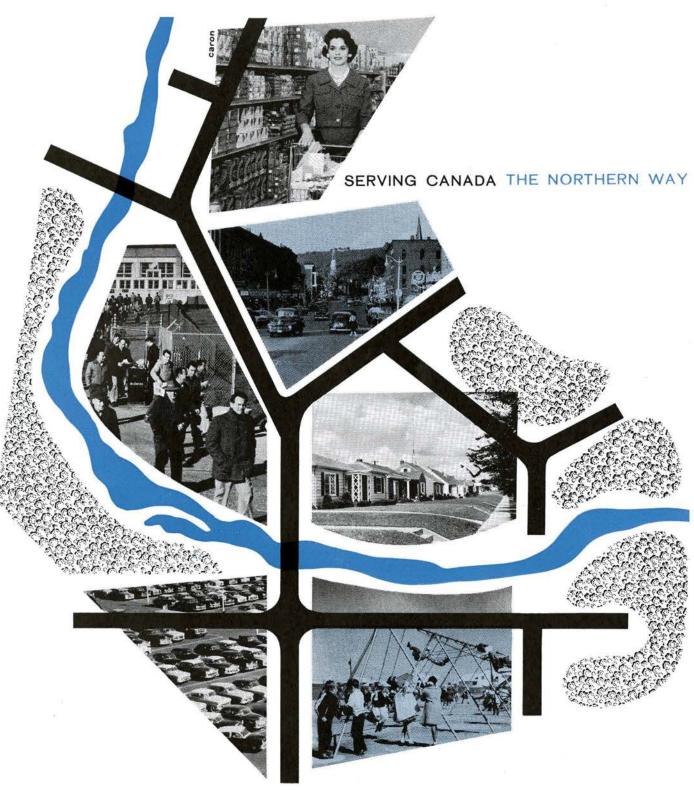
For a chalkboard with superb writing and erasing surface you can find no equal to Sterling and Hyloplate chalkboards. These materials are made only for chalkboard purposes. They are not the by-product of any other industry. Sterling and Hyloplate have been given the best test — the test of time — and were found to have the best qualifications for chalkboard use. Many installations have been in use for over twenty years and are still giving excellent service.

The quality of Sterling and Hyloplate chalkboards is backed by the manufacturer with seventy years of chalkboard building experience and research as well as being backed by Moyer Vico Ltd. who have served the nation's schools since 1884.

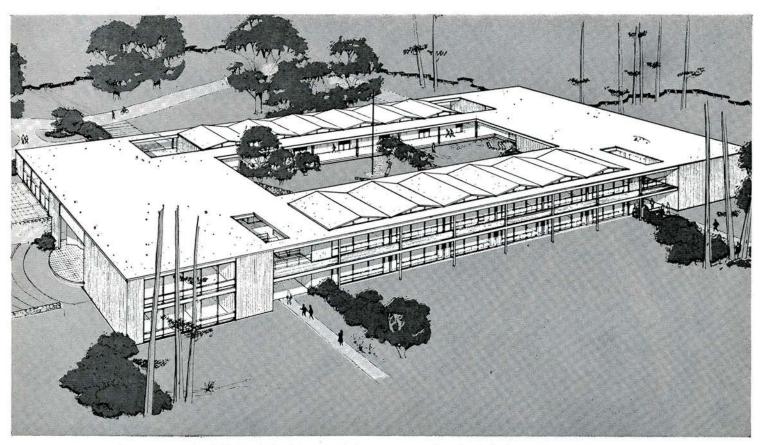
Moyer Vico maintains adequate stock at all six branches: Moncton, Montreal, Toronto, Winnipeg, Saskatoon, Edmonton.

When next considering chalkboard, please contact your Moyer Vico branch office and a representative will make prompt arrangements to present you with complete information.

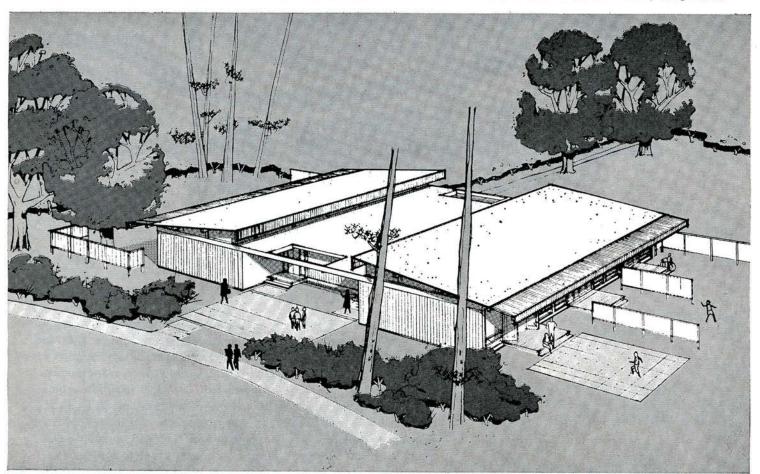




15,000 Northern People . . . individuals all with different personalities . . . different lives . . . holding various positions . . . making numerous products . . . but all linked together by a common bond as a member of the Northern Electric family, in the design, manufacture, and installation of a large proportion of Canada's telephone communication systems and equipment. They produce all types of electrical wire and cable for communication and power transmission, and distribute a complete line of electrical apparatus and supplies. At Northern Electric, product research and development never stops, and continuing progress is made in the communication, electrical wire and cable fields.



The Hillside School is one of three concepts in school design presented in CWDC's new booklet, "Environment for Learning" An inner court allows excellent lighting and easy access to lower classrooms on the downhill side. Modular construction offers off-site fabrication of many components.



The Pavilion School stands for economy, is adaptable to practically any site and is designed for expansion using additional units. This structure provides six classrooms around a main room, all with standard frame construction and wood paneling. This concept permits a choice of siding.

For schools dedicated to the needs of tomorrow

find the better way with WOOD

Wood's familiar warmth reassures the student, relaxes the teacher... to create an unrivaled *environment for learning*. Wood's flexibility takes advantage of the most modern methods known, to build a better school free from traditional restrictions.

Wood's workability allows simple, effective classroom planning, permits giant laminated beams to span a gymnasium floor. Its inherent acoustical qualities help to maintain a hushed library, or carry a voice from the stage to all seats of a spacious auditorium. You'll find, too, that the use of

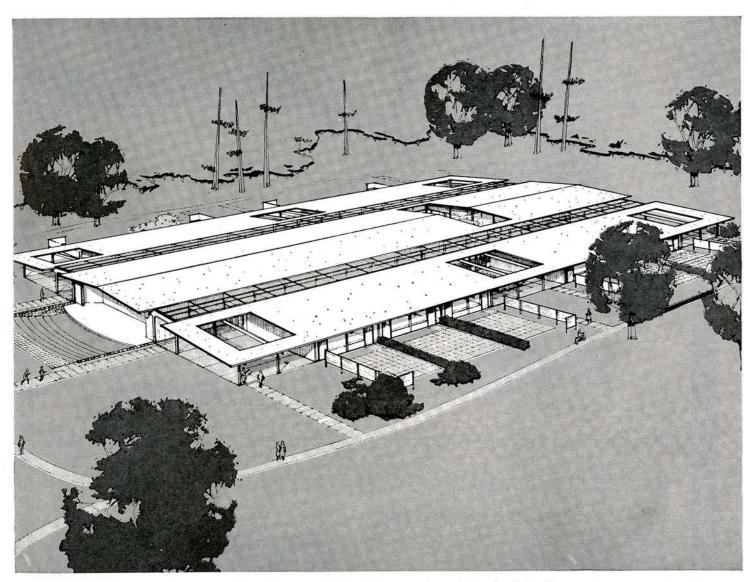
wood makes it easier to plan schools to fit community budgets — leaving room for expansion and change.

For information on CWDC's technical services, publications and motion pictures write:

CANADIAN WOOD DEVELOPMENT COUNCIL 27 Goulbourn Ave., Ottawa 2, Ont.

for freedom of design, look to Wood





The Compact School, with its exciting design and structural simplicity, was planned for a level site. Its vast multi-purpose room has a depressed floor-level to afford a straight laminated wood beam roof for economy, continuous skylights over each corridor for brighter interiors. Classrooms open onto separate patios.

Journal RAIC, January 1962

AIA/RAIC Nos. 35-P-3 and 28-D-1



solar shading fabrics

for soft, diffused light, heat control and economy too!

THESE DECORATIVE WINDOW TREATMENTS HAVE MANY ADVANTAGES OTHER METHODS CAN'T OFFER

Fiberglas* Fenestration Fabrics reduce solar heat transfer as effectively as, or better than other accepted shading devices. These soft, neutral shade fabrics add new beauty to windows. They minimize glare by diffusing *all* the light—even direct sunlight—yet still allow "see-through" visibility.

Fiberglas Fenestration Fabrics also provide efficient sound absorption as a bonus property. Understandably, the NRC values vary with the weight and construction of the fabric selected. Some fabrics are equivalent to acoustical ceiling

tile in sound absorbing action.

Because they're made of glass, Fiberglas Fenestration Fabrics are fire safe. They can't sag or shrink; they're rot-, mildew- and pest-proof, and have excellent resistance to fading. Maintenance costs are cut to a fraction because only inexpensive wet washing is ever required. No ironing is needed, and they should never be dry-cleaned. And with exceptional durability, they stay newlooking years longer than conventional window fabrics.

*T.M. Reg'd.

HEAT SHADING PROPERTIES

	SHADING COEFFICIENTS	s _f [†]	s _{fi} ‡	U Value
	Double Strength Glass Regular Plate Glass Heat Absorbing Glass	1.00 .95 .68	1.00 .86 .66	1.13
No Sun Control	Regular Double Plate Heat Absorbing Double Plate	.83 .56	.79 .53	.56
White Venetian Blinds	Regular Plate Glass Heat Absorbing Glass	.55 .53	.60 .52	.90
	Regular Double Plate Heat Absorbing Double Plate	.51 .31	.51 .36	.53
Fiberglas Off-White Draperies Transmittance—0.35 Reflectance—0.60	Regular Plate Glass Heat Absorbing Glass	.44 .39	.39 .35	.84
	Regular Double Plate Heat Absorbing Double Plate	.43 .32	.39 .29	.51
Fiberglas Tan Draperies Transmittance—0.14 Reflectance—0.42	Regular Plate Glass Heat Absorbing Glass	.53 .53	.47 .48	.84
	Regular Double Plate Heat Absorbing Double Plate	.51 .35	.46 .32	.51

NOISE REDUCTION COEFFICIENTS

Typical Fiberglas Fenestration Fabrics

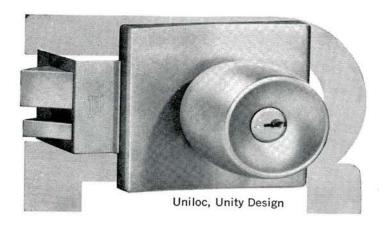
FABRIC	DESCRIPTION				COEFFICIEN	ITS1		
Weight oz./sq. yd	Filling Yarn Structure	125 cps	250 cps	500 cps	1000 cps	2000 cps	4000 cps	NRC
8.4	Aerocor	.09	.32	.68	.83	.76	.76	.65
7.9	Heavy Boucle	.08	.20	.34	.44	.39	.48	.34
6.1	Boucle	.08	.13	.21	.29	.23	.29	.21

*Mounting: fabric tailored to 100% fullness with 5" air space from rigid backing to fabric. source: Geiger and Hamme, Acoustical Consultants, June 12, 1959.

SPECIFY THIS FULL FAMILY OF FIBERGLAS PRODUCTS

- Duct Insulations
- Wall Insulations
- Pipe Insulations
- Sound Control Products
- Roof Insulation and Built-Up Roofing
- Light and Heat Control Products

FIBERGLAS CANADA LIMITED





that make it easy for you to choose the right lock for all designed building!

Whatever the building . . . whatever the budget . . . look to Russwin for your doorware! Three rugged locksets to choose from . . . each available in a wide choice of designs, finishes, functions. Call your Russwin Supplier. Or write Russwin Belleville Lock Division, International Hardware Company of Canada Limited, Belleville, Ontario.





The Honeywell Thermostat MECHANICALLY NEW INSIDE... BEAUTIFULLY NEW OUTSIDE

FEWER WORKING PARTS

LOW-MASS SENSING ELEMENT

9 NEW FINISHES

Now offer your clients more accurate, more sensitive and more colorful temperature control.

Honeywell's simplified construction protects critical working parts in the base. A low-mass sensing element provides immediate response to temperature changes. The heavy gauge steel cover stands up to the toughest abuse. Seven finishes are electro-plated for lasting beauty—highly impervious to scratches and smudging. Two finishes are tough, baked-on enamel.

The new Honeywell Round is much easier to read and set, too, with white numerals on a black background. With its new finishes, you can offer clients a wider choice—at no increase in cost!

Honeywell controls assure your clients of the finest, smoothest heating and cooling.

For assistance on your project, call your nearest Honeywell office or write Honeywell Controls Limited, *Commercial Division*, Toronto 17, Ontario.



LOOK AT ALL THE FINISHES YOU CAN OFFER!



SATIN CHROME. A brushed chromium plated surface. This finish supplied if no other specified.



POLISHED NICKEL. A bright, plated surface with a little softer tone than the polished chrome.



POLISHED CHROME. A bright chromium-plated surface, ideal for hospitals and other institutions.



SILVER BRONZE. A brushed silverybronze baked enamel surface with diamond luster coating.



STATUARY BRONZE. A rich, darker brushed bronze tone, plated. Heavy gauge steel cover resists abuse.



BOWER BARFF BLACK. A soft, black painted surface that adds a unique decorating touch.



BRUSHED BRASS. A soft, brushed golden brass color. Electro-plating keeps appearance years longer.



POLISHED BRASS. A gleaming goldenbrass tone, plated. Virtually scratch-proof, smudges wipe off easily.

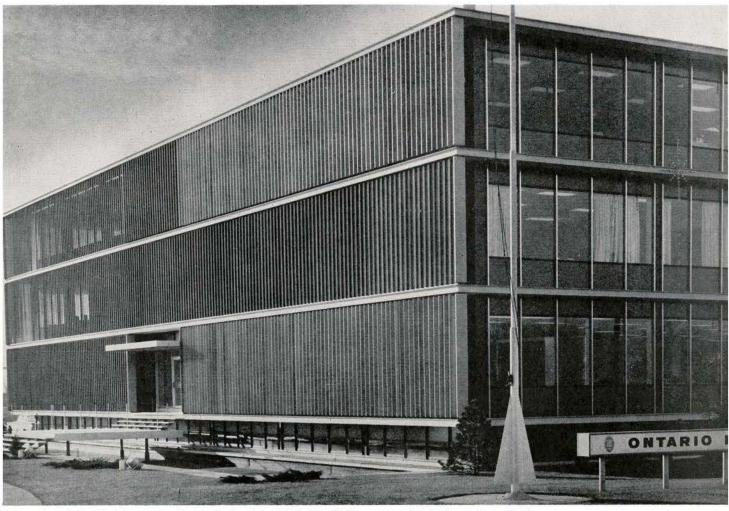


SATIN NICKEL. A brushed plated surface that is neutral in tone. All finishes resistant to corrosive atmospheres.

THESE NEW FINISHES ARE AVAILABLE IN PNEUMATIC AND ELECTRONIC MODELS

Honeywell Honeywell First in Control





Owner: Ontario Hospital Association, Flemingdon Park; Architect: Peter Dickinson; Associate in charge: Peter Webb

Control of Solar Heat and Light...

is best achieved with the use of Lemlar Sun Control Louvres made in Canada by Dominion Aluminum Fabricating.

These aluminum lightweight louvres mounted on the building structure can automatically follow the sun by preset controls. Manual operation is optional. This louvre system gives glarefree admission of light. Airconditioning load is reduced. Many interesting architectural effects can be achieved through various shapes and arrangements of these louvres.

DOMINION ALUMINUM FABRICATING . LIMITED

write for further information to:

DAF

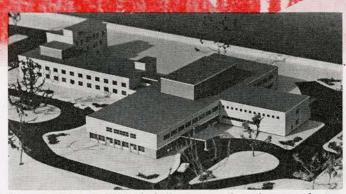
10 JUTLAND ROAD • TORONTO 18 • ONT

Design and Engineering in Aluminum • Magnesium • Stainless Steel

Manufacturers of Canada's most complete line
of aluminum Handrails •
Flag Poles • Expansion
Joint Covers • Grid systems
for suspended ceilings • Sun
Control Louvres. Representatives in Ontario,
Quebec, Manitoba, Saskatchewan, Alberta,
British Columbia.

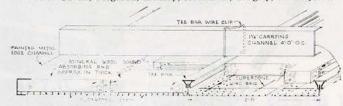


MOUNTAINSIDE



Brampton General Hospital, Brampton, Ontario, one of many beautiful buildings in Canada which has been sound conditioned with Cweco Acoustical Products.

Architects: Govan, Ferguson, Lindsay, Kaminker, Langley, Keenleyside.



APPLICATION: SUPERTONE ACOUSTICAL METAL PANS Suspended on 1½" Carrying Channel and 1½" Tee Bar

QUIET BROUGHT INTO CITY BUILDINGS

WITH

CWECO

ACOUSTICAL PRODUCTS



INDUSTRIES LIMITED

100 JUTLAND RD., TORONTO 18, ONT.

CLifford 5-3407



United Fruit and Produce Terminal (Montreal) Limited Central Metropolitan Market, Montreal

General contractors: Fernand J. Labrosse Inc.

Architects: Brassard & Warren

Consulting engineers: Lefrançois, Laflamme & Gauthier

VENTILATION PLUMBING AND HEATING INSTALLATIONS

MET, RO



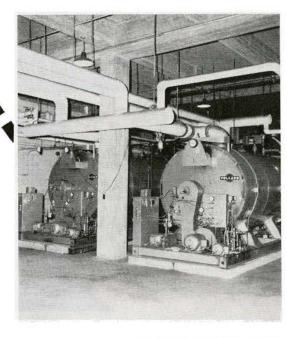
- Accurate plan interpretation.
- Top quality materials.
- Careful, expert installation.
- Supervision by professional engineers.

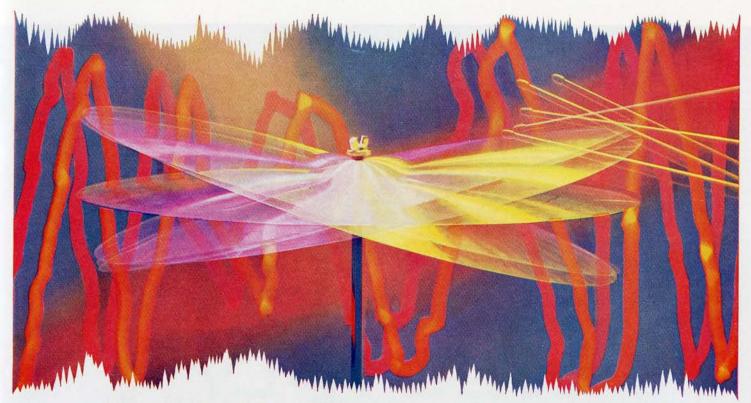
... Let us quote on your next project.

METRO INDUSTRIES

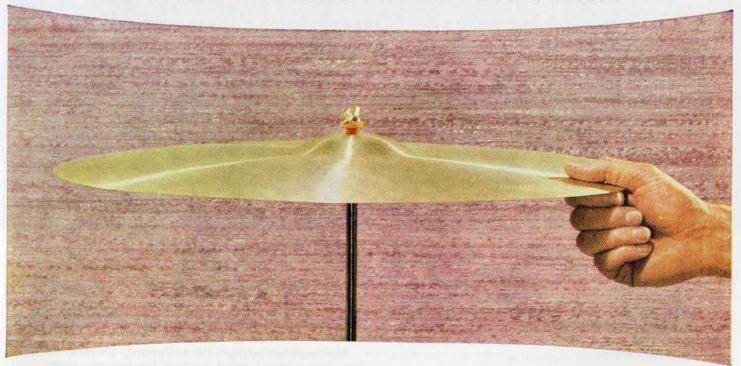
LIMITED

MONTREAL - QUEBEC - OTTAWA





Dominion Linoleum mutes "colour noise"



supplies quiet good taste with the soft-sheen floor

The "noise" of a too-brilliant flooring offends both the eyes and good taste. Dominion Linoleum's **soft-sheen** finish "plays down" glare, quietens colour, clarifies tone. This smart **soft-sheen** isn't just something that's applied to the surface of linoleum—it's natural because it's part of linoleum's own tex-

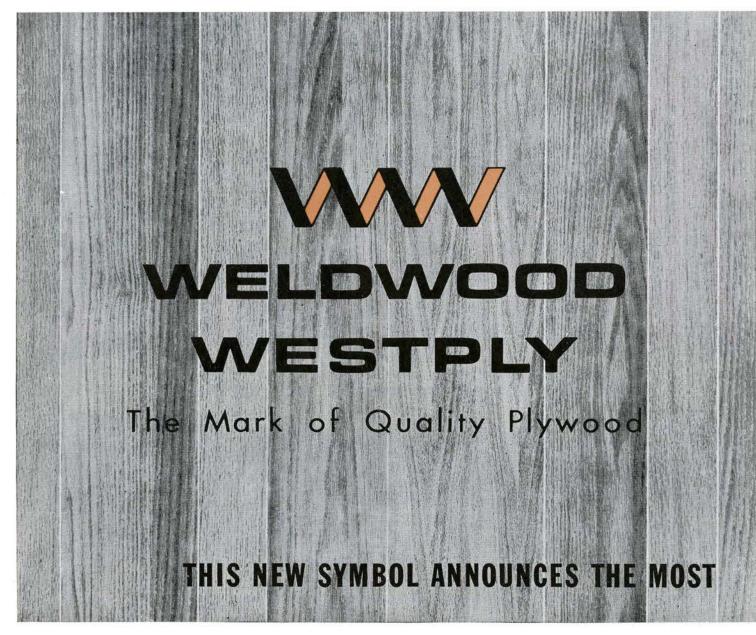
ture. Dominion's wide variety of up-to-date patterns and **soft-sheen** colours are all in tune with the refreshing, low-key feeling you're designing into today's buildings, offices and homes. For further information or literature, write Dominion Oilcloth & Linoleum Co. Limited, 2200 St. Catherine St. East, Montreal.

BY-THE-YARD FOR THE SMART, SEAMLESS LOOK, OR IN TILES FOR SPECIAL EFFECTS...MARBOLEUM, DOMINION JASPÉ, HANDICRAFT, BATTLESHIP, TILECRAFT...ALL INLAID

FLOORS BY DOMINION

DOMINION OILCLOTH & LINOLEUM CO. LIMITED, 2200 ST. CATHERINE STREET EAST, MONTREAL MAKERS OF DOMINION LINOLEUM, DOMINION VINYL, ASPHALT TILE AND ASSOCIATED PRODUCTS

Journal RAIC, January 1962



The new "double W" signature symbolizes a union of major importance to every architect in Canada.

With 22 branches from Vancouver to Halifax, Weldwood-Westply now offers you and your millwork house a nearby source for the most complete and diversified lines of decorative and structural plywood obtainable.

For outstandingly luxurious installations, its Ontario hardwood mill — Hay & Co. Limited — can make architectural blueprint matched panels to your own specifications in virtually any exotic wood species from Avodire to Zebrawood.

Where cost considerations are of prime importance, you have a wide selection of Weldwood stock panels in birch, knotty cedar, cherry, Korina, African mahogany, teak or walnut. The mill can customfinish any panel like the finest furniture.

All 22 Weldwood-Westply distributing centres also carry the full range of products from:

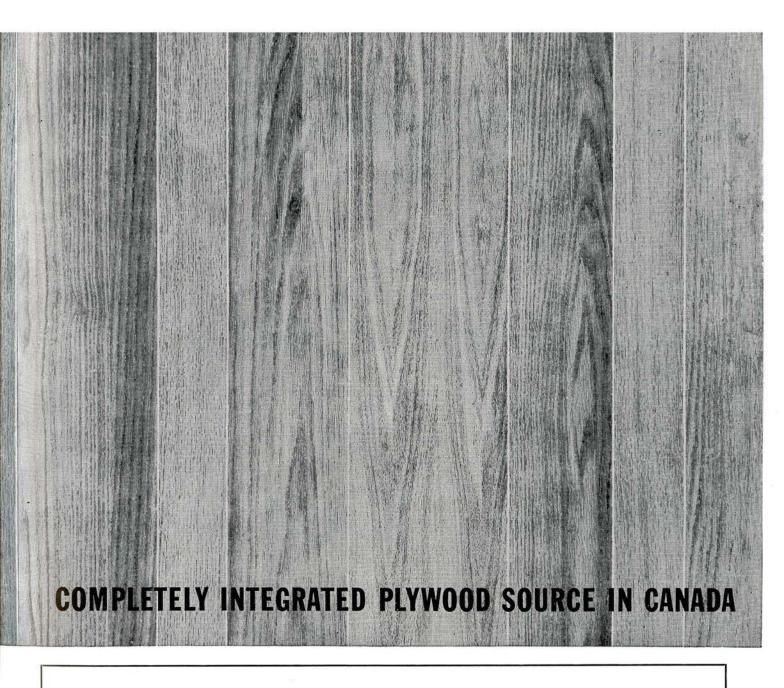
Western Plywood's three British Columbia fir mills and its Edmonton poplar mill.

Weldwood-Westply's Vancouver contract fir mill, Evans Products Limited.

Weldwood-Westply's Searchmont, Ontario mill, Canada's newest, most modern lumbercore plant.

They can also offer you such outstanding architectural products as Glasweld, the new low-cost, mineral-surfaced, fireproof curtain wall material and handsome Weldwood fire doors faced with exotic wood veneers.

Now you can enjoy the widest selection and a considerable saving in time by making your nearest Weldwood-Westply branch the source for all your decorative and structural paneling requirements.



OF SPECIAL INTEREST TO ARCHITECTS

Weldwood-Westply's Hay & Co. stock panels in oak, walnut and cherry are kept in flitch lots and are consecutively numbered like its architectural panels so that you can obtain sequence-matched panels at no additional cost.

Hay & Co.'s decorative panel faces contain no sapwood (even though C.S.A. standards permit 10 per cent).

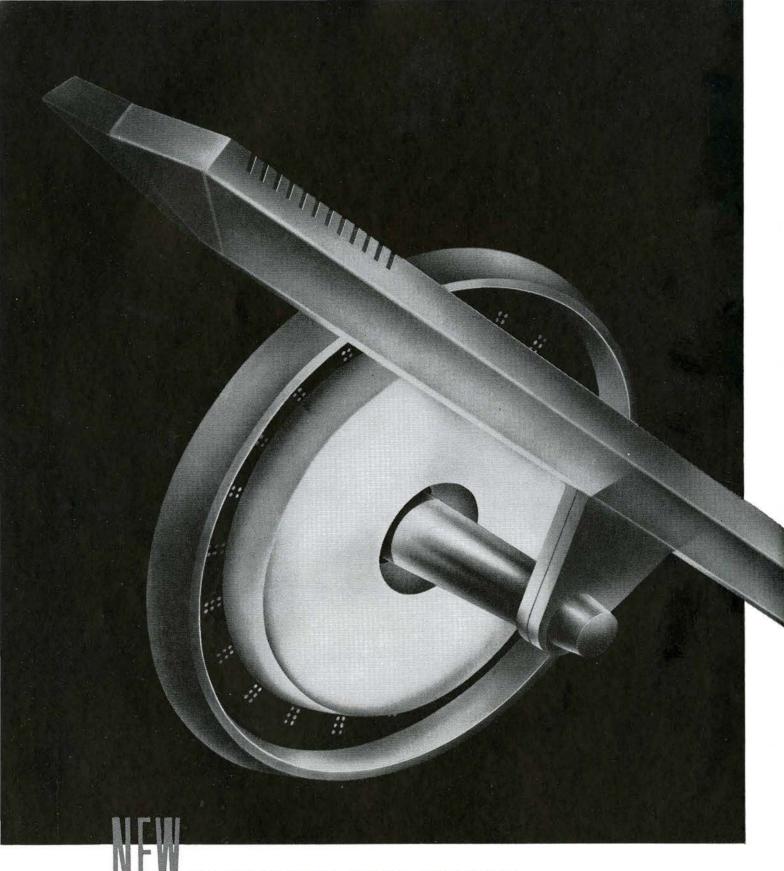
Only Hay & Co. uses African fuma as decorative panel corestock. Fuma is exceptionally stable, light in weight and easily worked.



The Mark of Quality Plywood

principal offices: VANCOUVER • MONTREAL branches: CALGARY • EDMONTON • REGINA • SASKATOON • WINNIPEG LAKEHEAD • SUDBURY • WINDSOR • LONDON • HAMILTON • TORONTO ORILLIA • PETERBOROUGH • KINGSTON • OTTAWA • SHERBROOKE TROIS RIVIÈRES • QUEBEC • CHICOUTIMI • HALIFAX

21



ILLUMINATED WALL BRACKET spotlights handrails in corridors and stairways · · · Incandescent recessed lighting provides added safety and decorative night lighting for:

HOSPITALS . HOMES FOR AGED . THEATRES . HOTELS . SHIPS

5 15/11mera/t of PITTSBURGH

GENERAL CATALOG OF COMPLETE BLUMCRAFT LINE AVAILABLE ON REQUEST COPYRIGHT 1961 BY BLUMCRAFT OF PITTSBURGH * 460 MELWOOD STREET, PITTSBURGH 13, PENNSYLVANIA

RAIC Journal

JANUARY 1962

MANAGING EDITOR WALTER B. BOWKER

ASSISTANT EDITOR LEONARD WEBSTER

EDITORIAL ADVISER ERIC R. ARTHUR (F)

REGIONAL ASSISTANT EDITORS MARITIMES

LESTER J. PAGE, Halifax WEST COAST

CHARLES A. TIERS, Vancouver

QUEBEC CLAUDE BEAULIEU, Montreal

PRAIRIE PROVINCES
HENRY D. KALEN, Winnipeg

ADVERTISING MANAGER

LLOYD SAWYER

ADVERTISING REPRESENTATIVE

J. F. SULLIVAN

JOURNAL COMMITTEE

Chairman EARLE C. MORGAN (F) F. BRUCE BROWN (F) R. A. DICK FORSEY PAGE (F) D. E. KERTLAND (F) R. SCHOFIELD MORRIS (F) Toronto GERARD VENNE (F)

Quebec

EDITORIAL BOARD

Chairman

R. A. DICK Toronto

Vice Chairman

L. A. OXLEY Toronto

H. A. DUNN Edmonton

DONALD WOOKEY Winnipeg

H. CLAIRE MOTT (F) Saint John

WM. J. RYAN

St. Johns

J. S. MCDONALD

Halifax HUGH ELLIS

Hamilton H. D. R. BUCK

ROBERT C. FAIRFIELD HENRY FLIESS D. C. HALDENBY

EARLE C. MORGAN (F)

L. E. SHORE (F) JOHN G. WASTENEYS

G. EVERETT WILSON (F) Toronto

PETER COLLINS
Montreal

DENIS TREMBLAY (F) Sherbrooke

J. A. LANGFORD

Regina

1962 ECONOMIC FORECAST



25 The Annual Editorial by the President RAIC Harland Steele (F)

28 AN ECONOMIC FORECAST A survey of the prospects for 1962 in the building and construction fields, written for the Journal by Maurice Hecht.

31 Page 31, Victoria Square, Montreal. Architects & Engineers: Prof Luigi Moretti, Prof Pier Luigi Nervi, Rome. Associate & Consulting Architects: Greenspoon, Freedlander & Dunne. Jacques Morin, Montreal.

> Page 32, Yonge-Eglinton Development, Toronto. Architect: K. R. Cooper and Associates, Toronto.

33 ARCHITECTURE IN CANADA SINCE 1945 An address to the Society of Architectural Historians (USA) by John C. Parkin (F).

41 HERALDRY The first of a two-part article by Eric R. Arthur (F).

43 THE PHILOSOPHY OF CITY PLANNING A Lecture presented by Jacques Simard, MAIUC, President, Community Planning Association of Canada, at the Annual Assembly of the AAPQ.

48 ROYAL ALEXANDRA NURSES RESIDENCE AND SCHOOL OF NURSING, EDMONTON Architects & Engineers: Rensaa and Minsos, Edmonton.

51 WINDOW AIR LEAKAGE

by J. R. Sasaki and A. G. Wilson. The January Canadian Building Digest Supplement from the Division of Building Research, NRC, Ottawa.

NOUVELLES DE OUÉBEC

55 "Nous ne sommes pas les seuls responsables . . . NOUS, LES ARCHITECTES" Conférence prononcée devant les members du Club Kiwanis St-Laurent par M. Paul-O. Trépanier, Premier Vice-Président de l'AAPQ.

59 DU SECRETARIAT DE L'AAPQ

DEPARTMENTS

61	From the Executive Director's Desk
62	Letters to the Editor
62	Book Reviews
64	Institute News
65	Provincial News

66 Coming Events

67 Product Index

68 Industry

78 Index to Advertisers

Published at 160 Eglinton Avenue East, Toronto 12, Ont. Telephone 487-4714. Advertising Office: 1133 Leslie Street, Don Mills, Ontario. Telephone (416) 447-5196. Subscriptions: Canada, Commonwealth and U.S. (12 issues) \$7.00 Foreign \$8.00 The Journal and the RAIC do not hold themselves responsible for opinions expressed by contributors. CCAB Member Authorized as 2nd Class Mail, P.O. Dept. Ottawa, and for payment of postage in cash.





The Royal Architectural Institute of Canada

Founded 1907 · Patron Her Majesty The Queen

OFFICERS 1961-62

PRESIDENT, HARLAND STEELE (F), Toronto VICE-PRESIDENT, JOHN L. DAVIES (F), Vancouver HONORARY SECRETARY, F. BRUCE BROWN (F), Toronto HONORARY TREASURER, R. C. BETTS (F), Montreal EXECUTIVE OFFICES: 88 METCALFE STREET, Ottawa EXECUTIVE DIRECTOR, ROBBINS ELLIOTT SECRETARY, MAURICE HOLDHAM, MBE

COLLEGE OF FELLOWS

CHANCELLOR, H. H. G. Moody (f), Winnipeg DEAN, J. Y. McCarter (f), Vancouver REGISTRAR, F. Bruce Brown (f), Toronto

REPRESENTATIVES TO COUNCIL

ALBERTA ASSOCIATION OF ARCHITECTS — G. B. McAdam, T. A. GROVES, D. G. FORBES, H. L. BOUEY (F), J. A. CAWSTON (F). ARCHITECTURAL INSTITUTE OF BRITISH COLUMBIA -JOHN L. DAVIES (F), W. G. LEITHEAD (F), C. E. PRATT (F), P. M. THORNTON (F), J. H. WADE (F), R. W. SIDDALL. MANITOBA ASSOCIATION OF ARCHITECTS -G. A. STEWART, H. H. G. MOODY (F), S. LINDGREN. ARCHITECTS' ASSOCIATION OF NEW BRUNSWICK -N. M. STEWART (F), J. R. MYLES. NEWFOUNDLAND ASSOCIATION OF ARCHITECTS -W. J. RYAN, L. W. HOPKINS. NOVA SCOTIA ASSOCIATION OF ARCHITECTS -J. L. Darby, L. J. Page, C. A. E. Fowler (f). ONTARIO ASSOCIATION OF ARCHITECTS - F. B. Brown (F). N. H. McMurrich, W. T. Pentland, A. R. Prack (f), W. G. Raymore (f), H. Steele (f), G. E. Wilson (f), J. W. Strutt. PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS -M. PAYETTE (F), R. C. BETTS (F), H. MERCIER (F), P. MORENCY (F), G. VENNE (F), F. J. NOBBS (F), H. A. I. VALENTINE (F), P. G. Brassard (f), R. E. Bolton (f), E. Fiset (f). SASKATCHEWAN ASSOCIATION OF ARCHITECTS — J. P. Pettick, G. R. Forrester, G. Berry.

CHAIRMEN OF STANDING AND SPECIAL COMMITTEES

ARCHITECTURAL EDUCATION, JOHN L. DAVIES (F), Vancouver BUILDING RESEARCH, ALSON FISHER, Toronto PROFESSIONAL USAGE, HARLAND STEELE (F), Toronto SCHOLARSHIPS, A. T. GALT DURNFORD (F), Montreal DUTY ON PLANS, L. E. SHORE (F), Toronto EDITORIAL BOARD, R. A. DICK, Toronto INTERNATIONAL RELATIONS COMMITTEE, JOSEPH PETTICK, Regina JOURNAL COMMITTEE, EARLE C. MORGAN (F), Toronto LEGAL DOCUMENTS, MARVIN ALLAN, Toronto SPECIAL COMMITTEE ON THE PRESERVATION OF HISTORIC BUILDINGS, E. R. ARTHUR (F), Toronto MASSEY MEDALS COMMITTEE, J. A. RUSSELL (F), Winnipeg PACKAGE DEAL COMMITTEE, JOHN M. DAYTON, Vancouver PUBLIC INFORMATION, G. Y. Masson (F), Windsor COMMITTEE ON HOUSING, James A. Murray (F), Toronto

ARCHITECTURE ABROAD, HARLAND STEELE (F), Toronto

RAIC-CCA COMMITTEE ON BUILDING MATERIALS,

ERNEST J. SMITH, Winnipeg

ARCHITECT-ENGINEER RELATIONS, C. A. E. Fowler (F), Halifax

PLANNING FOR 1967 CENTENARY, PETER THORNTON (F), Vancouver

In attempting to make any general assessment of prospects for Canadian architecture during 1962 there is a temptation for most of us to look beyond a moderately optimistic present, and endeavour to speculate on the major boom which, the economists tell us, will reach North America by late 1963.

Meanwhile, we can look back on a buoyant 1961. That it was buoyant is borne out by returns from a limited survey made by the Royal Institute among 250 architects and architectural firms in November 1961.

The purpose of the confidential survey was to analyze work volume in architectural offices throughout Canada during 1961 up to October 31, and to derive a forecast of work anticipated for 1962. The value of statistics produced by the survey is now under study in conjunction with officers of the Business Finance Division of the Dominion Bureau of Statistics. In the United Kingdom, and to a lesser extent in the United States, the data produced on architectural work volume has been a valuable economic guide to national construction policy.

Beyond question such surveys, if intelligently prepared and administered, can remove much of the guesswork from important decisions of the construction industry. The recent current work survey follows a wage and income study conducted early in 1961 by the RAIC and the Economics and Research Branch of the Department of Labor. Included in a fund of useful information about the profession, which will be fully revealed in a coming issue of the *Journal*, is the fact that the median annual salary for the profession in 1960 was \$9,050 as against the statistically erroneous figure of \$14,982 annual income for architects and consulting engineers in 1959, as released by the Taxation Division of the Department of National Revenue.

The introduction of the Maurice Hecht article in this issue of the *Journal* is useful and constructive if it helps to remind all of us that we are not operating within a vacuum.

Philip Will has said: "Cosy daydreams about future building booms should not blind us to the nightmare of our present man-made environment. For behind these rosy visions is the cold harsh fact that even greater technological progress to be absorbed and applied, even faster urban decay to be replaced, even more people to be housed, schooled, hospitalized, transported — and all in desperate need of space and beauty — only means even more problems to be solved".

As a step toward gaining a better appreciation of our position, the Institute appointed R. Schofield Morris, Peter Thornton and Peter Dobush last October to form a Committee to inquire into the state of the architectural profession in Canada. John C. Parkin was appointed Chairman of the Committee but has since found it necessary to relinquish the post. The Committee resulted from a 1961 Assembly resolution and its terms of reference are: (1) to study and submit reports to the Institute on those areas of activity within the building community where the architect should be, and is not now fully effective; (2) to recommend adjustments within the profession to give the profession maximum effectiveness.

The areas requiring special study include the following:

- (a) a national code of ethics;
- (b) a uniform standard of admission to the profession;
- (c) uniform reciprocal registration;
- (d) education of architects and the need for uniformity in education;
- (e) sources of revenue available to the RAIC;
- (f) organization and structure of the Institute;
- (g) the position of the architect in society and his potential role;
- (h) emerging forms of practice and how they affect the architect's status.

We are five years distant from Canada's Centenary and from the diamond anniversary of the founding of the RAIC in 1907, and naturally we are more conscious now of how far we must travel in the years ahead than of the progress already made.

The need for unity and co-operation between architectural associations and between individual architects or firms has never been greater than it is now. Wherever we may live in Canada, and irrespective of our language or cultural background, there is a recognition, usually unspoken but oftentimes vigorously expressed, that our unity as a profession in this country is unrealized and incomplete.

To the task of developing and maturing our professional organization and wellbeing as an Institute we should engage our energies in the few years remaining before 1967. I hope that the experienced counsel of the members who comprise the Committee on the Profession, supported by work studies and wage and salary surveys, will provide many of the answers to the problems that plague us today.

Harland Steele (F) President RAIC

EDITORIAL

Une forte tentation se présente à quiconque commence à étudier les perspectives de l'architecture au Canada en 1962, celle de ne pas s'arrêter à la situation relativement favorable du jour afin de songer plutôt à

cette période de grande activité qui, selon les économistes, devrait atteindre l'Amérique du Nord vers la fin de 1963.

Entre temps, nous pouvons nous féliciter de l'année 1961. Celle-ci a été indubitablement prospère si l'on en juge par les résultats d'un relevé partiel fait par l'Institut auprès de 250 architectes et maisons d'architectes en novembre dernier.

L'objet de ce relevé confidentiel était d'analyser le volume de travail accompli par les différents bureaux d'architectes du Canada entre le début de janvier et la fin d'octobre 1961 et d'établir des prévisions pour 1962. En ce moment, nous étudions avec le concours de la Division des finances commerciales du Bureau fédéral de la statistique la valeur des renseignements recueillis. Au Royaume-Uni et, dans une moindre mesure, aux Etats-Unis, la statistique relative au volume de travail des architectes sert de précieux guide économique dans l'établissement du programme national de construction.

Des relevés de ce genre, bien préparés et bien faits, peuvent sûrement éliminer beaucoup de conjectures des importantes décisions de l'industrie de la construction. Le nôtre a fait suite à une étude des salaires et des revenus effectuée au début de l'année par l'IRAC et la Division de l'économique et de la recherche du ministère du Travail. Dans cette mine de renseignements utiles que nous avons recueillis au sujet de la profession et qui seront divulgués au complet dans un prochain numéro du Journal se trouve le fait qu'en 1960 le salaire annuel moyen, dans la profession, a été de \$9,050, au regard du chiffre statistiquement erroné de \$14,982 indiqué par la Division de l'impôt du ministère du Revenu national comme revenu des architectes et des ingénieurs-conseils en 1959.

L'introduction à l'article de M. Maurice Hecht dans le présent numéro du Journal sera utile et aura une valeur pratique s'il nous aide tous à nous rappeler que nous ne travaillons pas dans un vide.

M. Philip Will a dit: "Les beaux rèves de grande prospérité future dans le domaine de la construction ne doivent pas nous faire oublier le cauchemar que représente la situation actuelle créée de main d'homme. En effet, au delà de ces beaux rèves se trouve la froide réalité: les progrès techniques à absorber et à appliquer, le vieillissement prématuré des villes à remplacer, le nombre croissant de personnes à loger, à instruire, à hospitaliser et à transporter, toutes aux prises avec un besoin urgent d'espace et de beauté, tout cela ne signifie que de nouveaux problèmes à résoudre".

Afin de mieux déterminer notre situation, l'Institut a invité, en octobre dernier, MM. R. Scho-field Morris, Peter Thornton et Peter Dobush à constituer un comité de la profession chargé d'étudier la condition de la profession d'architectes au Canada. M. John C. Parkin, nommé président de ce comité, a dû plus tard renoncer à ce poste. Le comité fait suite à une résolution de l'assemblée générale de 1961 et a pour mandat: 1) d'étudier et de signaler à l'Institut les secteurs du bâtiment où l'architecte devrait être, mais n'est pas actuellement, véritablement efficace; 2) de recommander les adaptations nécessaires pour assurer à la profession son maximum d'efficacité.

Les secteurs qui exigent des études spéciales comprennent:

- a) L'établissement d'un code national de conduite professionnelle;
- b) Des normes uniformes d'admission à la profession;
- c) Un enregistrement uniforme et réciproque;
- d) L'enseignement de l'architecture et le besoin de cours uniformes;
- e) Les sources de revenu offertes à l'IRAC;
- f) L'organisation et la structure de l'Institut;
- g) La place de l'architecte dans la société et le rôle qu'il peut y jouer;

h) Les nouvelle formes de pratique et leurs conséquences possibles sur la place de l'architecte. Alors que cinq années seulement nous séparent du centenaire de la Confédération et des noces de diamant de l'Institut fondé en 1907, nous sommes bien plus conscients de ce que nous devons accomplir que de ce que nous avons accompli.

Jamais nous n'avons autant qu'aujourd'hui ressenti le besoin d'unité et de collaboration entre les associations d'architecture, entre les architectes particuliers ou les divers bureaux. Où que nous vivions au Canada, quelles que soient nos particularités linguistiques ou culturelles, nous reconnaissons, le plus souvent sans le dire mais parfois en le déclarant bien fort, que dans notre profession au Canada l'unité n'est pas encore un fait établi.

Nous devons employer nos énergies au cours des quelques années qui nous séparent de 1967 à donner à notre profession plus de développement et de maturité et à notre Institut plus de force et de vigueur. J'espère que les sages conseils des membres du Comité de la profession, appuyés par des relevés des travaux effectués ainsi que des salaires fourniront la solution à un grand nombre des problèmes qui nous assaillent aujourd'hui. Harland Steele (F), Président l'IRAC

1962 ECONOMIC FORECAST

by Maurice Hecht

THERE IS LITTLE DOUBT that the soft boom which started to gather momentum in the final half of 1961 will continue to grow well into 1962.

Our Gross National Product, that is, the sum total of all goods and services produced in Canada will probably be somewhere between \$39 and \$39.5 billion.

This will be a decided improvement over the latest available Gross National Product figure, which is for the first half of 1961. In that period we were running at the seasonally adjusted annual rate of \$36 billion. The actual 1961 figure will undoubtedly be higher than that due to the improvement in the economy which became noticeable in the latter half of the year. The dollar volume of new building construction in 1962 probably will be four percent higher than the probable 1961 total.

The economic outlook, as seen at the end of 1961, is for the boom to lose impetus early in 1962. Though the year will set new records, the business expansion cycle will be in a levelling off stage and probably start actually to fall late in the year. The drop will, undoubtedly, be as gentle as this boom itself is but how long it will last is still a matter of doubt. So much is happening in our economic world today that business regenerating forces may get underway in 1962 and these will start pushing Canada into a new expansion very late in the year. However, it is more probable that this will only happen well along

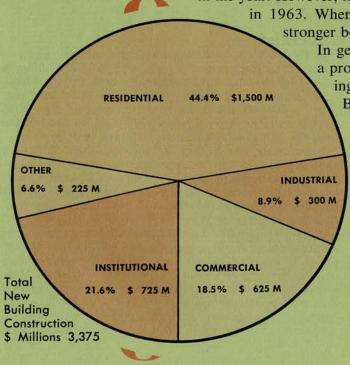
in 1963. When it does happen, it will most likely lead to a much stronger boom than we have had since the mid-fifties.

In general, then, the outlook is for a relatively good 1962, a probably slow 1963, with the start of a major boom coming sometime then and running for a number of years.

By the mid-sixties family formation should be setting new records and be one of the props of a large expansion. Also, demand will have caught up with plant capacity again and we will be ready for another big growth — nuclear powers willing.

What happens in 1963 is extremely important to construction activity in 1962, because this is a boom forerunner. A brief look at the birth and death of a business cycle, gives a clearer view of this statement.

In a cycle all major sectors of our economy do not start to grow slowly, then increase in pace and finally slow down again at the same time. The timing of the growth of various sectors is extremely important. Some sectors act as forerunners and commence to move up



when the economy in general is in a recession; others move up with the growth of the general cycle, while some laggers only start up when the cycle is at a high and keep moving up when recession has already set in.

The first group are leaders in the economic field. Indicators here include, among others, housing starts and construction contracts in general, new orders in durable goods and prices of industrial common stocks. After activity is evident here, the coincident group of indicators start up. These include industrial production and employment, imports and exports and retail trade. The final, or lagging group, consists of installment credit and average hourly earnings, among others.

Thus, construction in general — and more important the early phases dealing with architects and contracts — is greatest at the beginning of a boom and often starts to move downward in volume before a boom has run its course. Note how housing starts have slowed down after a terrific burst of speed in early 1961. Starts in 1962 will probably be under the 1961 level, though completions will be slightly ahead. Starts, however, will still be considerably above the 1960 mark.

If 1963 turns out to be a poor year, then renewed construction activity is not likely to get underway until sometime in that year. This would make 1963 a relatively poor construction year but a year of increasing contract activity. If the big boom starts early in 1963, or shows signs of coming late this year — evidence should be available by mid-year — then 1962 as a whole should be a fairly good year for contracts and 1963 a much better

In the balance of this article I shall deal with the main building sectors, one by one, and show what can be expected of each in dollar terms in 1962. First, though, a brief overall look is taken at what will probably happen, along with 1961 estimates made by Ottawa:

	1961	1962
		Ilions
Residential	1,569	1,500
Industrial	292	300
Commercial	613	625
Institutional	656	725
Other	211	225
Total new building construction	3,340	3,375

Figures do not add due to rounding

The 1961 figures given here are for estimates made at the turn of 1960-61 and my projected total for 1962 is only one per cent higher than the 1961 figure. However, judging by currently available figures, there is little doubt that the estimates for 1961 will not be realized. The total is likely to be \$3,250 million, rather than \$3,340 million, making my 1962 projection of \$3,375 million some four per cent ahead of the probable total for last year.

All figures given here are for construction dollars spent during actual year and are for new construction, not for repairs. New construction, it is realized, includes totally new structures, major repairs and renovations and other alterations and renovations where a major structural change is made or the life span of the building is increased. Repairs

include minor renovations and alterations but not normal maintenance activities. Over the past few years repair expenditures have been running around \$850 million each year and will probably be about the same this year.

RESIDENTIAL

In recent years seasonally adjusted dwelling unit starts touched bottom in the second quarter of 1960, when the rate was at the annual one of 92,300 starts. This rate increased in the following quarter and in the last quarter of that year reached 131,300 starts. In the first quarter of 1961, the speed of starts soared to 164,100. This is close to the record pace of any quarter. However, the high rate slackened off considerably in the second and third quarters, reaching the 120,000 level. The actual figure for the year will be somewhere around 135,000 starts. This is much better than the 109,000 starts of 1960 but no impressive figure. Because of the slowdown in 1960, completions in 1961 will only run a little above 125,000.

According to estimates of family formation, the number of dwelling units completed last year will just about supply the demand. Along with family formation, of course, allowances must be made for non-family households, replacements etc. Some authorities claim that the stock of houses in good repair is high in Canada and this will influence starts in coming years. However, if a check is made of family formation figures in the postwar period, as well as construction rates, the idea that Canada has an adequate stock of houses for comfortable living is not well-founded. In addition to thinking that high rates of residential starts are still to come, I believe that a demand for bigger houses will develop. - the economy willing. I base this opinion on the increasing size of families over the past decade. In 1951, for example, only 16.7 per cent of families had three or four children and only 7.7 per cent had five or more. By 1959 those percentages had increased to 20.6 and 8.5 respectively. When the big boom starts in a year or so, there should be a growth in demand for architect designed houses.

The outlook over the next two or three years for house or apartment building is excellent; for 1962 it is not too optimistic. Dwelling unit starts this year will be at the 125,000 level while completions will run a bit over the 130,000 mark. The total dollar volume for new construction in this area will be \$1.5 billion.

INDUSTRIAL

In the industrial field the outlook is somewhat more uncertain. Over the past few years non-residential building in general has not measured up to early expectations. Investment intentions fell short by \$250 million in new construction in 1960, and are likely to fall short by \$150 million in 1961. A large share of responsibility for the drops stems from the industrial side of non-residential building.

How much new factory development there will be in 1962 depends, in part, on uncertain trading developments. Much of the emphasis on industrial growth in recent months has been on the engineering type of construction, due to renewed expansion in resource industries. The overall manufacturing capacity of plants has still to be fully exploited and there will probably be more emphasis on new machinery and equipment this year than on new buildings or enlargements. If, however, the new boom seems to be getting underway late this year and trade in manufactured products grows—a consummation devoutly wished for in Ottawa, particularly on the international side—then the way will be open for more plant planning than I can estimate at this time.

Current thinking places the 1962 forecast for industrial

construction at \$300 million, though this should increase sharply in the coming years.

COMMERCIAL

The pace of activity in commercial construction will undoubtedly continue at the high rate of the last few years. Much work was underway in 1961 and a great deal of this carried on into this year. The changes which have been going on in the retail field have not come to a stop — or even slowdown — by any means. Discount store development continues, while the transformation of gasoline service stations into miniature shopping centers is only beginning.

Expenditure on office buildings will be high, if only to complete what was already underway in 1961 or before. It is doubtful if any new major office buildings will be started in Montreal this year. New buildings coming to completion there this year will offer a vast amount of new floor space, and with Place Victoria now underway, many more thousands of square feet will be available. Apart from Montreal, the situation is not as pessimistic.

The total dollar volume to be spent in commercial construction in 1962 will be around \$625 million.

INSTITUTIONAL

The brightest outlook for construction activity is in the institutional area, with the educational part of this making the largest contribution. Hospital work will continue at a high level, but the growing discrepancy between government per bed grants and actual per bed costs is becoming so high that raising money for new construction is becoming more difficult.

University enrolment in the academic year 1961-62 was fairly close to the 1964-65 estimate set by academic leaders only a few years back. A ten per cent increase is expected each year during this decade. In 1955-56 full-time enrolment was 4.7 per cent of the college age group (18-24 years). This increased to 6.6 per cent in 1960-61 and should continue to increase.

College building has been going on at a very fast rate these past years in order to catch up with enrolment. Old campuses are changing their look so quickly that even postwar graduates no longer recognize them. And, of course, many new campuses have been created. Capital expenditures by universities between 1956-57 and 1960-61 amounted to \$300 million, with the rate increasing year by year from a modest start. Spending estimate for the years 1961-62 to 1965-66 is \$750 million. McGill recently announced extensive expansion plans; York University has only begun, with no main campus as yet. Sir George Williams has to greatly increase its facilities, which probably means erecting a new building or buildings at a site close to downtown Montreal and there are many other examples.

Public school enrolment is also well ahead of estimates made years ago. The attendance total projected by the Gordon Commission in the mid-1950's for the year 1959-60 was almost reached in 1956-57. Apart from the increase in students — and it is not slowing down — there has been a widespread re-location of students from a decade ago, due to the rapid movement into the suburbs. Another feature being added to augment the growth is the increasing need, as well as actual plans, for technical and vocational secondary schools and colleges. More schools are needed to take care of this requirement and this is placing another demand on space since pupils are now staying longer in school — about one year longer on the average than a decade ago.

Last August, the federal government and the provinces, except Quebec, entered into an agreement to finance technical schools, with Ottawa providing 75 per cent of the re-

quired funds. By November of last year over \$150 million had been committed for technical schools to be completed by April, 1963. Educators feel that the amount for technical schools should be doubled to include vocational schools as well.

In the hospital field there has been a tremendous increase in the number of beds available since postwar days, with very rapid development in the last few years because of government-sponsored hospitalization schemes. Outside of Saskatchewan, where the bed per population rate is highest, there does not appear to be any levelling off in demand. Seven beds per 1,000 people is the nationally accepted rate for acute and chronic hospital needs. If the current rate of expansion continues in both hospital construction and population increase, then the shortage of beds in Canada should catch up with the demand by 1980 - provided no beds are taken out of use in the interim, and provided that seven beds per 1,000 population is still the accepted rate in 1980. This takes no account of mental hospitals, where there is also a great shortage of beds. Only in TB hospitals has the actual bed need been decreasing over the years.

There is room to grow in hospital building but, with primary needs somewhat met at present and money harder to obtain, the rate of growth will tend to decrease. However, with a cyclical downswing in the offing, more government money may be forthcoming as a counter-cyclical measure.

With other types of institutional construction included, the 1962 dollar volume in this field is estimated at \$725 million.

OTHER BUILDINGS

In other building construction the outlook is for a similar rate of spending compared to the past few years. This field includes passenger terminals, airplane hangers, armouries, telephone exchanges, etc, though the largest item is non-residential farm buildings. The total expenditure probably will be \$225 million.

In preparing this forecast of building construction, I have approached the problem from the point of view of dollars spent on new construction during a calendar year, using residential, industrial, commercial, institutional and other breakdowns. The basic reason for doing this is that figures are available over a good many years. Engineering construction is also separated from construction in general. Architects obviously will not be involved in all the dollar work discussed here and may even be involved in some not mentioned, but to a very minor degree.

Because the figures give the actual construction spending taking place — or estimated to take place — this means spending after much of the architectural work is finished. That is why thinking has been carried beyond the 1962 estimates in order to show what is likely to happen afterwards. Bearing this in mind the outlook for the architectural profession for the coming years is more optimistic than the actual dollar spending forecast for 1962, provided changes do not come about within the profession itself.

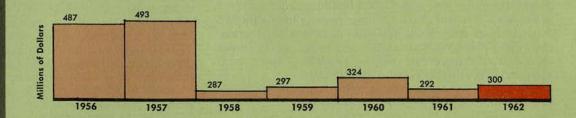
Mr Hecht, B Sc, M Sc (McGill) is a former Vice President, Research and Statistics, of the Montreal Stock Exchange and a contributor to leading Canadian magazines on economic topics and forecasts.

RESIDENTIAL

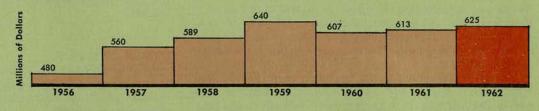
1,782 1,752 1,575 1,488 1,430 1,488 1,500 1,488 1,500

New Building Construction

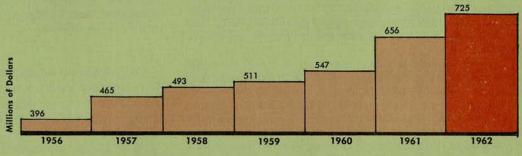
INDUSTRIAL



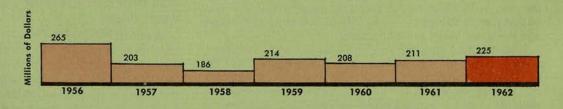
COMMERCIAL



INSTITUTIONAL

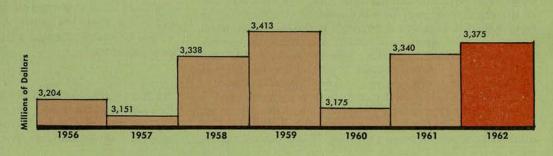


OTHER

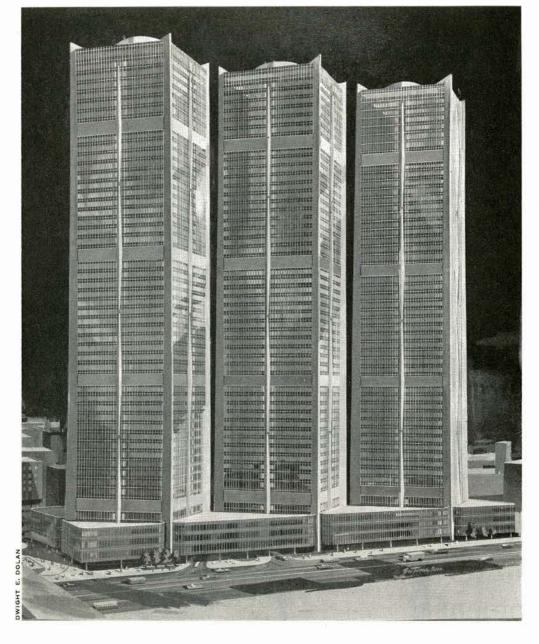


TOTAL

All figures are in current dollars. The 1962 figure is the forecast. The 1961 figure is the first estimate made for construction at the beginning of that year; the actual figure is more likely to be \$3.250 million. Other years are for dollars spent during the period.







Victoria Square

Montreal

Architects & Engineers Prof Luigi Moretti Prof Pier Luigi Nervi Rome

Associate & Consulting Architects Greenspoon, Freedlander & Dunne. Jacques Morin Montreal

THE LARGEST OFFICE COMPLEX in the world — three 51 storey buildings to be the future home of the Montreal and Canadian Stock Exchanges, the Mercantile Bank of Canada and the Mercantile Trust Company, are to be constructed in the heart of the financial district of Montreal.

Completion is scheduled for early 1964.

Designed by the Italian engineer-architect team of Pier Luigi Nervi and Luigi Moretti, with associate and consulting architects Greenspoon, Freedlander & Dunne, and Jacques Morin of Montreal, the first building of the project will rise on the area bounded by the west side of Victoria Square, St James, Little St Antoine and Craig Streets.

The buildings will be the first all-concrete, high-rise office group on the continent. Their design features the relative absence of structural steel normally employed in the construction of high-rise buildings. The three 51-storey towers will include a mezzanine section of three floors, open street level area, with facilities for shop and display space, and underground parking in six underground levels with accommodation for over 1,500 cars. Other facilities will include several restaurants, cafeterias, an auditorium, health club and businessman's club. Floors will be a two-way ribbed design and will have a clear span of 45 ft. from the core to the outside face of the building. Spacing between floors will be 11½ ft., providing 8 ft. ceiling clearance. Floor modules are 4' 8".

Services to the offices in each tower will be by 22 elevators, to the first underground levels by escalators. Ramps and service elevators will service the remaining underground levels. Each building will be completely air-conditioned, and the entire complex has been designed for earthquake resistance. A complete utilization of underground and other tower areas will be made as fallout shelter accommodation.

Consulting Engineers
J. B. Carswell
Toronto

d'Allemagne & Barbacki Letendre Monti & Ass. Wiggs, Walford, Frost & Lindsay Montreal

G. B. Panero Salvadori Weidlinger New York

Civic Planning Prof Harold Spence-Sales Montreal

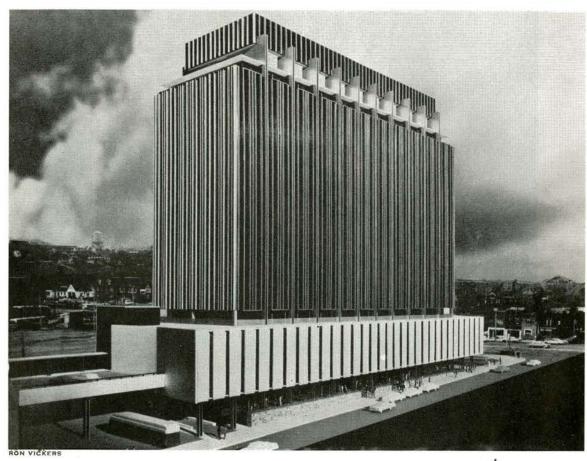
PROJECT

Architect K. R. Cooper & Associates Toronto

Structural Engineer W. Sefton & Associates Toronto

Mechanical Engineer
A. Shuper
Toronto

Electrical Engineers Ewbank and Partners Toronto



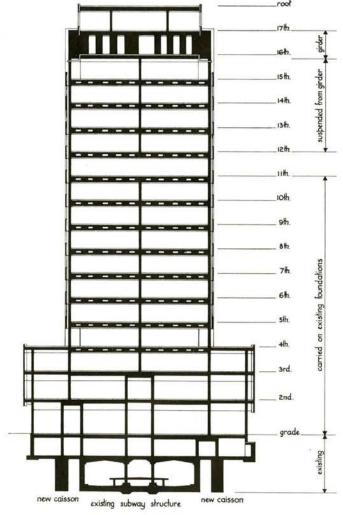
Yonge-Eglinton Development

Toronto

When the northern terminal of the Toronto subway at Eglinton Avenue was constructed, foundations were placed in anticipation of a future multi-storey development. These foundations were found adequate to support 11 storeys of the 17-storey block now under construction. The remaining floors are bridged over at the 12th level and are supported independently on caissons.

The building illustrated is the first unit of a complex that will eventually include the 17-storey block, a 20-storey unit some 300' to the west, a connecting 1st floor promenade deck covering the subway terminal and stacked parking for some 700 cars. The promenade deck will be landscaped.

This first unit, scheduled for completion during 1962, will contain commercial units on the 1st and 2nd floors, including a bank and restaurant, and office accommodation on the remaining floors. Another restaurant is planned for the penthouse level. The building will be the first in Canada to use the variable volume reheat system of air conditioning whereby each floor is mechanically fully independent.



An address to the Society of Architectural Historians (USA)

Architecture in Canada since 1945

An Appraisal

by John C. Parkin (F)

"No one knows my country, neither the stranger nor its own sons. My country is hidden in the dark and teeming brain of youth upon the eve of its manhood. My country has not found itself nor felt its power nor learned its true place. It is all vision and doubts and hopes and dreams. It is strength and weakness, despair and joy, and the wild confusions and strivings of a boy who has passed his boyhood but is not yet a man." 1

This description of "America's Attic" is from Bruce Hutchinson's "The I Unknown Country". It suggests the present condition of Canadian architecture no less than an accurate total summation of Canada's social, economic and artistic state. Our own "manifest destiny" remains in the future, for we Canadians live constantly in that dimension, and often, in so doing, jeopardize our present.

It is, of course, a great privilege that you have extended to me to speak today. No one more than I, am aware of the presumption involved that I, as an architect, should risk addressing so distinguished and learned a group. Like Philip Johnson, writing recently in the Architectural Review, 3 I suggest that this, my disadvantage, is my one advantage. The fact that I am not a scholar — an historian - will permit me to draw all manner of "interesting" parallels as well as some conclusions, irrespective of the narrow time dimension that separates us from the recent work I hope to describe. As a practising architect, perhaps I can be as subjective and arbitrary as you will tolerate.

In searching out a manner in which I might present my survey, I concluded

that my paper might best take a kind of biographical approach.

There are, in Canada, somewhat more than 2,000 architects. To reduce the total effort of so many to so few is my first arbitrary act. Certainly, the work of the architects I mention presently is some of the most influential in Canada today. No doubt you, whose task it is to measure true worth, will find the actual leaders among those I have been so foolish as to omit.

May I reinforce my first apology through the words of Ian McCallum, who used the same approach in his assessment of contemporary architecture in the

United States:

"The approach is biographical because, in architecture today, quality is in direct ratio to the calibre of the individual architect. We are not living in a time when the artisan-workman can make a contribution to architectural style; this responsibility, along with many others, rests squarely on the architect. He may bring in many types of specialist as collaborators and he certainly looks to the builder and workman for higher standards of assembly and finish, but in the long run it is the quality of his imagination that gives us good or bad architecture." 4

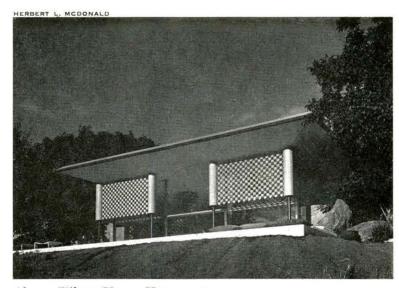
It is both an honor and a privilege to be asked to address the Annual Meeting of the Society of Architectural Historians (USA) but, when the subject set the speaker is an assessment of Canadian architecture since 1945, it may also be an embarrassment. Mr Parkin found himself in this dilemma, but was prompted to accept, and we think rightly, by the distinguished nature of the audience in the field of letters, and the fact that the Society had not previously had contemporary Canadian architecture brought to its notice in a prepared illustrated paper. Mr Parkin would like us to say that his paper pretended, in no way, to be definitive, but was a preamble to an extensive showing of slides. In this way, many outstanding names, which are missing in the list, were brought to the attention of the audience. The lecturer need make no apology for a provocative paper - if it had been otherwise, the Society would not have wanted it, and the Journal would not be so glad to publish it. When our architecture ceases to be provocative, it ceases also to be architecture. E.R.A. My second apology concerns my having limited most of my slides to examples of work completed in the last six or seven years. The task of properly covering 15 years in the time available would be an impossible one. I would plead that the immediate post-war period in Canada — perhaps until as late as 1952 or 1953 — was not significant in its production of noteworthy examples of contemporary architecture. Those earlier years for my firm, (and I suspect for most others in Canada — save those on our Pacific Coast) were more taken with proselytizing and in moulding a previously conservative public taste, than in creating lasting architecture. That these were well-spent years, however, may be found in the continuing ascendancy of contemporary architecture in Canada today.

Those of us designing contemporary buildings in the immediate post-war period were still in the minority and, for the most part, doctrinaire in our emulation of the great international masters, for many of us had neither the experience nor the time to develop a personal philosophy. In those years, from the Atlantic to the Rockies, the older-established eclectic firms did the important work and conservatively directed the building programs of the managerial elite. British Columbia, however, had already been won by such pioneer-modernists as Ned Pratt, his partner Robert Berwick, Peter Thornton and those others of a hardy group whose residential work was both a source of constant hope as well as envy to those of us to the East.

Our struggle for the acceptance of contemporary architecture in Canada was made the more difficult for the existence of a curious fact — there were numerically few protagonists of modern. The Great Depression — more severe in Canada's nervously volatile economy — and five years of World War, almost cost Canada a "middle" generation of architects — those who might now be in the age group 40 to 50. This would be the group upon whom the greatest burden of design leadership might naturally have fallen. Indeed, it is to the relatively few of that group who did graduate and practice that contemporary architecture in Canada owes most.

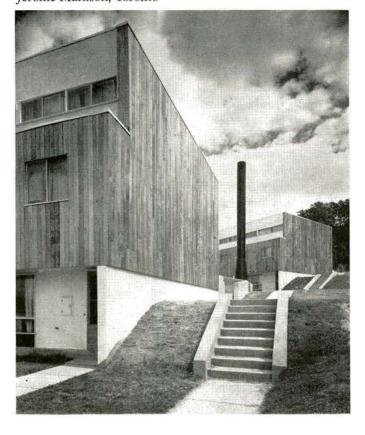
There are about 700 private firms across Canada, employing more than 5000 persons. While the population ratio to architects is about the same as the United States, the majority of our architects practice in the four largest cities. Certainly, the location and quality of much of our best recent architecture reflects this concentration. Thus, while I will show slides from other cities, the majority are from Vancouver, Toronto, Winnipeg and Montreal, with the first two cities having greatest representation.

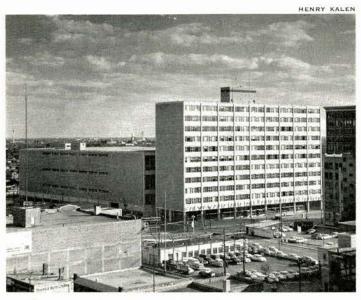
Let me emphasize that the selection of the work of some 20 architects is merely the *vehicle* for presentation of almost a generation's work. There are few heroes of any kind in Canada — we tolerate few of our own and are bemused by most of those from elsewhere. Where there appears a surface seriousness, and even a self-righteousness, there is, in reality, the opposite. Typically Canadian (in this regard, at least) is the viewpoint of John Kenneth Galbraith, himself of Canadian birth and education, who delightfully puts forward Canadian iconoclasm in the essay "The Wholesome Influence" from his recent book — "The Liberal Hour". 6



Above: Filberg House, Vancouver Architect: Arthur Erickson, Vancouver

Below: Stanrock Terrace, Elliot Lake, Ontario Architect: Jerome Markson, Toronto



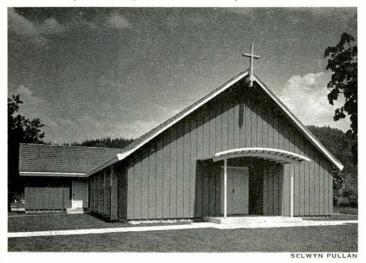


Above: Winnipeg General Post Office Architects:

Green Blankstein Russell Associates, Winnipeg

Below: St Anthony's Church, Aggasiz, BC Architects:

Gardiner, Thornton, Gathe & Partners, Vancouver



Certainly, there are no national architectural heroes, and relatively few of the international variety. Today, few other than students and those most recently in practice indulge in the blind hagiolatry so often attendant to the world's architectural saints. In Canada, the overly orthodox of any variety do not last long; this might explain the uneasy and short flirtation of most of us with Mies, Frank Lloyd Wright, and the others in the immediate post-war years.

Mies van der Rohe has had, I would contend, a much greater influence across Canada than Frank Lloyd Wright, perhaps because he has created a no-nonsense vernacular particularly appropriate in a country of more restricted no-nonsense budgets, but perhaps also because he has demonstrated a *relative* (only relative, mind you) mastery of technique. May I submit, however, that the principle reason for Mies' greater acceptance lies in the fact that he is the architectural internationalist par excellence and that we Canadians are, in all due modesty, the political, social and economic internationalists par excellence. In the words of our eminent historian, A. R. M. Lower:

"... We will soon be the best informed people on international affairs, and the worst on national affairs." 7

A nation without a recognized flag or national anthem never seriously sustains for long the occasional fervent outbursts of nationalism in politics, economics or the arts. We are an outward-looking nation — but we have never willingly accepted any unilateral influence which might demean our uniform desire to be as multilateral in architecture as we are in politics and economics. One might, in this way, explain the quantitatively small influence in Canada of Frank Lloyd Wright — for he is after all, American — pardon — Usonian — and we are not.

Nonetheless, Wright has found influence in varying degrees in the work of a dozen or more highly competent men - from John Di Castri and Christopher Cyoni (Owtram) in Victoria and Vancouver respectively, Joseph Pettick in Saskatchewan, to James Strutt in Ottawa, and Roger d'Astous in French Canada. Perhaps, too, the work of Ronald Thom of Vancouver, one of our most gifted young architects, might, on occasion, demonstrate a dominant Wright influence. Where one might expect the Wright influence strongest – in the Prairie Provinces — one, in fact, finds it the least. Why should this be so? In my opinion the great opposite force exists in one of our most important Schools of Architecture, 400 miles immediately north of here. The presence, at Winnipeg, of the University of Manitoba School of Architecture, a dedicated teacher, John Russell (of American birth) and his driving encouragement of post-graduate training in design, has resulted in a dominant Internationalist influence in architecture on the Prairies, and most certainly in Winnipeg itself. Few schools in North America could claim so high a percentage of post-graduates of Harvard, MIT, and interestingly, of the Illinois Institute of Technology, as can Manitoba. Most have returned to the Prairies, but others of us have scattered to the eastern and western extremities of Canada - each an "internationalist" (if I may say) in viewpoint. Parenthetically, one such graduate did remain in Chicago, where he was principal assistant of Mies' for many years.

At the western limits of the Prairies, the Province of Alberta is not nearly so architecturally well-endowed as Manitoba. Neither isolation, (for no part of the world is isolated today), nor lack of money can be held accountable. This "Texas of Canada" has enjoyed unprecedented economic prosperity, yet other than for a few examples, Alberta suffers a paucity of good architecture. The domination in the educational, governmental and institutional field, of a provincial department of public works, whose standards of design are appallingly low, the loss of what might have been an important University School of Architecture, has left a residue of work that will take several years for the now-rising group of well-trained younger men to erase. One might hope that by the end of this decade a quite different state will prevail.

The other side of the Rockies presents a quite different picture. British Columbia has held design leadership in Canada for more than twenty years; it has only been in the most recent five years that we in the East have attempted a serious challenge. A more benign climate, and a forward-looking, restless, unpretentious people, have combined to give British Columbia the greatest concentration of good architecture in Canada. It is perhaps only in the design of larger structures that we in the East now seriously challenge our West Coast colleagues, and then it might be argued, only because there happens to be more opportunity in the richer and older cities of the East to work with larger building programs. With typical candor, the British Columbians admit to this, and to partial guilt that undue influence finds its way into their larger buildings from their dominant problem of the smaller-scaled structure. Thus there exists in the eyes of some Easterners incongruities and improprieties in material and in scale in some of their largest buildings.

Canada's other extremity, the Atlantic Provinces of Prince Edward Island, New Brunswick, Nova Scotia and Newfoundland, have been compared in historical association and in influence with the role of New England in the United States. In the 18th and 19th century architecture there undoubtedly did exist a roughly comparable role in each of the two countries. Unfortunately, the parallel does not exist today. The world-significant architecture in and around Boston, in Fairfield County and elsewhere, have no counterpart today in those Provinces which nurtured Confederation.

Not a cultural but a geographic isolation from the rest of Canada, with a resultant lack of economic prosperity, has contributed to the present state of architecture in our Maritime Provinces. It should be remembered, however, that the technical problems of building for the inhospitable wind and rain of our extreme East is not likely to produce an architecture of lightness, nor fine detailing. In some respects the problems of building there would appear greater than in the far colder areas of our country. Again there is reason for hope. An influential group of architects has worked successfully to establish this year, a University School of Architecture in Halifax. If they attract some of the capable junior professors from the older schools across the country, the essential and regenerating focal point will have been established.

I may appear to some to exaggerate the role of the university schools of architecture in the development of contemporary architecture in Canada. I do not think I am overstressing their importance, for their directors and faculties have long maintained initiative in both creating a favourable acceptance of the new style and, in notable cases, in practicing themselves. But, then, of course, there is a precise parallel in this country.

The historic buildings of Quebec, as Dr Alan Gowans has shown, are our greatest architectural heritage. The contemporary architecture of Franch Canada, centred largely in that Province, requires special consideration. That unique part of Canada's culture which has given us our greatest painters, Jean-Paul Riopelle, Paul-Emile Borduas and Alfred Pellan, as well as the man who is probably our greatest sculptor, Louis Archambault, has not yet played a similarly influential role in our architecture. Let me turn to my colleague, Jean-Louis Lalonde of Montreal for help. Mr Lalonde, commenting on the contemporary architecture of Quebec in his recent article "L'Ecole des Beaux-Arts and the Quebecois" says:

"... nowhere else have nearly all the buildings such an odd character.

"... There are a number of reasons why a French Canadian does not follow the rest of Canada. His traditions are more established and his social behaviour is determined by certain factors which do not affect other Canadians: universality of religion, different language, institutions, lack of control of economic means, and, most of all, that individualism which seems to be the lot of anyone with a drop of French blood in his system."

Mr Lalonde suggests that the different approach of the French Canadian architect in technical and aesthetic problems was due "to his education, of which L'Ecole des Beaux-Arts was essentially responsible." And again,

"... While the Bauhaus and Le Corbusier were exploiting a new world of forms more adaptable to varied functional requirements, the school maintained that the final result was to be found in aesthetic standards based on an architecture of stone."

Or

"... A sort of duality of aims followed him into practice."
"The most simple building cannot be a bare statement of its function and construction; something has to be added to enrich it, to dress it up... Something more is needed to make his building different from others." Mr Lalonde continues later: "... The school is also responsible for the lack of consideration that (its) architects have for the environs of their buildings. As students they were taught to design in the abstract."

He continues in the same article to speculate "if the French Canadian architect is not . . . producing a building that (merely) stands out conspicuously from everything around it." He also suggests that "he has lost the discipline and control his ancestors possessed."

Lalonde places the same stress I do on the role of the academic institution. In closing, he says:

"... There are already some indications that such a process (a more enlightened approach to shaping the environment) is underway, and the School of Architecture of Montreal has become a modern institution..."

Perhaps within Mr Lalonde's observations may be found the reasons for the ironic fact that our province of greatest architectural tradition has the least planning legislation.

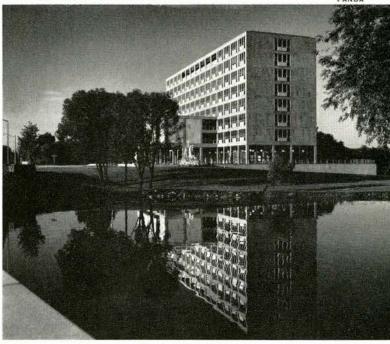
Nonetheless, I would suggest that some of our French language architects in Canada are amongst our very best. The invidious task of mentioning some names to the exclusion of others would present such names as Charles

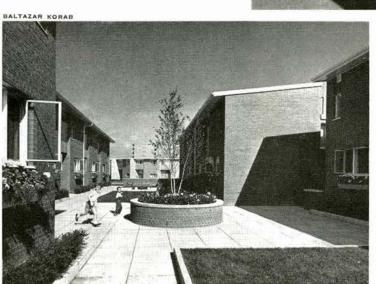


Left: South Hill Village, Don Mills Architect: James A. Murray, Toronto



Left: The Queen Elizabeth Theatre, Vancouver Architects: Affleck, Desbarats, Dimikopoulos, Lebensold & Sise, Montreal





Above: City Hall, Ottawa Architects: Rother-Bland-Trudeau, Montreal

Left: Flemingdon Park Row Housing, Toronto Architect: Irving Grossman, Toronto

Trudeau, the Gropius-trained co-winner of the national competition for the Ottawa City Hall, Guy Desbarats and Jean Michaud, co-winners of the national competition for the Queen Elizabeth theatre in Vancouver, co-architects with I.M. Pei for Place Ville Marie, Gerard Notebaert, and Roger d'Astous.

As the French Beaux-Arts influence has been loosened on Quebec, so has the English academic tradition been all but removed from Ontario, our richest and most populous province — certainly among the younger architects.

Perhaps I should refrain from all but the most general comment on the architecture of Ontario, for I am too involved to lend any real authority. May I say, however, that there is little trace today of the same concern for the picturesque so dominant in earlier generations, and so well described by Dr Gowans and by Dr Hubbard. Vast post-war immigration has created a heterogeneous, cosmopolitan society in Ontario. The taste of those who would have had us emulate the English no longer prevails. A new and interesting result of the post-war influx of British-trained architects arises nonetheless. It has been suggested that there are more than 400 such architects in various offices across the country. Being newer in practice, their influence, insofar as individual buildings are concerned, has been relatively limited, but is to be seen throughout Canada in a greater stress on those important details for which the Architectural Review is famous – typography, street furniture, wall patterning, and pavement texture.

Before turning to the slides, may I make some general observations?

The first concerns the increasing resort in Canada to the national and international competition for the design of important civic buildings. While the result of some competitions have resulted in compromise, and occasionally confusion, the increased use of the competitions technique has introduced a fresh note into our national architecture. Worth mentioning are the national competitions held for the Queen Elizabeth Theatre in Vancouver, the Winnipeg City Hall, Massey College at the University of Toronto and, most recently, the international competition for the Toronto City Hall, the largest ever held, with whose design it is now my firm's privilege to be associated.

Perhaps our greatest single failure to date resides in our heretofore inability to conceive buildings in the Far North which are the natural product of the intemperate climate. All too often the buildings of these new far northern communities resemble those of southern Canada, on the argument that their inhabitants demand an environment similar to the cities to the south from whence they came. The recent relocation of Aklavik on the Arctic Ocean at the mouth of the Mackenzie River to Inuvik was not taken as the opportunity to demonstrate a completely new building concept. Rather, it has the quality of a typical military installation, irrespective of the fact that it is overwhelmingly civilian. On the other hand, the new plans for Frobisher Bay on Baffin Island, North-West Territories, would appear to possess the essential ingredient of imagination.

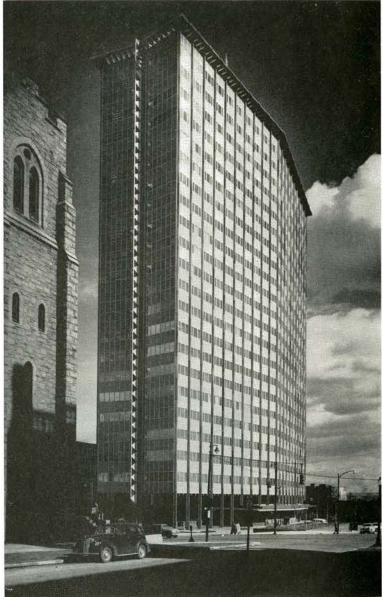
Let us turn again to details. In the slides you will no doubt question the seeming predilection for white exteriors — is this really typical you may well ask, and is

Right: School of Architecture, University of Manitoba, Winnipeg

Architects:

Smith, Carter, Searle Associates, Winnipeg

Below: BC Electric Building, Vancouver Architects: Thompson, Berwick & Pratt, Vancouver





it not too "cold" for a cold country? I cannot speak for the others, but I can tell you why most of my firm's buildings are white or light in color. The long autumn and spring, and in Eastern Canada the blue-gray to gray sky, the brown to gray landscape, require an element of sparkling contrast in an otherwise sombre atmosphere. In winter when the snow arrives, only white can settle a house so completely into its environment. What elsewhere is rationalized as a device for setting a building apart from nature, in Canada, becomes the means of integration. In Vancouver there is little snow, and relatively few white buildings, The buildings there integrate through the medium of the browns that predominate. Perhaps there are other reasons in the case of some of my colleagues, but these are mine.

Many visitors to Canada point out a "heavier" quality in our detailing to that prevailing in the United States. This they dismiss as part of our Scottish heritage and naturally to be expected of a nation who pronounce "south", "about" and "roof" so peculiarly, or who have a Highland regiment in every city worthy of the name.

May I disagree? Most of us detail as you do, attempting to stress our materials as greatly as good technique permits. We simply have, in many areas, a different climate which requires different detailing. While technology may make increasingly little difference possible throughout the world in fundamental concept, major differences still remain in the parts. The amount of material, for example, that we are required to use to seal a doubleglazed window in a supporting wood corner will inevitably be viewed by some as a "heavier" by conviction, rather than by necessity. There is also perhaps greater reliance, even today, in our smaller buildings, on the use of our abundant and inexpensive timber resources. More wood is required to do the same thing where steel might be used in this country. Ironically, where timber is most abundant and where there is the encouraging and relatively mild climate of British Columbia, corner transparency is not likely, at least until technology improves.

Canadian architecture, like Brazilian, or any other, requires its own criteria of evaluation. Yes, this sounds so trite as to be unworthy of repetition.

But we are often criticized for our "heaviness", amongst other vices, on the assumption that the same forces govern the architecture of the northern half as the southern part of North America. We are not, however, likely to produce an architect of the sensuous virtuosity of an Alfonso Reidy or an Antonio Gaudi, nor engineers of the kind of Torroja or Nervi, for we are essentially a nation of North European origin, philosophy and conviction.

It is my view that there is almost a national motif in our architecture in the widespread expression of the post and lintel in its almost invariable white color. It appears almost as frequently in wood in British Columbia as in concrete or steel in the east or Prairies. Even our more organic architects cannot, I contend, rid themselves of it they simply "slip" the horizontal member past the vertical. Rarely, (perhaps only in the work of Arthur Erickson of Vancouver) is a flowing, plastic relationship used. While we, too, have our share of hyperbolicparaboloids, much of our concrete architecture shows our concern for the crisply-expressed right angle connection, even if one must resort to precast prestressed concrete to rationalize its use. I would suggest that the majority of our contemporary Canadian architects, whether romantics or classicists, all join in the seemingly common conviction that a building must honestly advise how its structure holds. This, then, is our universal "frame of reference", to use a bad pun.

You, better than I, will shortly be able to detect whatever common qualities our buildings may have. In the view of Arthur Erickson of Vancouver, speaking of West Coast architecture:

"Most of our buildings are only half buildings" or must seem so in your (Eastern) eyes — because the other half is the site. You think in the more architectonic terms of complete geometry. Your buildings have flat bases whereas ours seldom have. I think our bottoms are the clue to our basic difference." Then, with typical irreverence, Erickson concludes: "Vive la difference!"

All of us are striving, perhaps now and then in a too self-conscious way, to better technique and to deepen our respective philosophies of design. Many of us, in so developing our own particular aesthetic conviction, deplore the almost "originality for its own sake" movement that has become so dominant in the United States.

Some of us look with horror at those in this country who must have been so lacking in original conviction that they now profess an opposite aesthetic creed within so few years. It is the contention of some of us that in your concern with aesthetic experimentation in individual buildings you have completely lost sight of the central problem of the age — the relationship of building to building and the power to control the form of environment.

We have been no more successful than you in that respect, but we are not, at this moment, sublimating our frustrations in an over-concern with aesthetic permutations inherent in the individual building.

Professor Hitchcock suggests:

"... We are, on the whole, less puritanical and singleminded about architecture today than we were in the twenties, and less naively Freudian than in the thirties."

"... One may note in many recent buildings the return of curves in section, in plan, and even in elevation, and the preference for types of expressive structure more organic in appearance, if not in fact, than the reticulated cage. In this looser and more eclectic climate of taste, which has come with the mid-century, it should be possible to appreciate more fully the virtues of Art Nouveau architecture." 12

While we all must agree with Professor Hitchcock, there are many of us who do not agree with his former collaborator, Philip Johnson (who has had such an important influence in Canada) when he says:

"... We live in an age when we do not like 'compelling slogans' or styles or disciplines, or even capital letters. Can't we just wander around aimlessly?"

"... We are going through a foggy chaos. Let us enjoy the multiplicity of it all. Let the students have a different hero every year. Maybe it is good for them."

Rather, we are more inclined to agree, in Canada, I submit, with Peter Blake, who has suggested:

"... That (while) we have now received a vocabulary for the architecture of our time; that the acceptance of the revolutionary images declares that the time for individually heroic buildings is over; (that) now and for the future an army of competent workers must win the new battle for the city." 10

The words of one of our important Toronto architects, Gordon S. Adamson, express a prevalent view:

"I am most definitely opposed to architecture which changes with the whims of every so-called leader of architectural thought and I will rue the day that architecture becomes a year-to-year fashion which will undoubtedly be the case unless a lot of us are determined to stick to fundamentals."

Many of us in Canada, are likely to agree with Lewis Mumford when he states:

"Architects who pursue their formal aims so intently without consideration of all the public functions they serve are really claiming the privileges of the painter and sculptor without fully accepting the responsibilities of their own profession."

If there is to be a significant Canadian architectural contribution in the next decade, many of us hope it will be in creating lessons in how buildings might be skilfully sited with respect to other buildings by different authors. The problem is of equal magnitude in both our countries.

The majority of the now 18,000,000 Canadians live in urban areas; in the next 20 years, the vast majority will be urban. Each of our great cities — Montreal, Toronto, Vancouver and Winnipeg — will double in size. The immensity of this challenge caused our Royal Architectural Institute of Canada to initiate and conclude last year a Tour of Inquiry¹¹ to explore the reasons for Canada's disastrous urban sprawl, and to establish recommendations as to how our increasing urbanization could be brought forth in terms of beauty and order. The architects of Canada are committed to the implementation of the 32 recommendations of the Report of the Committee.

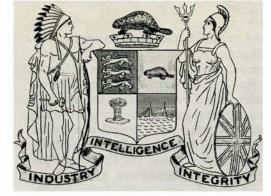
Thus we are attempting to resolve the central architectural problem of the age, the design of buildings in the group. Thus we have, in a typically Canadian way, concerned ourselves in probing the future. But there are many of us who have felt that we have dwelt too long in that dimension of what was to have been Canada's century. The central problem of the collective environment is the immediate task we Canadian architects have accepted as a challenge, rather than virtuosity in the single building.

It has been suggested that Canadians lack that essential quality of imagination in their artistic and cultural affairs. One can only plead in defense the view that the total direction of the collective energy required to build a nation under somewhat artificial circumstances has been all consuming. Surely no quality of imagination was lacking in the "design" and conception of Canada itself. The challenge ahead is to transpose that same quality of imagination required in "designing" and building the nation itself unto its cultural development.

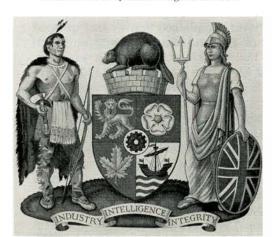
NOTES

- 1 Bruce Hutchinson "The Unknown Country", Longmans Green, Toronto, 1942. Opening paragraph.
- 2 Patrick Anderson, Canadian poet. "I am one and none, pin and pine, snow and slow, America's attic".
- 3 Philip Johnson, "Where are we at?" The Architectural Review, London. September 1960, page 175.
- 4 "Architecture U.S.A." by Ian McCallum. Preface, page 8. The Architectural Press, London.
- 5 The Canadian Architect, November 1960, "Education for Architects", page 36.
- 6 John Kenneth Galbraith, "The Liberal Hour", XII "The Wholesome Influence", Houghton Mifflin Company, Boston.

- 7 Prof A. R. M. Lower, 1960 Gravenhurst Conference of the Canadian Council of Christians and Jews.
- 8 "L'Ecole des Beaux Arts and the Quebecois", Jean-Louis Lalonde. The Canadian Architect, November, 1960, page 41.
- 9 Philip Johnson, "Where are we at?", Architectural Review, London, September 1960, page 175.
- 10 Peter Blake, "The Master Builders, Le Corbusier, Mies Van der Rohe, Frank Lloyd Wright", Alfred A. Knopf, New York.
- 11 Report of the Committee of Inquiry into the Design of the Residential Environment of the Royal Architectural Institute of Canada. Obtainable from the Executive Offices RAIC, 88 Metcalfe Street, Ottawa.
- 12 "Art Nouveau—Relevant Still?" Peter Selz and Mildred Constantine, The Museum of Modern Art, New York.



Toronto's coat of arms designed in 1834



The sketch by the College of Heralds



The design by Dr Eric Arthur, drawn by Mr John Hall



The approved armorial achievement for the City of Toronto

Heraldry

bu Eric R. Arthur (f)

intil a pear ago,

I had neither seen nor heard the word "armorist", and had certainly never met one. It was then that I found that there were several in Toronto, and quite a few learned and articu-

late ones in Ontario. Whether it is a title that is earned like 'architect', or whether one says he is a rabid armorist in the same way that one describes a crazy motorist or a well-known baptist, I have not discovered. A letter that I was permitted to see had the word "armorist" after the signature, and one could not help but be impressed.

My own interest in heraldry goes back many years, perhaps to a schoolboy's dreams of brave knights and fair ladies, of jousts at tourneys, shining lances and gaily caparisoned horses. If any readers of the *Journal* ever shared such daydreams, they will be mortified to know that your true armorist makes light of such romantic nonsense. Heraldry, today, is a science.

I doubt whether Mayor Nathan Phillips knew much about all this when council in Toronto decided to change its coat of arms, but he has since become deeply involved in medieval mysteries and with individuals whose titles come unchanged and unsullied from the age of chivalry. It also has its funny side because, while our arms now are the affair of Her Majesty the Queen, His Grace the Duke of Norfolk, Sir George Bellew, Garter Principal King of Arms and James Frere, Esq., Bluemantle pursuivant and Charter Herald, our original arms, legend has it, were drawn by a sailor whom our first mayor, Wm. Lyon Mackenzie, rescued from the clink. They were not very good and were never registered, but they have lasted since 1834.

I presume that a municipality or a corporation can copyright a distinguishing mark in Ottawa as a design for the payment of a fee, but arms, in the heraldic sense, can be registered in the Commonwealth only by the College of Heralds.

Only England has a college of heralds. Scotland has Lyon King of Arms, and Eire must long have shed any connexion with Ulster King of Arms and his Heralds, Cork and Dublin. In England, the Royal officers of arms were made a corporation by Richard III, a corporation that, today, is known as the College of Arms or Heralds' College. Its members are Garter Principal King of Arms, Clarenceux King of Arms South of Trent, Norroy King of Arms North of Trent; the Heralds of Windsor, Chester, Richmond, Somerset, York and Lancaster and the pursuivants Rouge Croix, Bluemantle, Rouge Dragon and Portcullis. Patron of the College is His Grace the Duke of Norfolk, Earl Marshal of England. The city clerk in Toronto, Mr Edgar Norris, has been dealing with Garter Principal Knight of Arms, the Richmond and Chester Heralds and Bluemantle.

When one thinks of the many places in the new Toronto city hall where armorial bearings would be shown, one can appreciate the desire of the Corporation to have a more distinguished one than that of the mythical drunken sailor, and to have one duly registered by the highest authority in the Commonwealth. It would be difficult to defend the old coat of arms. The royal lions and the side wheeler were, it is true, happy reminders of Royal York and traffic on the great lakes from early times, but the second beaver seemed redundant (even if the Hudson's Bay Company has four), and the sheaf of wheat is better remembered in Toronto as the name of a pub on Spadina Avenue than an emblem of the wheat growing propensities of our citizenry.

The first sketch from the College in London (with suggestions from Toronto) was criticized in the press chiefly because Britannia didn't seem quite right to those whose notion of the female bust is influenced by the popular illustrated press, and the pale Indian was dismissed by experts as belonging to a tribe of Crees from the prairies. While it would be unthinkable to have an emaciated Britannia or an Indian from some lost tribe flanking the arms of Toronto, it seemed to the writer that more was amiss within the shield itself.

The white rose of York was an admirable addition going back as it did to the original York, the capital of Upper Canada. Less good was the strange craft that represented our connexion with shipping on the great lakes and the oceans of the world. Local armorists couldn't believe

Heraldry

that we would take pride in an origin so recent as to be represented by a steam side wheeler —

far better conceal it, they thought, by a Roman galley or, it was suggested, by an anchor, which is timeless. The maple leaf must appear somewhere on our shield if only to indicate the capital city of Ontario, but so large a leaf as that in the third quarter seemed somewhat lacking in imagination. The cog wheel was a good idea, especially as in 1834 there were several industries in Toronto, but it would be untrue to say, at any time, that industry loomed so large in the city as to occupy so central a point in the shield.

The single lion came as something of a shock, unbalancing as he did the galleon and the waves, and replacing the royal lions which had honoured our arms (albeit without royal or herald's permission) for one hundred and twenty years. When it was innocently suggested that we might retain the lions (actually they turn out to be leopards which, in medieval times, were thought to be a cross, and not too nice either as they were begotten of a 'spouse breach' between the leo and the pard), the local armorists rose in their wrath to say we might as well ask for the Crown jewels. To cut a long story short, a competitive design was submitted, passed by city

council and, greatly to the writer's surprise, was sent to Bluemantle pursuivant for comment. Even more surprising was his reply in which he accepted the design even to the steam-driven side wheeler (the Great Britain, launched in 1830), but regretting his inability to approve the royal lions – that was a privilege that could be granted only by Her Majesty the Queen. Nothing daunted, the city clerk wrote His Excellency the Governor General explaining our dilemma and pointing out that, in one hundred and twenty years, the Governors General and Lieutenant Governors to six sovereigns had seen our arms and had never complained that we had usurped the lions of England. Furthermore, the Royal Standard had flown over York until it was taken as prize of war by the Americans in 1813. Weeks went by because of Her Majesty's absence in Africa but, at last, a letter arrived and we learned that permission had been granted, and Bluemantle pursuivant had been informed.

The story of the Toronto arms has been given in some detail because it should be of interest not only to historians of the future, but to those municipalities which are, at present, contemplating changes in their shields.

This would also seem to be the time to reprint an article that appeared in the *Journal* in 1937 and attracted more public attention than anything that has been published since. We were then indebted to an American scholar, Mr Howard M. Chapin, for permission to publish his paper on the arms of Canadian municipalities – with an introduction by the late C. W. Jefferys. Mr Chapin does not tell us who designed these arms. Did he call himself an armorist, and what fees did he charge the untutored aldermen whom he obviously mesmerized in the 19th century? One would like to have met him. If he was a charlatan, he was a nice one, and not without a sense of humour. How otherwise could he write of Oshawa, "Azure on a bend argent a gearwheel between an upright piano and a sedan automobile", or of Gravenhurst, "Argent Hygeia seated on a sofa with outstretched arms holding a goblet in her right hand, and at dexter a woman supporting a sick child reaching for the goblet, and at sinister a man . . . "? Was he an itinerant English armorist, but if so, "Why," as Prof. Chapin asks, "do the arms of New York City appear in the centre of the arms of Owen Sound?" Surely no more amusing or artistic fraud was ever perpetrated on the towns and cities of Canada. The reader will, of course, remember that the arms of the older cities ante date the arrival of the itinerant armorist, though in even these there must be exceptions - Dartmouth, N.S., for example.

It is sad to record that all the priceless examples described in the *Journal* are unknown, unhonoured and unsung so far as the College of Heralds is concerned. In 1937, according to Windsor Herald, "No Canadian city or town has yet obtained a grant of arms".

The Philosophy of City Planning



"A Perspective View of the City of Venice", published 1794 by Laurie & Whittle, London

A Lecture presented by Jacques Simard, MAIUC, President, Community Planning Association of Canada, at the Annual Assembly of the AAPQ

Definition

THE word "city" has in general usage a rather peculiar meaning. According to law, a "city" is a corporate municipality of at least six thousand people.

Without enlarging upon its meaning to the extent of St Augustine, we will consider a city, in accordance with its definition by Larousse dictionary, as a "political community whose members are self-governed by their own laws".

"Planning" is a word belonging to urbanism — which is opposed to "disorderly exploitation" — the physical assimilation of urban space. As we understand it, planning grasps the city in its organic unity, reaching beyond simple technique or an applied art.

As to "philosophy" we want thereby to stress our intention to dig into the problem created by our times with regard to the planning of the City.

However, it would be presumptuous to imagine that the few thoughts we have had could throw new light on the subject. In fact, those ideas which haunt the minds of today's thinkers have been better developed elsewhere, and we candidly admit having borrowed largely from them.

But nowhere, in our opinion, has anyone tried to cover with the cloak of wisdom the anguish of the architect, and of the conscientious urbanist, when facing these questions which have apparently no answer but are raised by the existence of the human community in the City of our times.

We say human community because, for whom is the City? Who would say that it is not for man, even if sometimes one can doubt it, in view of the invasion of techniques!

Man in the past

Since you allow us, we would like to look back with you at our ancestor, the man of the greco-latin culture, and compare him with what has been called "homo technicus", the man today. We then may be able to draw some useful conclusions for our disciplines which, undoubtedly, have shaped our habitat and will increasingly do so, the milieu which conditioned, and will continue to condition our era. For our times, it is ourselves.

The world of antiquity, the Middle Ages and, for a large part, the Renaissance, were ignorant, needless to say, of all the science apparatus and techniques which are so familiar to us nowadays, and a real effort of imagination is needed to try and picture the reality of these former times. It is a time stretch relatively long, by the way, fecundating several extremely rich cultures within the foreshortening of our vision, and an inexhaustable well of research for today's specialists and technicians as well as for savants. The latter, extracting from this complex whole a "universal" full of teaching for us, describe to us the man of the greco-latin civilisation.

His measure was nature as he knew it and the nature that he knew was cut to his measure. He made a whole with the world of his time and this world was nothing else than what he experienced with his senses. What he produced did not reach beyond his strength of his muscles, of the muscles of domestic animals, or the cleverness of his fingers, his sense of sight, his sense of hearing. With instruments and tools which were only a prolongation of the capacities of his body, he nevertheless built the Parthenon and the great cathedrals, in which he remembered to put in a place of honor the oxen, which had helped him, so they might share his glory.

This respect of nature can only be understood if we realize that man is satisfied with what nature lavishes upon him, and not at all preoccupied with possessing the key to its strength and forcing it open. The man of antiquity does not try to dominate nature. He is satisfied to live in it, this "mother". To the indiscreet questions that his reason may ask, he answers by inventing those divinities whose mission is to explain the mystery of things, divinities after all very natural, very close to him, even if they hide themselves to his sight. And when Christianity appears and adds its mysteries to those of nature, the man of the Middle Ages tends to bring them back to his own scale: The Lord, our Lady, don't they live close to us, on the other "side" of the sky?

So will man of older times adapt nature to his own way of life; as he acts upon nature, nature in turn acts upon him. And, as everything starts with man, the nature he manipulates becomes humanized, and the one who acts with nature and within it is simple and natural.

Who has not encountered, even in our times, among our peasant families, a simplicity, a genuineness, a nobility of the spoken word, of appearance, inexplicable to our eyes and which cannot be found anywhere else than in such surroundings?

Let us relate a simple story which can well illustrate what we are trying to convey.

On a range of the north coast of the St Lawrence river, where spreads one of the most glorious landscapes, lives an old man heir to a land which has been cultivated for centuries. To the "commerçant" who asked him why he was not willing to sell his wood lot (bois debout) he refused, saying that if that wood should be cut, the landscape, as seen from the river, would be spoiled.

This story, poignant in its nobility and simplicity, shows us a kind of man that one does not expect to meet any more.

Man in the present

But our present aim is not to find satisfaction in regretful dreams of the past, ready to abdicate before modern man, nor to refuse to take action in a time that still presents itself as an enemy who would like to explode the tender past. And, above all, our aim is not to judge and condemn our time, even if its mistakes and errors appear to us to be enormous compared with the scale of the past.

In fact, why should the past be the measuring line of the present?

An unbelievable graph of technical progress since Galileo (the beginning of the 16th century) shows that nearly 90 per cent of all men of science that the world has known are alive today!

A publication which is celebrating its 25th anniversary brought up recently that in 1936 science already had accumulated revolutionary knowledge which had not yet solidified. Then the study of the uranium atom clicked out an explosion of new techniques such as atom fusion, radar, television, automation, microtechnique, plastics, jet aeroplanes, rockets, satellites; and soon the launching of astronauts towards inconceivable conquests.

The explosion of such an intelligence should, it seems,

go hand in hand with great wisdom. But while our astronaut laughs at space at the start of a trip that has no limits, why is he unable to cross the innumerable borders of his own world without the intervention of the police?

We have seen how much ancient man was a part of nature itself; but in certain time, after an imperceptible progression, the organic contact with nature stopped and this complete world, well proportioned to man, master and servant, disappeared, having been destroyed by the insatiable pursuit of a new reality which finds its prolongation in the infinite. However, it is the pursuit of this new order of size, of "this new human space", that creates the majestic nobility of our times.

This transformation in the human ideal, the consequence of which is as extensive as the advent of Christianity, did not occur without the loss or the destruction of values that still appear to us as irreplaceable.

What was then the price paid, and what is the debt that modern man must acknowledge before feeling himself master of his destiny?

It is from the moment that ancient man, not satisfied with this "harmony of will and power over the here and now" of nature and the objects around him, pushes his knowledge beyond what he can see and feel, that his relationship with nature, fostering moderation, orderliness and proportion, declines.

We cite Guardini: "Thereby, his relationship with nature becomes transformed. It loses its character of spontaneity, and becomes indirect as it passes by the intermediary of figures and instruments. It loses its concrete character, becoming abstract and formal. It loses its experimental character, becoming objective and technical".

There it is, cleverly analyzed, the structure of modern man, "homo technicus", whose realm of personal experience is superseded by the ever increasing acquisition of knowledge and, consequently, of the means of action.

But then, as in the case of the "Sorcerer's Apprentice", being freed from the destiny that links it to nature, a whole sociological, political, religious work, a whole artistic work, is born, no more drawing its subject from organic man, but from an abstract knowledge that is self sufficient, directing itself on its own accord where it likes, without stop and without measure.

This means that "the scale of man" has no more significance, and proportion has given place to logic, statistics and mechanics.

But, still worse, as the organic link of man with a common measure has been broken, in his new mentality, he makes his decisions the wake of "forces liberated by reason and subjected by the machine to its autonomous will".

As we have seen, the civilization of the past was a human accomplishment; the civilization of the present is developing in disorder as it takes possession of the object without trying to understand it as a part of the whole which gave it life, dissecting it, classifying its pieces, finding its formula without grasping in the least its internal links.

Therefore, it is not surprising that one of the most striking facts of our times is, as a rule, the lack of sense - "platitude in planitude". The more man has in hand the capacity to steer his universe, the less he seems to understand it.

The fact is that the positivism of a Comte has been of poor service to us when decrying as without value what was not accepted by science.

But what then is that link between the mechanical movement that my fingers are making on the keyboard and the all silent music from within that I am trying to express? How can science show the meaning of this movement?

This is exactly what causes the anguish of those men of science who control an unheard-of power when they come to realize that the sense of these liberated forces escapes them. How else can we explain their confusion, their contradictions, even what seems to us a disorder carrying all marks of panic?

We must find again the sense of things! But how much is the man of techniques unaffected by the innermost values!

Listen to these sorrowful words by Father Couturier: they should have a special meaning for you: "That from such proud forms as those of our poorest villages of old we could have come down to today's baseness, there must be something that has given way in the heart of a Christian, there must be something that has been debased . . . Let us look carefully at those pictures which show the nobility of such poverty. These are the things that were normally coming from the hands, from the hearts of the people of old. This is what they were doing, what they liked. We know what happens today. Facing this state of things, one would have to be blind so as not to see that they pose a problem. And that this problem is moral and spiritual."

Although it is not for us to speak on this moral problem of our times as raised by Father Couturier, we shall, nevertheless, not fail to look into the desiderata of the spirit of our times. They are such that following the thread of a political science purely political, where the human only enters in dehumanized statistics; of a social science purely sociological, which is on the watch for the facts and deeds of a community comparable to those of the ants and bees; there is to be added a religiosity purely religious, wholely profane within a profane world. Of course, it is imperative to protect the dogma which is the "truth" and does not change with the passing of time.

But where is that deep sense of mystery, of the mystery of a world that the science of galaxies has not succeeded in circumscribing, but which, nevertheless, is at the root of all religions and which we find everywhere, with the most primitive tribes as much as with the most esoteric civilizations?

For example: The oath it at the base of the whole judiciary apparatus. But who does not get the impression, when seeing what is being made of it, that it is just an old custom, surely venerable, as are the wigs of the judges, but without any connection with the subject and at least very unscientific. Who can see in his neighbour a "person", namely a man linked with the mystery of liberty, and capable of an initiative if not an "alter Christus"; who recognizes in the poor (they are of every

kind), in this fallen man, a brother that one must assist, person to person, rather than rejecting him into the technicalities of a "Federation of Charities"; who can see comrades or brothers in the featureless mass of the human herd marching behind some absurd hero, or led by a leader manipulating the technique of crowds?

Let us quote the overwhelming testimony of Péguy who, at the beginning of the century, said "The world has changed less since the time of Christ than it has in the last thirty years . . . The modern world is debasing. It debases the City, it debases man. It debases love, it debases woman. It debases the race, it debases the child; it debases the nation, it debases the family. It even debases, it has even succeeded in debasing what was perhaps the most difficult thing in the world to debase: it debases death."

Since modern man tore apart the garment of the ancient world, so well measured to his size, to analyse its material or thread, he has no doubt been able to reassemble it through his intimate knowledge of the chemical, physical and mechanical realm. He has even invented machines and materials which, after having been fed with statistics, have given him a garment based on the sacred average. In so doing, has he really won something vital?

Let us set aside this image in spite of its convenience. But is it not true that we are always conscious of the imperious necessity to justify on a scientific basis?

What is the function of psychology, or psychiatry if not to disclose to anyone a person's deepest secrets? One can remember the health bulletins of a certain president. Debasement! For the sake of imperative science, our viscera and our deepest faults are brought out for all to see.

It has been forgotten that the deepest roots are those which require the most shade.

Let us be well understood. The point here is not to despise knowledge, science at all its levels, techniques in their multiplicity. The point here — and we insist — is to show how much we lack that sense of measure, of balance, that sense of direction which permits orderly control. We must, however, admit that the following is true. If, in our equation, a factor may have changed, namely science replacing natural knowledge, it remains equally true that the other factor, and the most important, is still the same: "homo technicus, sed homo".

For man, as an individual, is still the physical unit, the indivisible atom, the irreplaceable and essential module of our world.

Essentially the same, he changes in his accidents.

Man of the future

And so it is that Teilhard de Chardin, that theologiananthropologist, threw a strange light on man, a light more and more verifiable, and the extraordinary interest that has been taken everywhere in his writings, although they are as difficult to fathom as the ascent of a peak, is revealing in itself. Teilhard de Chardin states that homo sapiens occupies in the history of earth an insignificant portion of time. Atom, gas, vapor, mud, matter, animal and lastly man, our world starts its evolation from the simplest to the most complex and from the material to the spiritual. In a moment of great inspiriation that reminds us of the Prophets, the scholar describes man, and his evolution within the Divine Plan, as moving towards an ever growing spirituality in a decreasing materiality.

What a strange and troubling vision! Let us bring side by side two tendencies: The surprising quantity of scientists shooting up like an arrow and, on the other hand, the general lack of interest of citizens for the vigor of their bodies. Look at the swarming of human beings hardly able to walk, taking their minds from place to place on slave machines towards a meeting in the brain of all brains, the Metropolis! A man, at last, better and better adapted for his trips into space!

Without pursuing this vision, let us recognize that the newly found experience has singularly enlarged the field of our sensitivity. The artist who paints abstractions, the musician who looks for the scale of sounds in the universe, could they not be searching for the very expression of this sensitivity which, not limiting itself to the immediate, finds its answers beyond, in the abstraction of the spiritual?

To this "new human space" there is a dimension that may surpass anything the man of older times has experienced. But it belongs to us to understand its measure; and all these new forces, all these techniques that can be so destructive, make sense only if they meet from start to finish the dimension of inner man.

Péguy saw the necessity of going back to the fountainhead, of a new departure in the order of nature. Our world is like an adolescent and a spoiled child of techniques; it is in constant need of guidance, of education, of being confronted with the truth, of being constantly diverted from the evil company of false prophets. This does not mean that this liberty should be curtailed after the style of the faithful of historic determinism.

But, in the City, who can, who must play that role of Mentor, if not the politician first, and in terms of planning, the architect as well as the urbanist, that brother of the last hour?

As formerly did the guilds and corporations in a nascent society, the old disciplines are nowadays growing in importance; and those factions among us who, in their practical positivism and sophisticated materialism, like to think that they are in the vanguard are in reality overtaken by the greatness of the task. A style of architecture — a style of planning — which would claim to be existentialist, is only a hole in the web of history.

Conclusion

We have looked over the ancient world in order to show that man of that period lived surrounded by nature which he humanized, and this without conflicting with nature itself. In accordance with Teilhard de Chardin's theory, the slow but more and more accentuated evolution of mind has led man, surfeited with techniques having no measure in themselves, to a confusion at first glance fatal to him but which, when subordinated to his person, may acquire an incredible human richness. We have up to now avoided the snare of a moral judgement, contenting ourselves with objective facts, which are relatively easy to check, with the hope at least to be understood in this manner.

Our conclusions also refuse to moralise; they seem to emerge from the context and we shall only try to make them more explicit.

If it is true that the technical developments of our times must be given value in man, a more advanced man, to be sure, but ever the measure of our world; if it is necessary that he, as a person, recover his liberty in order to participate in the development of the City under penalty of otherwise falling in the level of the herd, the cipher, the mercenary; if it is true that the right of man to be himself is all that protects him from the State which would try to impose its irreducible will; if it is true that the flourishing of man as a person is possible in a milieu at the human scale; if, summing up, "homo technicus" is the basic unity of the new City and the agent for its planning, one must conclude that the politician, the urbanist, the architect are acting in his name, as the gobetween, in the City.

It ensues that the enlightened politician will set up his laws and his government only insofar as the techniques at his disposal will take into consideration man as a person and allow for his development; which is to say that the existing communities must be respected within the City; much more, they must be reconstituted where urban gigantism has eroded their substance.

At the administrative level, higher governments will act — but only when the task is above the capacity of the community to act for common good; and a court of appeal must be ready to judge, should the right to auto-determination of the community surpass the limits of its liberty to the detriment of the whole.

Now, in this society with its multiple communities, federated and staggered in its government in several concentric strata, of which the centre is still and always will be man, what will the architect bring? Let us ask ourselves a few questions.

I s it possible, as maintained by a respectable member of the profession, that the part of the architect should not change, since it is sufficient for him, as heretofore, to satisfy the needs of the day?

We would tend to believe that our times, which present us with realities, a new space, a new man should, after all, pose a problem somewhat different for the architect.

No doubt the architect has translated Greece faithfully in its monuments, so much so that Greek civilization is identified with these monuments; the same is true for the cathedrals of the Middle Ages and the palaces of the Renaissance.

But how much time was required to plan, build and finish such monuments? Let us remember that the average life span of the Renaissance was only 30 years. How many generations have gone into the cathedral of Chartres? Three, four?

One can say without stretching the point that a civilization was taking shape around and through these monuments. Needless to say this does not apply today. How can the architect—I am not speaking of the one who tries passively to please an inept client—how can the architect satisfy the needs of his time when these needs are only now taking shape and one is not even conscious of them.

Would not the architect's role be rather to precede his time and help with his vision to shape the dawning civilization?

His starting point must be man as a person, a unit, an individual of course, but taken in his context. The house of man, as man himself, is at the same time part of a group. Therefore, it is necessary that the house of man be also a part of the community. We ask you to think over this obvious fact in the light of our previous observations. Otherwise, how can we explain the chaos visually represented by a housing development in space conceived on a plan which guarantees a proper setting for a human community.

Of course, wo do not forget that housing construction is not exclusively the architects' prerogative. Would it not be advantageous to establish, parallel to the professional Institute, a society such as The Community Planning Association, for planners, as a true mentor for the citizen lost in the techniques and mounting traps of a monstrous urbanisation?

On the other hand, one cannot deny that an architect should receive directions to help him create "the house of the people of God" in accordance with the new norms of our times. Should it be that a worldly preoccupation blinds him to the "mystery" that such a building must exhale? Can genius only be the builder of a Ronchamps?

And over the isolation of the monumental towers set in the heart of the City, who is the architect who will throw bridges?

Moreover, should not the architect, as a specialist of beauty in the City, receive the massive support of his group, at least when the essential is at stake? We are thinking particularly of the support that certain projects should receive, in order to save the view of Mount Royal in Montreal — "the eyeful" — and this refuge against technological invasion.

As to the big question raised by the future density of population, how will the architect solve the problem of the vertical City? Rabbit-hutch or community? Experience already warns us that man as a person will part with some of his liberty only with reluctance.

Lastly, the urbanist, whose role is a creator of a new City together with the social worker, continuously meets the architect and often works with him. By definition, and also because he arrived later, he is more conscious of the community. To the urbanist as well as to the architect, we would like to present the social worker, who, out of necessity, acts upon the individual, the "one" of our community. As a source of enrichment, because he touches so closely our human problems, we should meet him at the level of our great social works. And, more and more, it is essential that he be included in our dialogue.

We could end with these two verses from Shakespeare:

"Now bless thyself;

"Thou meetest with things dying,

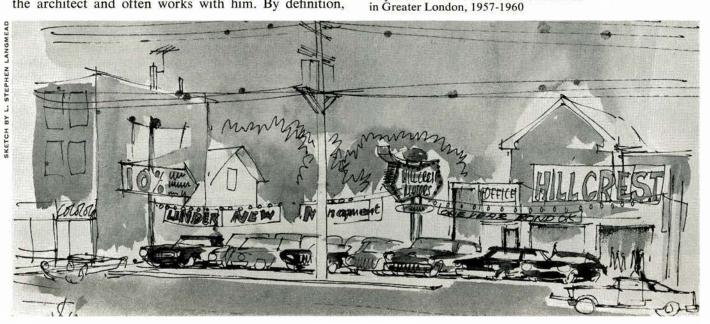
I with things new-born."

We prefer to present the testimony of a great scholar, Oppenheimer "Human truth does not belong to science, but to wisdom. Western humanity has no theory any more on the sense of life. Our scientific knowledge doubles every ten years, but our ignorance in philosophy increases as much. We are no more curious about man. The mind interests only the esthetes. Science becomes a purpose. Our civilization is monstrous because we do not know what to do with our power; we are in need of philosophy."

BIBLIOGRAPHY

Lettres du Lac de Côme Romano Guardini	Editions du Cerf
La fin des temps modernes Romano Guardini	Editions du Seuil
L'avènement de Prométhée Joseph Folliet	Chronique social de la France
Le Groupe Zoologique Humain P. Teilhard de Chardin	Editions Albin Michel
Problèmes de Culture au Canada Français Pierre Angers	Librairie Beauchemin
Urban Renewal – for Whom? Staughton Lynd	Commentary, Jan. 1961
Time	Jan. 2, 1961
Life	Jan. 1961
The Discovery of Meaning Owen Barfield	S.E.P. Jan. 7, 1961
Art Sacré	3-4, 1952
La Sexualite	Esprit, Nov. 1960
Pour un "ressourcement de la Soci Bernardin Verville	été Culture, juin 1959

Royal Commission on Local Government



Royal Alexandra Nurses Residence and School of Nursing

Edmonton

ARCHITECTS & ENGINEERS

Rensaa and Minsos

Edmonton

GENERAL CONTRACTOR

Bennett & White (Alberta) Ltd





The new Nurses' Residence and School of Nursing was planned and erected inside a period of three years. The Hospital Board appointed a committee from the hospital staff who worked closely with the architects under the Chairmanship of the Medical Director.

A great deal of work was put into the preliminary design and to a close study of facilities and extent of auxiliary rooms necessary for such a large group of girls.

The building is laid out in the shape of a capital H. The two vertical bars of the H are formed by the dormitory wing and the school structure, while the connecting wing contains lobby, lounge and chapel.

The seven storey dormitory wing contains mainly 380 single rooms and is offset in the centre. The offset gives room for the elevators and makes it possible to introduce daylight into the corridor at four points.

The school wing contains lecture rooms, laboratory, practice room with autoclaves and other sterilizers, study rooms for faculty and lecturers, as well as general school office. The 5,000 sq. ft open lounge with glass doors placed under a cantilevered roof leading out to a protected terrace, provides a spacious recreation area for girls, as well as for ladies auxiliary functions.

A small non-denominational chapel with a seating capacity of 160 is provided for sermons and worship.

In the school wing a large gymnasium-auditorium with stage and dressing room facilities is designed to look after physical education, social activities and graduation festivities as well as convention functions. In the basement, under the gymnasium, space is available for a future swimming pool with the necessary shower facilities.

Early during the design period, the Hospital Board decided to locate the library and reading room on the ground floor of the dormitory wing in order to stimulate study in off-duty hours. Living quarters for the executive staff have also been located on the ground floor. At this stage it was also decided to provide each girl with her own room.

Considerable thought and money was spent on the built-in furnishing throughout the entire project, and great care was taken in the choice of building materials. The buff brick was chosen to conform with other buildings on the site. In the main lobby and lounge, which forms the centre of this structure, decorative finishing material was chosen with great care. The floor is of venetian terrazzo in soft buff and beige shades. A procession of circular columns are clad with blue florentine mosaic. The pillars between lobby and lounge as well as the background wall at the far end of the lounge are clad with vertical mahogany panels. A large Scandinavian type corner fireplace with a sand finished hood dominates that end of the lounge.



At the desk in the lobby, the receptionist has full visual control of both entrances, the elevators, the lounge, the library and the stair leading to the games room. The games room and the lounge are the only rooms where the girls may receive male visitors.

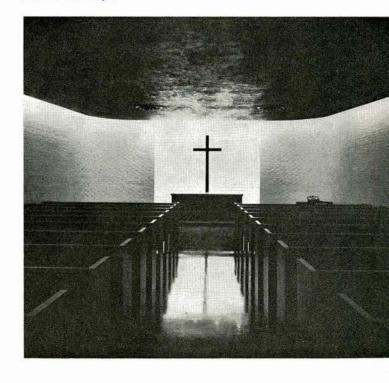
On the lower floor of the dormitory wing a great number of auxiliary rooms are located. Recreation rooms, snack kitchen, music rooms, T.V. rooms, tuck shop, shampoo room, hobby shop, as well as complete laundry and ironing facilities. At the north end of this lower floor are the linen room, sewing room, trunk storage and refrigerated storage for wool blankets as well as the entrance to the underground tunnel connecting the Nurses Residence with all the other hospital buildings. In the design it was of great importance to keep the length of the building within reasonable scale, considering corridor walking distance and also to make proper use of the two elevators. Vertical limitations due to the close proximity of the airport, confronted the designers with unusual problems. It was necessary to develop a special structural design to make it possible to have seven floors within the limitations set by the Department of Transport. The achieved design proved to be of great advantage both from an aesthetical as well as from an economical point of view.

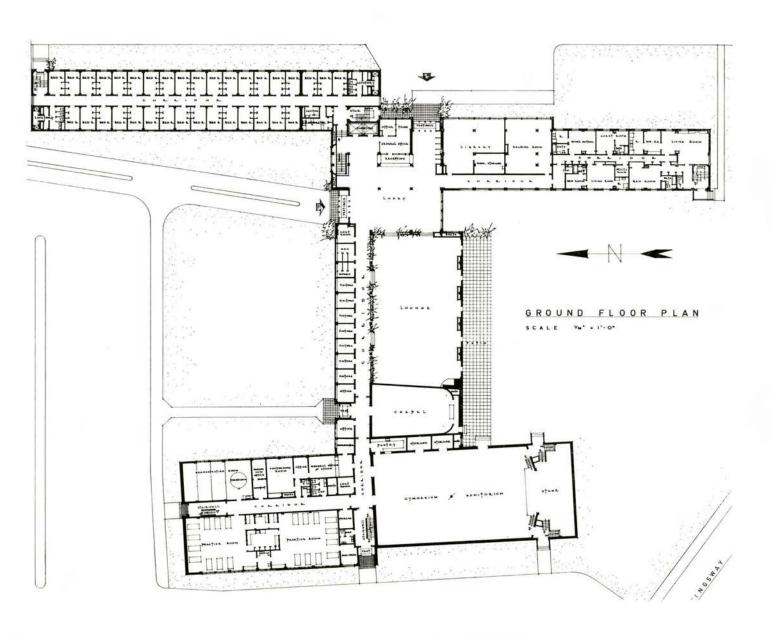
This building is completely wired for inter-com system. Each dormitory room has a two-way paging system connected to the reception desk. The recreation rooms, lounge and gymnasium are provided with recorded Hi-Fi music.

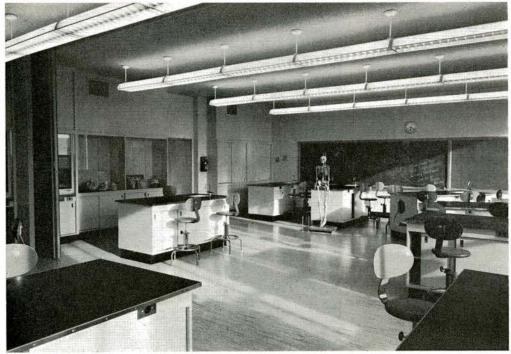
The building is heated partly with a forced hot water system and partly with circulating warm and cold airflow. The school, lounge, auditorium and recreation rooms are equipped with air changing facilities.

Above: Main lounge

Below: The chapel







Left: Physics and chemistry classrooms

CANADIAN

BUILDING DIGEST



DIVISION OF BUILDING RESEARCH . NATIONAL RESEARCH COUNCIL

WINDOW AIR LEAKAGE

by J. R. Sasaki and A. G. Wilson

UDC 697.135

Cracks around windows are usually the major source of the air leakage that affects so significantly the performance of buildings. Air infiltration increases the heating load in winter and may limit comfort conditions adjacent to windows; in air conditioned buildings it increases the cooling load in summer. On the other hand, it provides some or all of the outside air needed to control odours and relative humidity in buildings without mechanical ventilation, and may supply as well the air required for the combustion of fuel for heating.

Air leakage around windows also affects the performance of the windows themselves. The configuration of the air flow path is important with respect to their resistance to rain leakage and dust penetration, and with double windows largely determines the conditions under which condensation between panes will occur.

It is the purpose of this Digest to discuss the implications of window air leakage, its characteristics and criteria. Much that is said may be applied to air leakage around closed doors. Leakage through doors having a high traffic rate is especially significant and is a separate problem.

Implications of Air Leakage

In a typical air conditioned office building equipped with loose double windows (2 cfm/ft of crack at 0.30 in. water) that take up a third of the gross outer wall area, window air leakage contributes approximately 45 per cent of the wall heat gain in summer and 60 per cent of the wall heat loss in winter under design weather conditions. In the same building equipped with very tight windows (0.1 cfm/ft of crack at 0.30 in. water) window air

leakage contributes approximately 4 per cent of the wall heat gain in summer and 8 per cent of the wall heat loss in winter. The proportion of the total building heat gain or loss from window air leakage depends on the building design and use. It will usually be quite a small percentage of the total cooling requirements; for example, 4 per cent with the loose windows and ¼ per cent with the tight windows referred to above. For heating the values may be 16 and 1 per cent respectively. It might be noted that design weather conditions occur infrequently and that for most of the year the percentage of the heat loss or gain from air leakage will be less than the figures referred to above.

In buildings with mechanical ventilation, window tightness need only be limited by economics, assuming that the ventilation system provides the number of air changes required to control odour and humidity. Without air conditioning it is usually necessary to have operable windows since mechanical ventilation systems generally do not provide sufficient ventilation and air movement for summer comfort.

In buildings without mechanical ventilation window tightness may be limited by the minimum outdoor air requirement. The hourly air change required to control odours depends on the use and occupancy of the building; for houses the minimum accepted at present is about 0.3, although it is possible that slightly lower values would be acceptable to some families. This ventilation rate or greater may be required to prevent excessive relative humidity in many houses (see CBD 1). Infiltration also provides the furnace air require-

ment. For a relatively tight insulated house air needed for combustion under design weather conditions amounts to about ½ air change per hour; adding an equal amount for the control of chimney draft brings the total to about ¼ air change per hour.

Air leakage into buildings varies markedly with weather conditions; it may provide adequate air change rates under some weather conditions and either excessive or inadequate rates under others. In a well insulated bungalow with loose windows and doors (2 cfm/ft of crack at 0.30 in. water) air infiltration can easily amount to one air change per hour and contribute up to 30 per cent of the total heat loss under design weather conditions. With very tight windows (0.1 cfm/ft of crack at 0.30 in. water) and weatherstripped doors, air leakage could be reduced to % air change and amount to only 5 per cent of the total heat loss under design conditions. In such a tight house it would be necessary to induce additional ventilation through open windows or other means and provide a separate air supply for combustion. Thus it is not possible on the basis of fuel economy to justify this degree of air tightness with operable windows. With the aid of weatherstripping windows available at present can provide air leakage rates down to ½ cfm per foot of crack at 0.30 inch water (Fig. 1). Such windows, with weatherstripped doors, are likely to limit house ventilation rates to % air change per hour under design weather conditions in most of Canada.

In designing double windows to overcome condensation between panes the air leakage rate of the inner glazing assembly should not exceed about 0.1 cfm per foot at 0.30 inch water (see CBD 5). This is readily achieved with double glazing in a single sash where air flow between sash and frame bypasses the air space. To achieve this degree of air tightness between sash and frame while retaining ease of operation, as would be required for windows with independently operating inner and outer sash, requires an unusual quality of design. Windows of this tightness are sometimes specified by architects for air conditioned buildings or for buildings having special requirements where a custom design can be justified.

In order to appreciate fully the significance of the window air leakage values referred to above, a knowledge of the mechanism of window air leakage and current window air leakage criteria is required.

Window Air Leakage Characteristics

Window air leakage is the flow of air around a closed sash and through a frame that results from a pressure difference across the window. Significant air leakage can also take place between the window frame and the surrounding construction; but this depends on construction details and workmanship and is not a characteristic of the window.

The relationship between air flow and pressure difference across a window can be expressed as $Q = ch^n$, where Q is the window air leakage and h is the pressure difference. The pressure difference acting across a window in a building is the net result of the actions of wind, inside to outside air temperature difference and ventilating equipment (see CBD 23). The value of the exponent, n, falls between 1/2 and 1 depending on the characteristics of the cracks and the pressure difference; at typical design pressure differences it is closer to ½ for units with cracks of normal width and closer to 1 for units having unusually narrow cracks. The geometry factor, c, increases as the amount or length of crack increases; the reciprocal is a measure of the window tightness or resistance to air flow.

Resistance to air flow through a given amount of crack increases as the length of path through the crack increases or as the effective crack width or clearance decreases. This clearance depends on the alignment of mating surfaces and on the effectiveness of locking devices. In general, increasing tightness results in more difficult sash operation.

The tightness of any window arrangement can usually be increased significantly by the use of weatherstripping — any material or device introduced between the sash and frame to decrease the clearance or increase the length of the air flow path without interfering with the sash operation. Weatherstripping should be capable of convenient replacement and of withstanding wear and weathering over a long period without loss of effectiveness.

In double windows having independently operating inner and outer sash the resistance to air flow depends on the tightness of both units. In order to control condensation between panes, however, it is necessary to provide essentially all the resistance to air flow at the inner unit (see CBD 5).

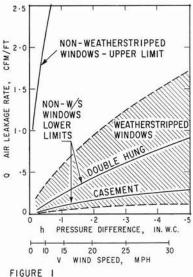


FIGURE I WINDOW AIR LEAKAGE CHARACTERISTICS

The air pressure difference across windows also provides the force that causes rain penetration. It is greatest across elements such as weatherstripping that provide the major resistance to air leakage, so that it is important to protect these elements from wetting by wind driven rain. With double windows this is accomplished conveniently by providing essentially all the resistance to air leakage at the inner sash. The possibility of rain penetration past the outer sash is minimized since there is no air pressure difference across it.

It has become common practice in Canada and the U.S.A. to express window air leakage rate, O, as air flow per foot of window crack length. Crack length is determined by summing the individual crack lengths that occur wherever the operating sash contacts the frame or another sash and is based on the dimensions of the clear opening in the frame. It is usual to assume that the total air leakage for any size of window can be calculated from values of the air leakage per foot of crack obtained for a specimen of similar design. Air leakage per foot of crack, however, usually varies more or less with window size, both because different cracks in a window occur in different proportion and because pressures imposed by locking hardware vary. For a precise definition of window air leakage it is therefore necessary to describe the window dimensions: in window specifications a standard size is usually specified.

In Europe it is the practice to express air leakage as a rate per unit area of window. Here again, it is necessary to specify the size of window in making comparisons.

Because the factors affecting window tightness are complex, the air leakage characteristic of a window must be determined directly by test. An air pressure difference is imposed across the window and the resulting flow measured. The test apparatus consists of a pressure chamber, a window mounting panel forming one wall of the chamber, an air supply to the chamber and a flow meter. The window is mounted in the panel so that air leakage can only occur around the sash and through the frame. Double windows may be tested with the storm unit open to ensure that the inner unit alone provides the required resistance to air flow. Window air leakage measurements are usually made at pressure differences from 0.10 to 0.30 inch water column, corresponding to the stagnation pressure of wind of 15 to 25 mph, since air leakage at higher wind speeds is not of concern.

A large number of window air leakage tests have been performed in the United States, Britain and Europe. The majority of windows tested were single wood vertical sliders and casements although a number of types of aluminum, steel and wood single and double windows have been tested more recently. Typical air leakage characteristics of vertical sliding and casement windows are summarized in Fig. 1, which shows the large variation in the tightness of non-weatherstripped windows as compared to that of weatherstripped windows. The advantage of weatherstripping in reducing air leakage is evident.

Window Air Leakage Criteria

The large variation in air leakage characteristics of windows clearly demonstrates the need for air leakage performance criteria. In establishing performance criteria for Canadian windows both the benefits of tight windows and the degree of tightness obtainable at reasonable cost must be considered.

Window air leakage criteria have been developing in both the United States and Norway, and are of special interest here since the climate in parts of these countries is similar to that in Canada. In Norway the Building Research Institute has published air leakage rating curves based on tests on a large number of windows, mainly wood casement, in a

standard opening. Translated into air leakage per foot of sash crack at 0.30 inch water column, the maximum air leakage rates for classification as acceptable, good and excellent are 0.36 cfm, 0.19 cfm and 0.16 cfm respectively.

In the United States, separate air leakage criteria have been established for aluminum, steel and wood single windows by the respective manufacturers' associations. The following values are the maximum permissible for the various window types, in cfm per foot of sash crack at a pressure difference of 0.3 inch water column:

Aluminum Windows

Vertical sliding — standard duty — ¾ cfm/ft — heavy duty — ½ cfm/ft

Horizontal sliding

standard duty - ¾ cfm/ft
 Casement - standard and heavy duty

weatherstripped — ½ cfm/ft non-weatherstripped — 1 cfm/ft

Steel Windows — all types — 1 cfm/ft Wood Windows — standard duty weatherstripped

Horizontal and vertical sliding — ¼ cfm/ft Casement — ½ cfm/ft

A significant step in Canada has been the development by the Canadian Government Specifications Board of performance specifications for aluminum and sashless windows. In these specifications air leakage requirements are comparable to those listed for aluminum windows in the United States. The Canadian Standards Association has published wood window specifications that are soon expected to incorporate air leakage requirements.

Summary

Substantial savings in the heating and cooling costs of buildings can result from the use of tight windows, but in general satisfactory tightness demands that windows must be weatherstripped. For a given type of window, increased tightness usually implies increased cost. This must be weighed against the savings resulting from decreased operating cost and the other advantages of tight windows when establishing air leakage requirements. In buildings such as houses where there is no mechanical ventilation and air infiltration provides the outdoor air required for ventilation and combustion of fuel, use of extremely tight windows can reduce ventilation to the point where odour, humidity and furnace draft problems occur. Other means of ventilation must then be introduced. This degree of window tightness is therefore greater than can be justified on the basis of fuel economy alone.

In order to minimize or eliminate the problem of condensation between panes of double windows the resistance to air flow around the inner glazing assembly must be many times that around the outer glazing assembly. It follows that in windows with independently operating inner and outer sash the resistance to air leakage should be provided entirely by the inner sash. This is consistent with good design for resistance to rain penetration as well. These implications of air leakage must be considered in the design and selection of windows in addition to the more obvious effects of over-all infiltration on a building and its occupants.

BINDERS FOR CANADIAN BUILDING DIGESTS

We have received several inquiries about binders for Canadian Building Digests and are now canvassing the recipients of Digests to ascertain the total number required. The cost of a vinyl binder, 10 by 7½ inches, with post-type fastening and a capacity to accommodate 100 Digests would be approximately \$2.00.

If you are interested in ordering a binder to house your copies of the Digests, write to: Editor, Division of Building Research, National Research Council, Ottawa 2, Canada. PLEASE do not send us any money now; we shall let you know when your order should be placed.

This is one of a series of publications being produced by the Division of Building Research of the National Research Council. It may be reproduced without amendment if credit acknowledgement is made. The Division has issued many publications describing the work carried out in the several fields of research for which it is responsible. A list of these publications and additional copies of this Building Digest can be obtained by writing to the Publications Section, Division of Building Research, National Research Council, Ottawa, Canada.

"Nous ne sommes pas les seuls responsables ... nous, les architectes"

Conférence prononcée devant les membres du Club Kiwanis St-Laurent à l'Hôtel Ritz Carlton, de Montréal, mercredi le 23 août 1961: Paul-O, Trepanier, architecte, Premier Vice-Président de l'AAPQ.

IRRESISTIBLEMENT, le murmure enchanteur du ruisseau s'enroule dans nos oreilles, et nous attire.

La fraîcheur du sous-bois, le mystère de la pénombre créée par les rayons du soleil éclatant, filtrés par les feuilles qu'une brise légère agite, la douceur des aiguilles de pin séchées, jonchant le sol, sur lesquelles vos pieds glissent, le gazouillis des oiseaux, le cri de l'écureuil nerveux, tout concourt à vous envelopper de bien-être et de satisfaction.

Assis sur un roc, les pieds nus dans le ruisseau glacé, vous surveillez les ébats de vos enfants sur l'herbe fraîche. Ils sont heureux.

Ainsi se comportent les peuplades primitives.

Ces hommes unis, vivent près de la nature, qu'ils ne bousculent pas et qu'ils respectent.

Ainsi vivaient les indigènes de l'île Hochelaga sur laquelle Maisonneuve fonda Ville-Marie.

On entend souvent, on lit souvent cette remarque que: "Si Maisonneuve revenait, il serait ébloui par le spectacle qui s'offrirait à ses yeux, à la vue de Montréal".

Eh bien, membre de cette expédition de 1642, j'imagine la beauté vierge de ce pays, et à la suite de ma description de la nature, j'affirme que Maisonneuve serait émerveillé et écoeuré.

Emerveillé, tout d'abord par l'initiative, la hardiesse, l'industrie des hommes qui ont bâti Montréal, écoeuré ensuite par l'imprévoyance, la laideur, l'incohérence du tout . . .

En premier lieu, le panorama de la cité, vu de la rive sud, est complètement faussé. La partie gauche de la montagne, située dans Westmount, est entièrement construite. La partie centrale est coupée par le chemin de la Côte des Neiges, par de nombreuses maisons de rapport, ainsi que par l'hôpital général.

A part le chalet de la montagne, les tours de radio et de TV, et la croix, la partie droite est intacte. Cependant, la montagne est déjà en partie masquée par les édifices de la place Ville Marie, de la Banque Impériale du Commerce et du CIL. Elle le sera encore davantage par l'hôtel Sheraton de la rue Sherbrooke, ainsi que par les trois tours du Carré Victoria.

J'allais oublier l'ignoble machine d'acier qu'est le pont Victoria "amélioré"!

Oui, monsieur de Maisonneuve, votre Mont Royal est en voie de disparaître. Montréal n'aura de caractéristique, à l'instar de cent autres villes de l'Amérique du Nord, que ses gratte-ciel.

Au lieu de construire la voie maritime, le long du port, aménageant en même temps, sur les bords, une autoroute, ainsi qu'une piste d'atterrissage, pour avion léger, on a érigé une muraille de pierre, tout le long de la rive sud.

Les froids calculs de génie civil ont laissé de côté les besoins de l'âme.

Aucun plan d'ensemble et de coordination n'a été suivi pour l'aménagement de cette voie maritime le long de Montréal.

Aucun plan d'ensemble et de coordination, en particulier les règlements de zonage et de limite de hauteur, ne préside actuellement dans l'élaboration des plans des édifices-tours, permettant ainsi de sauver ce qui peut l'être encore.

Ces ponts d'accès vers Montréal sont tristement et mathématiquement efficaces. Et de plus, on a pas appris par ce qui existe. La partie métallique du pont Champlain, n'est encore une fois, que le résultat des froides et exactes équations mathématiques des calculs d'ingénieurs sans imagination, pour ne pas dire sans âme.

Je pense ici, à cette phrase de notre président, l'architecte Richard E. Bolton: "L'Architecture est ce qu'il y a de plus important dans le monde de la technologie et la foi est ce qu'il y a de plus important dans le christianisme".

Oui, j'affirme devant vous, chers amis, que nous, membres du conseil d'administration de l'Association

des Architectes de la Province de Québec, nous avons la foi que la bêtise humaine a des limites; nous avons la foi qu'il est encore possible de sauver nos villes, dont nous ne sommes pas responsables. Cependant, l'on ne nous entend pas, et en ce moment, nous sommes la cible des critiques les plus injustes . . .

Dans l'élaboration du complexe routier et de l'esthétique des ponts, nous n'avons pas été consultés. Le tout a été conçu et réalisé par des compagnies de chemin de fer, ou par des politiciens assistés d'ingénieurs et de techniciens. Nous ne pouvons donc pas être responsables de l'horreur qui s'offre à nous . . .

Quant à la hauteur des édifices, il est clair que si les architectes sont soumis à des règlements de zonage favorisant l'utilisation du sol en hauteur, les édifices seront de plus en plus hauts, avec le résultat, catastrophique pour Montréal, que d'ici quinze ans, la montagne aura complètement disparue!

Voilà, monsieur de Maisonneuve ce qui s'offre à vous, provoquant ces deux sentiments, l'un d'émerveillement devant la technique, l'autre d'écoeurement devant le mé-

pris de la nature et de la personne humaine.

Pénétrons, si vous le voulez dans la ville . . .

Vous voulez vous diriger d'abord vers le coeur de la ville? Ce centre de la cité est actuellement le sujet de nombreuses discussions . . . où est-il? Je crois qu'il n'y en a pas, ou plutôt oui, il y a un coeur commercial: il "bat" au coin de Peel et Ste-Catherine . . . il n'y a pas de coeur administratif; il n'y a pas de coeur communautaire; il n'y a pas de coeur éducationnel; il n'y a pas de coeur sportif . . . le forum, c'est, ce sont les hôtels, les clubs, les grills . . . à l'instar de toutes les villes du Québec.

Le coeur de la cité? Eh bien, depuis bientôt quinze ans, on le fuit . . . on s'en va vers les banlieues.

Alors, ces banlieues, c'est bien? Non, et nous ne sommes pas responsables. Ce ne sont pas les architectes qui ont construit les banlieues, ce sont les spéculateurs, les "faire-la-piastre-vite", avec le concours de politicailleurs locaux véreux, trop souvent.

Y avait-il des lois municipales, des règlements de zonage, des plans d'urbanisme, des lois provinciales, pour mettre ces gens à la raison, les empêchant ainsi d'exploiter leurs semblables? Non, à cause de l'incurie, la société en général, non, à cause de l'incurie des administrateurs municipaux, non, à cause de l'incurie des administrateurs provinciaux. Non, il n'y avait aucune loi, car on respectait la liberté, la liberté des combinards de toutes sortes, des affairistes, des agioteurs, des rastaquouères!

Chacun ayant été libre de faire comme il lui plaisait, on en arrive à la cacophonie atroce, à l'ambiance infernale, à l'oppression diabolique de nos "développements urbains" et de leurs maisons boîteuses, toutes pareilles s'alignant le long des rues droites, derrière les ignobles poteaux de téléphone et d'électricité. Tout cela, ça donne la nausée à ceux qui savent ce que ça aurait pu être.

Ici, nous avons la liberté. Oui, la liberté des sots!

Sous ce régime, à ce que l'on dit, chacun est libre de faire ce qui lui plaît . . . ma foi, c'est le royaume des ignorants . . . et des spéculateurs.

Vous, père de famille, canadien-français, membre d'une communauté assujettie et exploitée, vous rêvez d'une maison, d'un abri pour votre femme, et vos enfants. Vous avez le choix . . . nous sommes dans un pays libre, n'est-ce pas? Vous recevez sans doute un des sept quotidiens libres de votre province, libres de s'alimenter tous à la même source: la Canadian Press, la United Press, etc . . . Vous y trouverez des annonces payées vantant les mérites des développements en périphérie de la grande cité, annonces, appât sur l'hameçon de la ligne que vous tend un spéculateur libre de vous tromper.

Eh oui, grâce à cette liberté chérie, ces messieurs sont libres d'acheter une ferme entière, que l'on revend avec gros profit, plusieurs fois, dont on a extirpé les arbres, les rocs, dont on a détourné ou enfoui les ruisseaux, dont on a chambardé l'humus riche, qu'on a en un mot plumé à coups de "bulldozers".

Vous êtes libres d'acheter; venez mes agneaux que l'on vous tonde. Votre laine est courte, mais à la quantité l'on n'y regarde pas de si prêt!

Venez, venez, nous vous attendons; votre rêve légitime d'échapper à cette ambiance qui vous opprime vous conduit irrémédiablement dans des fers, et des chaînes plus solides encore.

Moi, architecte, je dis: "vous êtes libres d'être esclaves." Et vous, vous l'êtes esclaves . . . Vos enfants manquant de l'ambiance propice à l'amour se détourneront de vous, et ensemble ils se retrouveront, car ils ont soif de se sentir les coudes, et solidairement, ils iront en riant dans le désespoir et l'abîme d'un tourbillonnement sans but. Espoirs perdus, et vies perdues, grâce à la liberté, insigne grotesque de cette belle démocratie qui est nôtre!

Le centre de la cité n'est guère mieux: c'est du n'importe quoi, n'importe comment.

Quelques efforts isolés, ici et là, méritent des éloges . . . mais il n'y a aucune homogénéité.

Il y a quelques années, l'on a aménagé le boulevard Dorchester. Large à l'époque, aujourd'hui, il est trop petit, car on l'a "Démoli" par un règlement de zonage, règlement qui permettra entre autre, la concentration de quinze mille personnes dans trois édifices voisins . . . rien n'est prévu encore pour l'évacuation rapide de cette population aux heures de pointe.

Lors de la conception de cette rue, l'on n'a pas prévu la construction des gratte-giel de quarante étages. Aujourd'hui, cette rue, entre Université et Peel, ressemble à un tunnel. De plus, les murs-rideaux de ces édifices, trop semblables, sont monotones.

Cependant, le centre de la cité, il faut le révaloriser. Il faut aussi que ce travail gigantesque se fasse selon un grand plan d'ensemble, plan que Montréal ne possède pas encore.

Il faut enrayer l'exode vers les banlieues. La survie de la ville même, en dépend. Une ville n'est en santé que si son centre respire. A l'instar de nombreuses autres villes d'Amérique du Nord, Montréal doit consentir le sacrifice financier, et l'effort humain nécessaire pour atteindre cet objectif.

Le centre commercial est en voie de transformation. Le centre artistique est en chantier, et le centre financier le sera sous peu. Radio Canada doit réaliser son projet. La cité même, doit aménager un nouveau centre administratif. Il faut maintenant unifier et relier ces différents centres par des projets d'habitation multiples, par des parcs, par des terrains de stationnement, et par des voies

de circulation rapide.

Il ne faut pas cependant tomber dans l'excès et ne pas trop forcer la note, du côté circulation. L'aménagement de ces voies de circulation n'est qu'un moyen, non une fin. La fin, c'est l'homme, c'est la création d'une ambiance où il peut s'épanouir et sentir les coudes de ses semblables.

L'homme des grandes villes doit apprendre à descendre dans la rue et se comprendre en perdant l'anonymat.

Il faut promouvoir la vie communautaire.

La métropole, garantie de la santé de la nation, doit être sauvée!

Pour ce faire, il faut d'abord lui enlever le cancer qui la ronge: ses taudis. Il y en a 18,000 à Montréal abritant 30,000 familles et 115,000 personnes! Dans ce domaine, Toronto nous dame le pion. Nous devrons faire vite pour rattraper le temps perdu . . .

Seules des lois inflexibles, mises en force par le gouvernement de la Province de Québec, peuvent protéger la population et lui assurer un environnement adapté à

ses besoins physiques et psychiques.

Les administrations municipales ne doivent pas être laissées "libres jusqu'à la banqueroute" selon Gérard Filion, et je cite une partie de son texte:" Il devrait être obligatoire pour toute agglomération de plus de 5,000 habitants ou située dans un rayon de moins de 25 milles de Montréal ou de Québec, de faire préparer par des experts et de faire homologuer un plan d'urbanisme, de mettre en vigueur des règlements de zonage, de construction et de lotissement. Aussi longtemps qu'une ville mégligerait de se soumettre à cette règle, son développement en serait bloqué d'autorité. De plus, la loi des cités et villes devrait faire une obligation au conseil de procéder à un développement ordonné. Il faut entendre par développement ordonné la construction de maisons de lot à lot et l'ouverture de rues de proche en proche. Tout bourgeonnement dans les parties excentriques devrait être interdit, si ce n'est pour des raisons bien précises et après enquête et autorisation du ministère des Affaires municipales.

La spéculation foncière devrait être entravée par des moyens rigoureux. Ce n'est que depuis deux ans que la loi autorise à évaluer au prix courant les terres achetées pour fins de spéculation immobilière. Mais ce n'est pas suffisant; les municipalités devraient être autorisées à prélever sur tout lot à bâtir un impôt d'accroissement de capital, dès que le propriétaire réaliserait un profit excédant certaines limites. Cette mesure aurait pour effet de ralentir la hausse des terrains à bâtir et de freiner l'achat inconsidéré de terres agricoles."

Personnellement, je propose ceci: "Au lieu de laisser les ignorants libres de nous imposer un environnement urbain inadéquat, qui en définitive nous crée une dictature oppressive, d'un bonheur humain perdu, nos gouvernements, c'est-à-dire nos ministres appuyés et éclairés par des grands commis qui savent, doivent imposer leur volonté sur ceux qui me savent pas.

En un mot, les spéculateurs de toutes sortes qui oppriment nos frères: au pilori! Imposons une dictature, sans merci, afin de créer, malgré ceux qui ne savent pas, un environnement urbain, sain, adéquat aux besoins humains, leur donnant ainsi la liberté d'une vie harmonieuse, où la famille pourrait s'épanouir, où l'esthétique aurait droit de cité, où l'enfant serait roi!"

De toute cette laideur, de toute cette petitesse, de toute cette ignominie, de toute cette ignorance, nous ne sommes pas responsables, nous les architectes . . .

Les civilisations ont toujours eu une architecture à leur image! C'est leur miroir. Ici, cette image n'est pas belle

Au moment où nous sommes en butte à des critiques de toutes sortes, j'affirme et je répète que nous avons encore la foi.

Nous avons résolu de quitter notre tour d'ivoire et de descendre dans la rue. C'est sur la place publique que dorénavant, nous allons discuter nos problèmes.

J'ai fait la preuve que la laideur et le manque de planification qui nous entourent sont dûs à un manque de

contrôle de la part de nos gouvernants.

Je tiens à rappeler que la loi des architectes n'a comme but que la protection du public, donnant à celui-ci la possibilité de distinguer entre ceux qui sont et ceux qui ne sont pas compétents pour s'occuper des choses de l'architecture.

C'est pour cette raison que notre association a soumis les amendements suivants à notre loi, au comité des bills privés de l'assemblée législative du Québec:

"Quiconque, n'étant pas membre de l'Association des architectes de la Province de Québec ou étant suspendu par ladite association.

- a) prend ou se donne verbalement ou autrement le nom ou le titre d'architecte ou s'en sert, soit seul, soit joint à tout autre mot, nom, titre ou désignation, sauf s'il est architecte-paysagiste; ou
- b) agit ou prétend agir comme architecte, soit directement ou indirectement; ou
 - c) usurpe les fonctions d'architecte; ou
- d) s'annonce comme architecte de quelque manière ou par quelque moyen; ou
- e) annonce ou agit de manière à donner lieu de croire qu'il est autorisé à remplir les fonctions d'architecte ou à agir comme tel; ou
- f) fournit ou offre de fournir des plans, mesures, dessins ou devis pour la construction ou la reconstruction d'édifices, soit directement ou indirectement, même lorsque le coût total des travaux ne dépasse pas vingt-cinq mille dollars, est passible d'une amende d'au moins deux cents dollars et d'au plus cinq cent dollars pour toute infraction aux sous-paragraphes a, b, c, d, et e du présent article, et d'une amende fixée à deux cents dollars plus deux et demi pour cent de la valeur de la construction ou reconstruction effectuée ou projetée dans le cas des sous-paragraphes f et g du présent article, et, dans tous les cas, à défaut de paiement immédiat de l'amende et des frais, d'un emprisonnement n'excédant pas trois mois.

Rien, dans le présent article ne devra être interprété comme affectant de quelque façon que ce soit les droits conférés par la loi aux membres de la Corporation des ingénieurs professionnels de Québec".

Il me semble que ces demandes sont sensées. Nous voulons que ceux qui sont compétents pour exercer un art, soient protégés par le pouvoir supérieur qui, lui, doit empêcher les charlatants de leurrer le public.

Quoiqu'il en soit, ces amendements à notre loi furent rejetés par le comité des bills privés. Notre réaction fut vive. En quise de commentaire, je cite l'architecte Jean Damphousse:

"La bastonnade que nous, les architectes, avons reçue, au lieu de l'appui supérieur rêvé contribue à nous décourager et nous faire abandonner le combat.

En face des imperfections évidentes de toutes les professions, devant le public avide de scandales et de jugements hâtifs, l'architecte peut devenir le bouc émissaire le mieux indiqué, car il ne peut ni enterrer ses crimes, ni les dissimuler dans des archives ou des greffes."

Avant cela, nous avons essuyé 14 années de rebuffades à Québec!

Quoiqu'il en soit, nous sommes présentement à modifier notre loi, et nous présenterons, dès l'automne un mémoire au premier ministre et au conseil des ministres.

En un mot, nous voulons, tel que l'a écrit Paul Gladu

"que la politique nous fasse confiance".

Monsieur Gladu écrit aussi "Or quiconque a le moindrement étudié l'histoire et l'architecture doit reconnaître que les belles réalisations sont inséparables de la notion de responsabilité de l'architecte. Il est très important qu'il demeure le maître d'oeuvres, le directeur, le patron, l'inspirateur. Il faut - pour assurer l'unité - que les ouvriers, les contremaîtres, les fournisseurs, les artisans, les services publics, les artistes, que tous ceux qui mettent la main à l'édifice répondent de leurs actes à l'architecte."

En un mot, pour répondre à monsieur René Lévesque, ministre des Ressources Naturelles du Québec, un homme que j'estime, j'admets notre architecture est ennuyeuse et atroce. Ceci est dû au fait que les architectes n'ont pas été engagés pour leur compétence professionnelle, mais plutôt pour leurs amitiés politiques. J'ai bien peur qu'il en soit encore ainsi.

Donc, les premiers responsables de cet état de chose ce sont les politiciens, non pas les architectes. Ceux-ci

sont victimes d'un système.

Je ne crois pas que l'Etat puisse rehausser le niveau esthétique de l'architecture québécoise par lui-même. Les plans des écoles-types, fournis gratuitement par le département de l'instruction Publique sont là pour le démontrer.

Ces plans, qui violent plusieurs lois provinciales, entre autres les lois de salubrité et d'hygiène, ainsi que la loi de sécurité dans les édifices publics sont distribués par le

gouvernement depuis plus de quinze ans.

A diverses reprises, notre association a protesté auprès des autorités compétentes. Nous avons en plus soumis un mémoire à cet effet à l'administration précédente ainsi qu'à l'administration actuelle. Nous nous sommes butés à un mur, jusqu'à maintenant.

Non seulement le gouvernement semble vouloir cesser la distribution de ces plans-types, mais il l'augmente. Cette année, ce ne sont plus des plans d'écoles de huit classes que l'on distribue, mais encore des plans d'écoles de douze et seize classes.

Ceci veut dire que la province continuera à être enlaidie par ces écoles, toutes pareilles, d'une banalité à faire pleurer, ressemblant plutôt à des granges qu'à des édifices publics et qui en plus, sont des trappes à feu.

En un mot, pour paraphraser le ministre René Lévesque, ces plans donnés et distribués par un gouvernement, dont il fait partie, ont pour résultat, des écoles qui sont atroces et ennuyeuses.

Il est à remarquer aussi que ces écoles encouragent l'achat de matériaux, en l'occurence le pin de Colombie, étranger à notre province, au lieu d'employer le sable, la pierre concassée, ou le gravier qui sont des matériaux de chez nous, et qui plus est, donnent du travail à des milliers d'ouvriers. Notre gouvernement a construit pour plusieurs millions de dollars d'écoles dont la structure est en bois lamellé. La preuve a été faite par l'architecte Adrien Dufresne de Québec, lors d'une demande de soumission d'école à Chateauguay, le 26 juin 1961, que les écoles en béton armé, à l'épreuve du feu, ne coûtent pas beaucoup plus cher. En effet, il y a à peine une différence de 2% entre une construction de bois, d'acier et de béton. La soumission la plus basse donnait les chiffres suivants: \$469,369.00; \$471,067.00; \$476,976.00.

De plus, il est peut être bon de dire que les architectes canadiens-français, et ceci à cause du marasme économique dans lequel se débattent nos compatriotes, n'ont comme clients que les gouvernements à différents paliers, commissions scolaires, municipalités, gouvernements provincial et fédéral, et ainsi que les communautés religieuses.

Pour le bien de notre communauté, il est donc très important de sauvegarder l'existence des bureaux moyens établis dans les petits centres de la province, car ces derniers, en perdant la clientèle des Commissions Scolaires, ne pourront survivre, et les architectes devront se rendre dans les grands centres, et travailler à salaire dans les grands bureaux.

Notre association a donc décidé de rendre ce dossier public. Ceci sera fait lors d'une conférence de presse, dans quelques semaines.

Cependant, le gouvernement Lesage semble vouloir légiférer dans le bon sens.

Les arrêtés ministériels, relativement au contrôle des annonces le long des voies publiques, à la défense de l'inscription des marques de commerce sur les plans et devis des édifices gouvernementaux et des écoles, l'attribution d'une somme égale à 1% du montant du contrat pour les oeuvres d'art, la création d'une faculté d'urbanisme à l'université de Montréal, etc., en font foi.

En un mot, nous voulons nettoyer notre profession des éléments indésirables.

Pour ce faire, il est inutile de se fier seulement à un code d'éthique. Nous en avons un; il est bien fait . . .

Il nous faut la collaboration du public et des autorités compétentes.

A l'instar des autres secteurs de l'activité intellectuelle dans le Québec, nous sommes à un tournant, nous faisons une prise de conscience.

Je termine par un voeu: "J'espère que cette "société Réformée" saura retenir les services des architectes "qui savent" et non pas des architectes qui savent tirer les ficelles. Je suis certain que nous aurons alors une architecture qui ne sera ni ennuyeuse, ni laide!

SI ARCHIVISTE IL Y AVAIT, le terme qui vient de prendre fin lui fournirait ample matière à rédaction. L'année 1961 a débuté en grand éclat, avec ce que l'aile plus jeune a qualifié de "premier" congrès de l'Association. La plus forte assistance enregistrée à une assemblée anuelle dans les derniers cinq ans: au-delà de cent architectes inscrits, et une participation agréablement surprenante, où l'enthousiasme des conférenciers a débordé les cadres du temps alloué, ont contribué à rendre cette réunion du Lac Beauport désormais mémorable. Manchettes de journaux, photos à répétition, textes reproduits in extenso, reportages des seminars et surtout des conclusions qu'on y a adoptées, voilà en peu de mots la publicité retentissante que nous ont value ces deux journées d'assises au Manoir Saint-Castin, fin janvier 1961. Devant une réussite aussi étincelante, due en partie à l'ambiance, le Conseil n'a pas hésité un moment: le prochain congrès dans la région de Québec se tiendra à nul autre endroit qu'au Manoir.

Parmi les multiples problèmes abordés et les efforts déployés dans les douze mois écoulés, trois item semblent se détacher nettement comme traits saillants de cette période: a) évidemment, en tout premier lieu, l'entrée du Secrétariat de l'Association dans ses nouveaux locaux du boulevard Dorchester; b) les nombreuses démarches et représentations faites aux autorités provinciales; et c) une revision quasi-générale de plusieurs documents officiels de l'AAPO.

Du déménagement de nos bureaux dans une nouvelle bâtisse, cette colonne en a déjà traité partiellement; cette première annonce sera suivie d'un article qui paraîtra dans la prochaine livraison du Journal et dans lequel on détaillera tous les aspects et avantages de ce "grand dérangement". Qu'il me soit permis pour le moment de remémorer à chaque membre de l'Association que le local qui lui sert de siège social lui appartient en un certain sens. Archetée à même les frais d'inscription, d'examens ou d'exemption d'examens perçus depuis on ne sait combien d'années, la nouvelle bâtisse est la propriété de tous et chacun des architectes. C'est votre argent qui en a permis l'acquisition et à ce titre vous vous devez d'en tirer le plus d'avantages possibles. Une circulaire doit parvenir ces jours-ci à tous les membres de l'Association pour les informer de l'utilisation variée qu'on se propose de faire des diverses salles, et des commodités que la salle des membres, la cuisine et le bar seront en mesure de fournir de façon permanente à compter du prochain terme. Lorsque vous aurez pris connaissance des lieux, vous pourrez

en profiter pour enguirlander votre humble serviteur, le "secrétaire nonhonoraire", comme le désigne ironiquement un membre du Conseil, ou tout simplement pour le saluer. Il lui fera plaisir de consacrer de son temps à causer avec vous des grandeurs et difficultés de votre organisme professionnel.

Au chapitre des démarches entreprises auprès du Gouvernement de la Province, le président a échangé, au nom du Conseil, pas moins d'une vingtaine de lettres avec différents ministres du Cabinet pour exposer l'attitude de l'Association, solliciter des entrevues ou faire les recommandations appropriées. Par exemple, une lettre-rappel a été adressée au Ministre de la jeunesse pour lui demander à quel moment il entend donner suite à la rencontre qu'il nous a accordée en décembre 1960 et au mémoire que nous lui avons présenté relativement aux plans d'écoles fournis gratuitement aux commissions scolaires par le Départment de l'instruction publique. On nous a appris dernièrement qu'on en est rendu hélas à fournir de tels plans pour des écoles contenant jusqu'à seize classes. D'autre part, comme suite à l'assemblée annuelle du Lac Beauport, une entrevue a été sollicitée du Ministre des travaux publics pour discuter de la promotion des architectes au sein du Ministère et surtout dans le but de faire des représentations à l'effet d'obtenir du Ministre en question qu'on respecte la démarcation qui doit exister entre les deux principales divisions de son Ministère, à savoir celle des ponts qui doit relever des ingénieurs et celle des édifices dont on devrait confier la direction uniquement à des architectes. A une autre occasion, c'est-à-dire lors de la création du Conseil provincial des arts où l'on a, par oubli sans doute, omis de nommer un architecte, des représentations ont été faites immédiatement pour demander correction à cette anomalie. Le Ministre des affaires culturelles nous a demandée de lui proposer des noms. Enfin, à tour de rôle, au Ministre des Travaux publics, au Procureur général, et finalement au Premier Ministre de la Province, lettres et télégramme ont été dépêchés dans le but de recommander la tenue de concours d'architecture lorsqu'il s'agit d'édifices publics en général et plus particulièrement des bâtisses que le Gouvernement se propose d'ériger avenue Grande-Allée à Québec, et le nouveau palais de justice à Montréal. Le Premier Ministre lui-même nous a écrit pour nous remercier de notre offre de collaboration. Voilà un très court résumé du rôle qu'a joué l'Association sur le plan provincial durant la dernière année, mais il démontre à coup sûr que l'Exécutif et le Conseil entendent, sinon revendiquer, du moins protéger les droits et privilèges de l'architecte dans le domaine public. Inutile de conclure en admettant que le succès n'a pas couronné tous ces efforts. Les autorités de l'Association ne s'attendaient pas d'obtenir gain de cause immédiatement. Ce sont de premiers jalons. Dans les prochaines semaines, nous reviendrons à la charge. Demandez et . . .

Code de réglementation de concours d'architecture, Tableau des honoraires minimum, Règlements et Code d'éthique ont subi de profondes transformations l'an passé: adopté provisoirement en juin 1960, le Code des concours a été transmis à l'Institut royal qui tente avec l'aide de l'Ontario de l'adapter aux besoins du Canada tout entier. Nous devrions très prochainement être en mesure d'annoncer l'adoption d'un Code uniforme à travers tout le Canada. Le Tarif de 1912 qui demeure toujours en vigueur, au grand désarroi de la majorité des membres, a subi de nouveau, coupes, entailles, rapiéçages et additions de toutes sortes au cours de novembre et décembre. Sur réception d'un projet de Tarif qui nous venait de l'OAA, via l'Institut royal, notre Comité concerné s'est remis à l'oeuvre et a repris la dernière version pour l'adapter autant que possible à ce que l'Institut voudrait voir appliquer dans toutes les provinces du Canada. Le 19 décembre dernier, une réunion conjointe du Conseil et du Comité du tarif donnait sa bénédiction finale au nouveau Tableau des honoraires qui a été confié immédiatement aux soins d'un traducteur officiel pour en faire l'adaptation française. Soit dit en passant, il y aura dans le préambule une clause à l'effet que c'est la version française qui sera la version officielle du Tableau des honoraires minimum de l'AAPO. Ce texte devrait se retrouver sur la table du Lieutenant-Gouverneur-en-Conseil d'ici un mois au plus tard. Espérons que cette fois-ci le Tarif ne prenne pas le chemin du tiroir, mais qu'il reçoive la sanction officielle du Cabinet des ministres. Tous les Règlements de l'Association, de un à cent quarante-cinq, et de plus le Code d'éthique nous sont revenus le 18 décembre dernier avec une toilette toute neuve et des dispositions qui prêteront sûrement à controverse lorsque le tout fera l'objet d'études et

de discussions à une assemblée générale spéciale convoquée à cette fin au cours de 1962. Avant de l'envoyer aux membres en général, les Comités des membres & bourses d'études et de pratique professionnelle et l'Exécutif se partageront la tâche et reviseront les tranches des règlements qui relèvent de leurs compétences respectives et les soumettront à l'approbation du Conseil; puis on convoquera l'assemblée générale. Plusieurs expériences vécues au cours de ces dernières années nous ont démontré la faiblesse et les lacunes de certains articles, plus particulièrement dans le Code d'éthique. Une rédaction plus ou moins précise et des dispositions incomplètes ont empêché le Conseil, à diverses reprises, de sévir contre des membres qui ne manquaient pas à la lettre du Code, mais qui, on avait bonne raison de le croire, enfreignaient l'esprit général des Règlements.

Tous ces efforts, démarches, revisions, travaux qui ont marqué l'année dernière représentent un bilan propre à réjouir chacun des membres de la profession: 1961 restera comme une période très fertile en réalisations de toutes sortes. Même si beaucoup a été accompli, il reste toutefois énormément à faire. Un terme d'office vient de prendre fin, un Conseil termine son mandat, un président cède le fauteuil. L'Association elle continue son existence. Il n'y a pas de doute que la ma-

jorité des membres du Conseil sortant de charge n'ont pas à craindre pour leur ré-élection (!), ce qui permettra de poursuivre et de parachever l'oeuvre gigantesque et les nombreux travaux qui restent en suspens. Quant au président de l'Association, on peut se permettre quelques questions en le voyant partir. L'AAPQ serait-elle une pépinière de présidents pour se payer le luxe de changer de chef de file chaque année? Tous sont au courant que depuis ses origines l'Association a scrupuleusement observé deux principes de base concernant la présidence: jamais deux termes complets consécutifs, et l'alternance des langues. Douze mois est une période plutôt réduite pour s'initier à la direction des affaires d'une Association telle que la vôtre, et lorsque l'AAPQ a l'avantage d'avoir à sa tête un chef de valeur et d'envergure, pourquoi doit-elle le remercier de ses services au terme de son année? De plus, il est très difficile pour quiconque d'établir la relation qui puisse exister entre la promotion de l'architecture en cette. Province et l'idiome dont se sert principalement le président de l'AAPQ. Pour être bien sûr de ne pas manquer à ce principe d'alternance des langues, on est même allé jusqu'à considérer comme français un architecte d'expression anglaise et vice versa. Le temps n'est-il pas venu de mettre de côté de telles coutumes douteuses pour ne penser qu'architecture et architectes?

J'aimerais rendre ici un hommage tout particulier au président sortant de charge, monsieur Richard E. Bolton, dont le jugement sûr, la dignité et le respect constant de la hiérarchie en ont fait un leader de tout premier ordre. Comme ambassadeur de bonne entente auprès des autres professions connexes, il a fait honneur à son Association, et dans la galerie des anciens présidents, il figurera parmi les meilleurs serviteurs de la profession. Je voudrais également rendre un tribut spécial au Journal de l'Institut pour les efforts louables qu'il a faits au cours de la dernière année pour donner aux architectes de langue française la part qui leur revient dans cette revue. Désormais le Journal consacrera chaque mois un nombre minimum de pages à des articles rédigés en français et à des reportages qui concerneront le Québec. Vous êtes donc invités, membres de l'AAPQ d'expression française, à écrire au Journal et à lui transmettre de plus en plus photos et textes relatifs à vos oeuvres. Il est de votre intérêt et de votre devoir de prêter votre collaboration la plus franche à l'offre généreuse qui vous est

Je désire terminer cet article par une expression de bons souhaits à l'endroit de tous les membres de l'AAPQ, et en leur réitérant l'assurance de mes services dévoués.

> Jacques Tisseur, Le secrétaire administratif

Les architectes et la campagne "Faites-le maintenant"

DEPUIS plusieurs années déjà le ministère fédéral du Travail, en collaboration avec le Service national de placement, mène une campagne publicitaire intense auprès du public pour le convaincre de la possibilité de construire davantage en hiver.

La publicité qui a découlé de la campagne "Faites-le maintenant" a fortement insisté sur l'entière possibilité d'entreprendre des travaux intérieurs de construction en hiver. En même temps mais par des moyens différents, on a continué de propager l'idée de la construction accrue, à l'extérieur, en hiver. Il a été établi, dès le début, que la construction à l'extérieur, en hiver, tout en étant elle aussi pratique exige une préparation soignée et le recours à des techniques spéciales si les entrepreneurs et les propriétaires d'immeubles veulent être satisfaits des résultats obtenus.

En suivant ce raisonnement, les organisateurs de la Campagne d'emploi d'hiver ont choisi de travailler surtout par l'intermédiaire d'organismes comme l'Association des constructeurs canadiens, la National Housebuilders' Association et d'autres agences en mesure de parler avec autorité des problèmes de la construction à l'extérieur, en hiver. Il en est résulté une connaissance générale beaucoup plus répandue du problème de la construction en hiver et l'acceptation par un grand nombre, au sein même de l'industrie de la construction, de l'idée de la poursuite des travaux à l'année longue.

Il reste à faire accepter aux propriétaires éventuels de nouveaux immeubles les principes que l'industrie de la construction accepte maintenant de façon générale. Ici l'architecte peut jouer un rôle important. Etant une des premières personnes consultées en matière de construction, il est on ne peut mieux placé pour lutter contre une façon surannée de penser et pour organiser et échelonner les travaux de manière à en assurer l'exécution efficace durant les mois d'hiver.

Bien qu'il soit généralement admis que la construction en hiver puisse être un peu plus onéreuse, les frais additionnels peuvent être reduits au minimum grâce à une organisation appropriée et le propriétaire éventuel peut être encouragé à comparer ces frais supplémentaires aux autres frais qu'il serait exposé à encourir s'il tardait à entreprendre la construction de son nouvel immeuble. Les économies réalisées en loyers et en programmes de production commencés plus tôt peuvent souvent amplement contrebalancer les frais additionnels inhérents à la construction en hiver.

La Division des recherches en bâtiment du Conseil national de recherches a préparé une brochure intitulée "Bien bâtir — Les travaux d'hiver No 6", laquelle renferme une foule de renseignements sur les techniques de la construction en hiver. On peut obtenir cette brochure en écrivant à: Division de l'information du ministère du Travail, Ottawa.

RECOGNIZING ADVERTISING EXCELLENCE

When president harland steele presents traditional honors at the Annual Dinner of the RAIC Assembly in Vancouver's Bayshore Inn next June 2, he is expected to present an important new award to the winner of a competition for superior quality in building product advertising. Several years ago a Committee comprising three senior Toronto architects selected winners from among manufacturer's advertising in the *Journal* of the RAIC, in the hope that such action would improve the quality of product advertising. The practice of encouraging competition among *Journal* advertisers did have beneficial results, but failed to become a permanent event.

Now a special award for advertising excellence in the field of architectural publishing is to be sponsored by the Canadian Joint Committee on Construction Materials. The Committee was organized by the RAIC and the Canadian Construction Association in 1960, and numbers five architects and five manufacturers or suppliers (a report on the activities of the Committee is given elsewhere in this issue).

It is evident that a scheme to recognize advertising excellence is a logical outgrowth of the leadership which was offered by the Committee early in 1961 with the release of a carefully-edited brochure intended for advertisers and advertising agencies, and entitled "Guide for the Preparation of Effective Product Literature". Over the past few months the RAIC office has experienced a substantial demand for the product literature brochure and for the RAIC-AIA file index. This latter publication, printed by the American Institute of Architects in Washington, is a valuable aid in the office of any architect and may be secured from the RAIC for the nominal sum of \$3.00.

Many members of the Institute report to me that they lose no opportunity to remind building product salesmen visiting their offices that promotional literature should bear an RAIC file index number, and they are accustomed now to ask their visitors point blank if the product is regularly advertised in the *Journal*.

For those practices whose "round filing cabinets" bulge with ill-conceived, unwanted literature received by mail, it is recommended that poorly prepared brochures and promotional pieces be returned with constructive written comments attached thereto. This process, repeated several times over, is bound to produce results eventually, members of the Construction Materials Committee believe.

Creation this year of the proposed new product advertising award, given bold promotion and effective administration, will attract considerable attention to the architect-producer relationship, and result in measurable benefits to the building industry in the long run.

Members of the profession, immersed in the minutiae of their daily routine, are asked to remember that when the salesman calls, ask him if his firm advertises in the *Journal*; and if you are distressed by direct mail advertising which boasts about a product without giving the essential facts, mail the offending folder back to the company and explain why, in your opinion, the marketing effort failed.

PRIX D'EXCELLENCE EN PUBLICITE

N PREVOIT QUE LE 2 JUIN PROCHAIN, lors du dîner qui marquera l'assemblée annuelle de l'Institut au Bayshore Inn de Vancouver, le président Harland Steele aura un nom à ajouter à la liste traditionnelle des personnes méritantes, celui du gagnant d'un important concours établi pour reconnaître la qualité de la publicité en faveur des matériaux de construction. Il y a plusieurs années, un comité de trois architectes éminents de Toronto s'était donné pour tâche de choisir des gagnants parmi les annonceurs dans le Journal de l'Institut, espérant ainsi stimuler la qualité de la publicité. Cette pratique a donné de bons résultats mais elle n'a pas réussi à s'implanter de façon permanente.

Le nouveau concours est une initiative du Comité mixte des matériaux de construction, établi conjointement, au début de 1960, par l'Institut et la Canadian Construction Association et composé de cinq architectes et de cinq fabricants ou fournisseurs. (Le rapport de son activité paraît dans une autre page du présent numéro.)

Un moyen de reconnaître la qualité de la publicité s'imposait manifestement comme partie du programme lancé par le Comité au début de 1961 par la publication d'un feuillet soigneusement préparé à l'intention des annonceurs et des agences de publicité sous le titre "Guide pour la documentation efficace des matériaux de construction". Depuis quelques mois, nous recevons à notre bureau beaucoup de commandes à l'égard de ce feuillet et du "RAIC-AIA File Index". Ce dernier travail, publié par l'American Institute of Architects à Washington, est d'un concours précieux dans un bureau d'architecte et peut être obtenu de notre Institut au prix nominal de \$3.

Beaucoup de membres de l'Institut me disent qu'ils ne manquent jamais l'occasion de signaler aux vendeurs que leurs écrits devraient mentionner le numéro de dossier de l'IRAC. Ils ajoutent qu'ils ne craignent pas non plus de demander directement à ces visiteurs s'ils annoncent régulièrement dans le Journal.

Aux maisons d'architectes dont les classeurs débordent de publicité mal préparée, reçue par la poste, nous recommandons de retourner ces écrits inefficaces en ajoutant quelques remarques utiles. De l'avis des membres du Comité des matériaux de construction, ce procédé plusieurs fois répété donnera sûrement de bons résultats.

Bien connu et bien administré, le concours projeté de publicité en faveur des nouvaux produits devrait attirer l'attention sur les relations entre les architectes et les producteurs et assurer à la longue des avantages appréciables à l'industrie du bâtiment.

Voici donc quelques conseils à l'adresse des membres de la profession aux prises avec les détails de la routine quotidienne: N'oubliez pas de demander aux vendeurs s'ils annocent dans le Journal et, si vous êtes inondés de publicité postale vantant certains produits sans en donner les caractéristiques essentielles, retournez cette mauvaise publicité à l'expéditeur en disant pourquoi, à votre avis, ces écrits sont inéfficaces.

Robinsin

LETTERS TO THE EDITOR

The Editor, RAIC Journal.

The coverage given in your November issue to the Pilkington Travelling Scholarship in Architecture for 1961 was extremely well done and we would like to congratulate you for the excellent format. We feel sure that your expert treatment of the subject has contributed very decidedly to the objectives we are trying to achieve in making these annual awards.

Donald Jupp, President Pilkington Brothers (Canada) Limited

Editor, RAIC Journal

We at the Canadian Institute of Quantity Surveyors are very proud to have reached the stage of holding examinations for membership to our Institute only two years after Incorporation. In view of this milestone we have issued the attached statement which we feel will be of interest to you and your readers.

Yours very truly,

Malcolm Milton, Toronto

"The Canadian Institute of Quantity Surveyors held their first direct entrance examinations on November 18th, 1961 at the following centres: Calgary, Montreal, Ottawa, Toronto.

"The holding of examinations for

membership to the Institution within two years of Incorporation is early fulfillment of one of the Institutes aims to restrict membership of the Institute to those having the requisite skills and experience.

"The Education Committee have organized for students of the Institute a four year course with the Canadian Institute of Science and Technology. The course is in preparation for the examinations of the Canadian Institute of Quantity Surveyors. The subjects covered by the course include: building construction, applied mensuration and mathematics, economics, bookkeeping, quantity surveying, surveying and levelling, building materials, drainage and sanitation, graphic statics, specifications, heating, ventilation and electrical estimating, reinforced concrete and structural design.

"This student education and training program will provide the construction industry with a Canadian trained Quantity Surveyor well able to meet the demands of the industry.

"In addition to these programs for membership to the Institute, the Institute is giving outside instruction to other members of the industry. An advanced estimating course is being held at the Provincial Institute of Trades in Toronto with an enrollment of 30 attending a 20 lecture course; special lectures are being prepared on estimating for sub-trades in all centres across Canada for early in the new year. This young Institute is proud of its rapid growth and early implementation of its incorporation aims."

Monsieur le Rédacteur

Il me fait plaisir de me joindre au président de l'Institut, M. Harland Steele, pour solliciter la collaboration de tous les architectes au programme mis de l'avant par le Ministère fédéral du Travail de concert avec le Service national de placement pour stimuler la construction en hiver. Le programme comprend entre autres la construction d'édifices municipaux ou leur rénovation. L'an dernier, 2,163 municipalités se sont prévalues des avantages d'un tel programme et le Gouvernement fédéral a versé \$35,923,000 à ces fins.

Vu l'impérieuse nécessité de maintenir l'équilibre de notre économie, les membres de notre profession à travers tout le Canada reconnaîtront tout de suite l'importance d'entreprendre des projets de construction à l'année longue sans égard aux intempéries qui pourraient menacer de les arrêter.

Les architectes peuvent apporter une contribution substantielle à cette campagne des travaux d'hiver en avisant les propriétaires que la construction peut se poursuivre même en plein coeur de la saison morte sans aucun sacrifice dans la qualité de la construction ni augmentation quelconque du coût d'exécution.

Je vous invite donc, chers confrères, à endosser pleinement cette campagne.

Le président de l'AAPQ, Richard E. Bolton

BOOK REVIEWS

THE CITY IN HISTORY by Lewis Mumford. Published by Harcourt Brace and World, 1961. 784 pp. 156 plates. Price: \$13.00

THIS BOOK is a magnificent and heady brew. With yeasty phrase and vivid imagery Lewis Mumford conjures up an engrossing tale of man and the city. This is no work of dessicated scholarship nor handbook for social engineering. Rather, it is high poetry and religious dogma. With anguish and with passion Mumford seeks to release the image of the city from the sedimented overlay of anarchic fact and corrupt theory. Building upon the foundation of his trilogy, "Technics and Civilization", "The Culture of Cities" and "The Condition of Man", Mumford rephrases the history of the city in terms of a conflict between masculine 'will to power' and feminine 'nurture'.

Contrasting the feminine conservation of neolithic village culture with the

coercive masculinity of the hunter or the herdsman, Mumford traces the formative role of myth and magic in providing a focus for the first urban 'implosion'. The closed city of Ninevah, girdled with walls, gives to mankind an early taste of the potentiality of disciplined power. To Mumford this apparatus of power remains, throughout his study, the ultimate problem facing civilized man. In an effective denial of the Platonic 'ideal' city he equates it to the narrow ethos of the Spartan, and suggests that the brutal simplifications of Le Corbusier are akin to this sterile dream. In a crushing denial of the grandeur of Imperial Rome, Mumford, in his most effective passages, paints the picture of an insatiate military autocracy parasitic upon the Mediterranean and the known world.

With sympathy and understanding he traces the efforts of the early Christian community to rebuild a world from the sanctuary of the monastery. In the bur-

geoning vitality of the medieval town is found an aesthetic scale and social order which serves as an archetype for the satellite town. Correctly, Mumford, envisages the Renaissance as an extention of the medieval world, infusing with order and harmony the accidental configurations of an earlier epoch.

Tracing the destruction of the medieval order to the suppression of the Franciscan 'ideal' by the Papacy, Mumford exposes the theatrical inconsistency of the courtly baroque of the seventeenth century which hid festering slums behind a facade of military regularity. From the pretensions of the aristocracy he turns to the horrors of nineteenth century 'Coketown'. Paleotechnic industry, the speculative grid, and the 'traffic' in traffic, are analysed as the causes of the urban explosion, which has spread a scum of meretricious building across the continent. Aghast at the wreckage of the 'ideal' of a Wellwyn Garden City or Radburn; the conversion of the 'satellite' into a dormitory suburb that is neither city nor suburb, Mumford closes with a pious hope that congestion and high densities can be avoided in the city centre. Clearly, he is aware that a new urban 'implosion' is under way, that the city has once again become the focus for those who are tired of the tawdry provincialisms of suburban life. And yet he remains consistently distrustful of just those architectonic baroque patterns of order which can once again infuse the city with delight. Patterns which can rise above the squalor of the expressway and the motor car, using the full resources of modern technology, are our hope for the future, not tawdry invitations of nineteenth century idealism. Perhaps a brief recapitulation of the history of the garden city movement may serve to clarify this inconsistency in Mumford's argument.

For those of us who came to maturity during the savage and exciting squalor of the war, Mumford provided just the right blend of idealism for the future and scarifying commentary upon the present. The stained and wrinkled pages of his 'Condition of Man' which accompanied me throughout the war in a twenty five pounder ammunition case along with a varied cargo of socks, battle jackets and bottles of brandy, lies open and accusing on the desk before me. Well, and what did happen to the dream? Incredibly it came true in a short twenty years. Europe, rebuilt and burgeoning with prosperity, North America enduring a population explosion as the average man fled to a 'natural' suburban idyll with wife and four children, but is it a dream or has it turned into a nightmare?

Obviously Mumford alone could not be responsible for this metropolitan explosion, for this rejection of the rich and orderly texture of the baroque world, which until yesterday was the pattern for urban building. In fact, he has summed up for my generation a discontent with society with its roots deep in our recent history.

From the romantic individualism of Rousseau, to the early dogmatic formulae of Auguste Comte and Le Play the infant science of sociology evolved as a protest against the early horrors of industrialism. The 'Gothic' follies of Capability Brown linked with the unfettered landscape ideal and the concept of the 'natural man' of the social reformers, produced a mood of unquenchable optimism for man's future. In the dream of William Morris, the Arts and Crafts movement, married to a socialist utopia of labour, led to a glorification of the middle ages. Guild

socialism as in "The Dream of John Ball" heralded a new world freed from the panoply of power of the baroque elite. Across the Atlantic, Henry Thoreau at Walden Pond set a pattern for 'simplicity' and the 'natural' which was to be the root dogma of Frank Lloyd Wright's Celtic and mystic reaction against the ugly vitality of the brash Middle West.

In the opening years of the twentieth century, Patrick Geddes, biologist and sociologist, emerged from Huxley's lab to proclaim the vision of a city based upon the balance of man's biological nature. Out of the Nottingham coal mines came D. H. Lawrence with a rich psychoanalytic theosophy glorifying 'race' and 'blood'. In central Europe, Peter Kropotkin in his 'Fields, Factories and Workshops', idealized the decentralization of industry, and to complete the rout of the baroque overworld, Sigmund Freud stripped away the frills and furbelows of the costume to discern the psychoanalytic pressures of the

It may well be that future historians will look upon this deliberate rejection of the 'power' ideology of the seventeenth century as the most significant act of nineteenth and twentieth century man. Certainly our usage of technology in superficial and trivial applications in war and in peace argues for a profound distrust of 'science' per se by man. It is 'political idealism' not 'technology' which has made possible the inhumanity of the twentieth century. Western man, rejecting the panoply of 'court parade and capital', denying the simplicities of Cartesian science and without a calculus for power and necessary action has fallen prey to demagogues and adventurers of unparalleled cupidity. Little men, mouthing the platitudes of nineteenth century idealism, have led us into the carnage of the First World War trenches, into the hollow values of the suburban bypass, into the refined terrors of genocide.

Lewis Mumford, tapping this rich tradition of the glorification of the 'natural' man, neatly sidesteps the fundamental dichotomy of our time: the gulf between technician and humanist. In his fervent rejection of the baroque world, stemming from Thoreau and Emerson, he cuts himself off from the real sources of power in the city of man. He is, as was Frank Lloyd Wright, basically anti-city, anti-baroque, and anti-humanist. In his horror at the polished urbanity and glossy cruelty of megalopolis, Mumford reverts to the ever recurring dream of the frontier, and would destroy the city by cutting it into fragments dispersed over the face of the world. For the architect the decision is critical. Architecture and town planning are the ultimate social arts. As such they must meld every phase of technology with the humanity of man, but not by slavish adherence to the precepts of an outworn and discredited sociology.

But — do read this book. However irritating and infuriating is Mumford's explicit rejection of precise and careful analysis keyed to diagrammatic structural studies, it will widen your perspective and enrich your knowledge of the city as it has developed throughout history.

James H. Acland, Toronto

FRANK LLOYD WRIGHT by Finis Farr. Published by Charles Scribner's Sons, N.Y. 293 pages. Price \$7.50.

INIS FARR, in the first full length Frank Lloyd Wright, treats both the man and his architecture. While our position in time negates a complete comprehension or evaluation of either the man or his work one regrets that author Farr seldom penetrates more than façade deep. His greatest service has been to vividly collate the vast number of newspaper, eyewitness, and other accounts surrounding the marital and related legal complications with which Wright was so unfortunately and unjustly plagued, and here journalist Farr writes with the greatest ease and understanding. The inevitable result is a book which emphasizes Wright's tribulations.

An Autobiography, written by Frank Lloyd Wright in 1932 and 1943, was the single most important source for the present study wherein little more than a page per year is devoted to the period subsequent to the autobiographical account. This is unfortunate. The discussion of the architect's work has prudently been allocated a secondary position since it is neither the biographer's major concern nor his forte.

What Finis Farr has produced is the first relatively complete, non-autobiographical, account of a great man, drawing together scattered information within a single volume. What he has not done is to appreciably increase our understanding of Frank Lloyd Wright, as a man or as an architect.

H. Allen Brooks, Toronto

New NRC Fire Dep't Code

The first edition of "Municipal Fire Department Code 1961", (NRC No. 6479) an advisory document to guide local municipal regulations, has been published by the National Research Council through its Associate Committee on National Fire Codes. Copies are available from NRC, Ottawa at 25¢ each.

INSTITUTE NEWS

Assembly Preview

. . . Montreal, Windsor, Winnipeg, Quebec . . . VANCOUVER!

The Architectural Institute of British Columbia is host to the Annual Assembly of the Royal Architectural Institute of Canada, May 30 to June 2. After ten years the RAIC returns to Vancouver, and the AIBC and its Host Committee are determined that the success of this 55th Assembly will be unexcelled. Planning is well advanced and in order to keep members of the profession across Canada informed of preparations it has been suggested that space in the *Journal* be utilized in this and succeeding issues for advance news of the Assembly.

As Chairman of the AIBC Host Committee, W. G. Leithead expertly manoeuvres a group of no less than twenty members of the AIBC from Victoria and Vancouver. Since last July monthly meetings have been held by the Central Committee. Various members have been assigned to handle the many facets of Assembly organization and many have in turn enlisted other volunteers to form sub-committees. Decisions have already been made regarding major elements of the program and several distinguished architects from abroad have indicated they will be present, while replies from others are expected in the near future. Sir William Holford, President RIBA, is expected to attend the Assembly and will likely be a speaker. An acceptance has been received from Dean G. Holmes Perkins of the School of Architecture, University of Pennsylvania, who will play a prominent part in the Seminars. Dean Perkins will also be a luncheon speaker on the day of the Seminars.

Among the first and most urgent items to be settled by the Host Committee were the questions of theme and location. It was unanimously agreed at the outset that the Assembly theme should be "Architectural Education". Also, Vancouver was designated as the Assembly city. Contrary to earlier reports, the Host Committee, after serious debate, decided on Vancouver instead of Victoria which had been suggested earlier. There were many reasons for this choice, not the least of which concerned the theme. The School of Architecture at the University of British Columbia will open its new building in mid-May and it is intended that Convention proceedings, in particular the day-long Seminar Sessions dealing with Education, will take place in the new quarters for the School on the UBC campus.

Assembly headquarters will be the new Bayshore Inn in Vancouver. This recently completed hotel offers perhaps the best convention facilities in Vancouver, and is ideally situated close to Stanley Park and the downtown area and overlooks Vancouver's harbor and North Shore mountains. Few convention centres can claim equal advantages.

RAIC Journal
Change of Address
Effective 1st Feb., 1962
Editorial & Business Office
Suite 104, 160 Eglinton Ave E.
Toronto 12, Ont.
Telephone 487-4714
Advertising Department
1133 Leslie St, Don Mills, Ont.
Telephone 447-5196
(area code 416)

In the social department, present plans hope to capitalize on some of the unique appeal of the West Coast and in particular of Vancouver as Canada's link with the Pacific and the Orient — the idea of a "Pacific Rim" with its distinguishing regional characteristics. In line with this concept, a prominent Japanese architect is on the list of distinguished visitors who have been invited, and an oriental dinner is tentatively planned as a major evening event.

Post convention tours are being arranged for both nearby and distant destinations, including Mexico, Hawaii and the Orient. A "triangle tour" may be arranged to take in Victoria and Seattle. The Century '21 Exposition opening in Seattle in April promises to be an exciting and interesting event which many visitors will want to see. Members of the Washington State Chapter of the AIA resident in Seattle and vicinity have offered to be hosts at a reception for Canadian architects in Seattle and some are expected to attend the RAIC Assembly. C. A. Tiers

New Quarters for U of T School of Architecture

The School of Architecture of the University of Toronto has moved from the old Victoria Rink Building to more commodious and suitable quarters in the former Faculty of Dentistry Building 230 College St., corner of Huron.

Invitation to Australia

The 1962 Australian Architectural Convention is to be held at Sydney, 19-25 May, and the Royal Australian Institute of Architects has issued a cordial invitation to members of the RAIC. The Convention theme will be on the effect of architecture on human behavior.

Change of Address

Mendelow & Keywan announce a change of address from 1398 Eglinton Avenue West, Toronto 10, to Musician's Building, Thorncliffe Park, Leaside, Toronto 17, Ontario effective 1 February, 1962.

Horton and Ball announce a change of address from 351 King Street West, Kitchener, to 85 Frederick Street, Kitchener, Ontario, effective immediately.

Partnership

H. Claire Mott, John R. Myles and Alfred Chatwin announce they have entered into partnership on January 1, 1962, under the name of Mott, Myles and Chatwin, with offices at 13 Germain Street, Saint John, NB. The firm was previously Mott and Myles.

Positions Vacant

Architect or draftsman wanted for Rochester office. Write Cyril T. Tucker, AIA, 377 Glen Ellen Way, Rochester 18, New York.

Erratum

The Journal apologises to its French readers for two errors which occurred in the Editorial by Mr R. A. Dick, Chairman of the Editorial Board, on Page 27 of the December, 1961, issue. In the italicized French paragraph, line 5, for continué read "continuer" and in line 6 for augmenté read "augmenter".

NEXT ISSUE

The Education Centre, Toronto Architects, Page & Steele

"The Architect in Society"
An Address by Walter Gropius

The Saskatchewan Symposium on Architecture at Regina A Report by Henry Kalen

Ox Bow House, near Toronto Architect, Allan Crossley

Annual Meeting, Architectural Institute of British Columbia A Report by C. A. Tiers

Results: RAIC-Dept of Labor Salary and Income Survey of the Architectural Profession for the Year 1960

AIBC Annual Meeting

The 42nd Annual Meeting of the Architectural Institute of British Columbia was held at Vancouver's new Bayshore Inn on December 1 and 2, with 106 members registering. More than 20 executive and committee reports were mailed to the membership in advance of the meeting and were presented for discussion and adoption during the Friday business session. Unfortunately most of the reports were only briefly considered in the midst of numerous other matters. Inevitably the accumulated time and effort of many members tends to get passed over hurriedly in favor of more urgent or contentious issues. It has become increasingly evident in recent years that the affairs of the AIBC have multiplied to a point which has prompted some talk of extending the time allocated to annual business sessions. Whatever policy is adopted in future, it is encouraging to note the increasing scope of committee work covering all aspects of the profession. This is the area in which the individual member can contribute something to the affairs of his profession.

Out of the numerous reports delivered to the meeting, two deserve mention in this summary of the proceedings. Both dealt in one way or another with the fee structure and malpractices which arise from it. It is an unhappy fact that so many troubles between members and with the public can be traced directly or indirectly to the matter of fees and services. President Ned Pratt's report stated: "The most important subject about which I should talk to you is a widespread abuse of the fee structure". And further: "We might as well face up to the unpleasant fact that fee-cutting has reached a degree of intensity where we can no longer sweep it under the rug and look the other way". The report referred to the "sizeable disciplinary powers which we have over our own members", and concluded by requesting the meeting to authorize Council to take more direct and positive action in combatting feecutting and its associated evils. In the discussion which followed the President's Report it was clear that most members favour a more effective disciplinary campaign and it is to be hoped that next year's meeting can report some improvement in this deplorable situation. It is discouraging to realize that this subject appears to require the excessive amount of time it receives both at monthly Council meetings and at the annual assembly.

Again on the subject of fees was a report delivered by R. A. D. Berwick concerning the fee schedule for sketch plans and daily rates. Three motions were proposed offering a revision to the existing fee schedule for preliminary sketches and daily rates. The proper remuneration for so-called promotional studies has lately become a matter of concern in the AIBC and, having studied the problem for over a year, Bob Berwick's committee recommended changes to the sketch plan portion of the fee schedule which would allow the architect to collect his fee on the basis of a daily rate. A lengthy discussion ensued which included various attempts to define "promotional studies", "feasibility studies", etc, and in which various members objected to the inclusion of design work involving sketch drawings in a daily rate arrangement. In the end the motion permitting such changes was defeated and the question sent back to the committee for further study. In the general discussion of this subject it was claimed by many that the present fee structure dealing with preliminary and promotional work is "unrealistic" and thus encourages deviations and malpractices. Others argued convincingly to preserve the traditional fee arrangement based on a commitment between client and architect and, further, that no design work can properly commence until such a relationship is established. Still others favoured a complete overhaul of the entire fee structure, which they contend is cumbersome, confusing, un-

realistic and obsolete from the point of view of both client and architect. No doubt these varied opinions help to explain many cases of fee-cutting and malpractice and the contempt which these generate in the mind of today's client

One event of the Annual Meeting which has been consistently entertaining and enjoyable during the four or five years since its inception is the Members' Stag Dinner. This year Dr James S. Tyhurst, BSc, MD, CM, Prof and Head of the Department of Psychiatry at UBC, was the guest speaker.

On Saturday December 2, a Seminar was held entitled "Residential Environment — Our Responsibility?" Prof Wolfgang Gerson chaired a panel officially consisting of Bill Leithead and Warnett Kennedy, but actually involving most of the assembled architects. A practical outcome of the discussion was the adoption of a resolution asking the AIBC Council to write the RAIC urging that proto-type neighbourhood and town centres be considered as suitable projects commemorating Canada's Centennial year.

Ned Pratt was re-elected to serve a second two-year term on Council and was also re-elected as President of the AIBC. John Wade was again elected to Council, after having served two or



The 1962 AIBC Council, left to right, seated, R. W. Siddall and C. E. Pratt (F), reelected vice-president and president, respectively; standing Warnett Kennedy, executive director; F. S. Brodie, R. S. Nairne and R. L. Toby. (Not shown, John Wade (F) and Prof Wolfgang Gerson).

three terms in the past including one as President. Few members have contributed as much to the affairs of the AIBC. A third member elected to Council was R. S. Nairne. Other members continuing on Council are Ray L. Toby, Fred S. Brodie and R. W. Siddall; the latter was also re-elected Vice-President. Prof Wolfgang Gerson, in his capacity as Acting Director of the UBC School of Architecture, continues on Council as a permanent appointment.

C. A. Tiers.

BC Seminar on Steel Construction

An attempt to clarify and evaluate the many aspects of the use of structural steel in building frames was the ambitious aim of a Seminar held at UBC on December 12 and directed primarily to BC architects. The Seminar was sponsored jointly by the School of Architecture and the Canadian Institute of Steel Construction and was attended by about forty architects and engineers, mainly from Vancouver and Victoria.

The meeting opened with a presentation of "The Architectural Problems with Structural Steel" by Frank Rus-

COMING EVENTS

May 30th to June 2nd, 1962
55th Annual Assembly
Royal Architectural Institute of Canada
Bayshore Inn, Vancouver, B.C.

February 8th to 10th, 1962
Annual Meeting
Ontario Association of Architects
Royal York Hotel, Toronto, Ontario

February 8th to 10th, 1962
Annual Meeting
Province of Quebec
Association of Architects
Queen Elizabeth Hotel, Montreal, P.Q.

February 12, 13 and 14, 1962
National Concrete Products Association
Thirteenth Annual Convention
Sheraton Brock Hotel,
Niagara Falls, Ontario

March 20-22, 1962 Conference on Church Architecture Sheraton Hotel, Cleveland, Ohio

March, 1962
Western Canada Conference on
School Architecture
Banff School of Fine Arts
Auspices of Alberta Association of
Architects

sell, Vancouver architect. An interesting and challenging treatment of the possibilities of structural steel; new materials, techniques and methods of analysis, plus an illustrated survey of the more exotic structural forms in steel was presented by Prof Paul Wisnicki, MEIC, PEng, of the UBC School of Architecture. Prof Wisnicki's discussion of suspension roofs, grids and space frames exploiting the maximum potential of steel accompanied by remarkably clear and informative diagrams was the highlight of the meeting. The more mundane, but none the less necessary, topics dealing with codes, contracts, specifications, fire ratings, etc, were ably presented by representatives of the consulting engineers, the fabricators, and the CISC. Architect Bill Leithead moderated a panel composed of the several speakers, which provided a lively relief to the sometimes tedious factual material presented previously. The difficulty with meetings of this type is that the experts seem to be pre-occupied with facts whereas the architects are more often looking for inspiration. A preponderance of the former in this case left the Seminar somewhat short of its stated objectives.

C. A. Tiers

How to STEEL a Building WIREINFORCING



In modern construction concrete alone is not enough. The tensile strength and uniform quality of Electroweld Wire fabric ensures the architect that his building is properly "steeled."

Available in mats or rolls up to 8' 0" in width with spacings from 2" to 12".

BE SURE IT'S Kenforced SPECIFY ELECTROWELD WIRE FABRIC MANUFACTURERS OF CON TIE WIRE BLOC-WELD (BLOCK REINFORCING) WANCHOR" BRAND NAILS ELECTROWELD WIRE FABRIC STEEL PENCIL ROD



MANUFACTURED BY

IRVING WIRE PRODUCTS

AN AFFILIATED COMPANY OF FOOTHILLS STEEL FOUNDRY AND IRON WORKS LTD. 66th AVE. & CENTRE ST. S. — CALGARY, ALTA. — PH: AL 5-6661

PRODUCT INDEX

JANUARY, 1962

Products advertised in this issue listed in accordance with RAIC-AIA Standard Filing System

3 Masonry Materials

Master Builders Company Ltd., The Third Cover

4 Concrete & Monolithic Construction

Irving Wire Products

10 Masonry Unit Construction

Blok-Lok Limited

13 Structural Metals

Algoma Steel Corporation Limited, The 7
Dominion Bridge Company Limited 4 & 5

14 Miscellaneous Metal Work

Bolar Foot Grill Co. Ltd. 69
Borden Metal Products (Canada) Ltd. 78
Dominion Aluminum Fabricating Limited 16

16 Doors, Windows

Rusco Canada Limited Fourth Cover

19 Carpentry, Lumber

Canadian Wood Development Council 10-11
Plywood Manufacturers Association of B.C. 72-73

23 Floor & Wall Finishes

Dominion Oilcloth & Linoleum Co. Limited 19
Weldwood-Westply 20 & 21

25 Paint, Painting & Finishing

Para Paints Limited 67

26 Glass & Glazing

Compagnie de Saint-Gobain 70

27 Hardware

Sargent of Canada Limited

Russwin-Belleville Lock Division
International Hardware Company of
Canada Limited 13

28 Furnishings & Interior Decoration
Fiberglas Canada Limited 12

29 Plumbing

Darling Brothers Limited 3 Metro Industries Limited 18

30 Heating, Ventilating, Air Conditioning & Refrigeration

Canadian Armature Works Inc. 6
Honeywell Controls Limited 14-15
Metro Industries Limited 18
Trane Company of Canada Limited Second Cover

31 Electrical

Blumcraft of Pittsburgh 22
Curtis Allbrite Lighting Limited 71
Electro-Vox Intercom Inc. 67
Northern Electric Company Limited 9
Wilson J. A., Lighting and Display Ltd. 76-77

35 Equipment

Art Woodwork 79
Fiberglas Canada Limited 12
Moyer Vico Ltd. 8

39 Acoustics

Cweco Industries Limited

Not Classified

Government of Canada 60 Taylor Woodrow (Canada) Limited 69

Dara. Dalint GALVAPRIME

51 OFF WHITE The Calcium plumbate rust inhibitive metal primer designed particularly for galvanized steel. It shows excellent adhesion to new galvanized steel surfaces. Galvaprime's off-white colour permits one coat coverage with white or coloured paints.



PARA PAINTS LIMITED

MANUFACTURERS

25 Racine Road, Rexdale (Toronto) Ontario • CH. 6-6641 STORE: 616 Yonge St., Toronto 5 • WA. 3-2468

Send for free colour styling booklet and descriptive catalogue price list

ELECTRO

74 & 75

VOX

intercom

17



NEW HOSPITAL COMBINATION-INTERCOM featuring 3-button nurse-call, radio and TV selection and volume control, as well as vacuum and oxygen reservoirs and night-light.

ELECTRO-VOX INTERCOM INC.

QUEBEC · MONTREAL · OTTAWA · TORONTO · HAMILTON

INDUSTRY

NEW PRODUCTS

Shirlite & Koroseal Vinyl Wall Coverings. The Shirlite Manufacturing Co. Ltd., 91 Whitney Place, Kitchener, Ontario.

Inca-Domes. J. A. Wilson Lighting Ltd., 280 Lakeshore Road, Toronto 14.

Modular Steel Furniture. On Display in Office Speciality branches in Halifax, Saint John, Quebec, Montreal, Ottawa, Toronto, Hamilton, London, Winnipeg, Regina, Edmonton, Calgary and Vancouver.

Vaughana Walls. Canadian Gypsum Company, Ltd., 790 Bay St., Toronto 2.

Sound Control Panel. Canadian Johns-Manville Co. Limited, 565 Lakeshore Road E., Port Credit, Ontario.

Rotaflex Display Fittings. Rotaflex of Canada Limited, 163 Church St., Toronto 2, Ontario.

New Cooling, Heating Concept for Schools. Modine Manufacturing Co., 1500 De Koven Avenue, Racine, Wisconsin.

Nine New Bathroom Products; Two bathtubs, four lavatories, a lavatory leg, a water closet and a revision of brass fittings. Additional information from Crane's Plumbing, Heating & Air Conditioning Group, P.O. Box 780, Johnstown, Pa.

New Urethane Resin for Interior Wood Finishes. For information, write Dept. NA 138, National Aniline Division, 40 Rector Street, New York 6, N.Y.

Column Speaker, consisting of four elliptical speaker cones mounted one directly above the other in a common enclosure. Details from DuKane Corporation, St. Charles, Illinois.

Ply-O-Glas Roof Coating. Ply-O-Glas Company of America, 50 Cutter Mill Road, Great Neck, L.I., N.Y.

"Stuart Stimix" Thermostatic Mixing Valves. Stuart Sales Engineering Co., 130 Bermondsey Road, Toronto 16, Ontario.

Portable Photocopier. Anken Chemical and Film Corporation, Newton, N.J.

Built-in Intercommunication Sub-stations. Canadian Distributor: Industrial & Institutional Communications Ltd., Wallaceburg, Ont.

Plastic Handrails. Plasticana Co., A division of Industria (Ore & Chemicals) Ltd., 5765 Andover Ave., Montreal 9, Que.

Decorative ceiling panels. Canadian Johns-Manville Co. Limited, Port Credit, Ontario.

Angle-type drain for installation in vertex marquees. Canadian Zurn Industries, Ltd., 396 Hopewell Avenue, in Toronto.

Desco Neolon . . . For coating roofs and other exterior surfaces. Desco International Association, Box 74, Buffalo, N.Y.

197 Telephone Floor Outlet Fitting. Condustor Canada Ltd., 130 Queens Quay East, Toronto 2, Ontario.

NEW LITERATURE

High Quality Concrete. The Master Builders Company, Ltd., Toronto 15, Ont. for a free copy of Bulletin P-36A.

Colorbestos Siding Brochure, a full-color brochure on Permatone Colorbestos siding. Available in English (As-150C) and French (As-150CF) from the Company at 565 Lakeshore Rd. E., Port Credit, Ont.

Fire Retardant Treatment for Wood. A booklet on PROTEXOL, The Fire Retardant Treatment for Wood. R. Laidlaw Lumber Co. Ltd., Weston.

Holophane and the Lighting Field. The Holophane Company, Limited, 418 Kipling Ave. South, Toronto 18, Ontario.

Electric Heating Catalogue CC-62. Containing information on the use of Electric heat in industrial, commercial, residential and institutional applications. Available from the Canadian Chromalox Company Limited, 210 Rexdale Blvd., Toronto.

An eight page brochure on Chalkboards and Chalkboard trim, giving information on various types of Chalkboard, suggested specifications and layouts of Chalkboard arrangements in conjunction with Corkboard. Write to: Central Scientific Co. of Canada Ltd., 146 Kendal Ave., Toronto 4, Ontario. Bulletin SB-61.

An illustrated booklet entitled, "Things get Done at Foresteel", showing some of the many large and complex platework and sheet-metal jobs carried out by Foresteel. Available from Foresteel Products Limited, P.O. Box 600, Hochelaga Station, Montreal 4, P.Q.

An illustrated 20-page brochure detailing the characteristics, applications, decoration, and general data of Transitile, a light weight, corrugated sheet. Available from Canadian Johns-Manville Co., Limited, 565 Lakeshore Road E., Port Credit, Ontario.

Brochures on "Chemfoam" a two-component rigid polyurethane foam system. Available from Taylor Chemical Foam Industries Ltd. P.O. Box 312, Terminal "A", Toronto.

A 52-page, hole-punched engineering manual for architects, covering the newly introduced line of central station air handling equipment. Write to Acme Industries, Inc., 600 North Mechanic Street, Jackson, Michigan.

Literature describing the "TeleNurse", a transistorized voice-operated audio-visual nurse's call system. Available from the Perry-Briggs Company, 4135 West 150th Street, Cleveland 35, Ohio.

A brochure detailing techniques for sealing joints with polysulfide-base compounds. Single copies of brochure SS200, titled "Joints", available from Thiokol Chemical Corporation, Trenton 7, New Jersey.

Rocamora Bros. Limited, catalogue number one covering steel pipe, fittings, and hangers. Available from Rocamora Bros. Limited, 35 Wingold Ave., Toronto 19, Ont.

A 20-page catalog, "Foamglas Building Insulation," dealing with the use of Foamglas, and Foamglas-Board in the building field. Obtainable from the Pittsburgh Corning Corporation, One Gateway Center, Pittsburgh 22, Pennsylvania, by requesting FB-108.

COMPETITION

THE CANADIAN
JOINT COMMITTEE

on construction materials
of the
Royal Architectural
Institute of Canada
and the
Canadian Construction
Association

announces the institution of its

FIRST

ANNUAL AWARDS
FOR EXCELLENCE IN
BUILDING PRODUCT
LITERATURE

In Three Classifications

PUBLICATION ADVERTISING CATALOGUES BROCHURES AND LEAFLETS

JURY OF AWARD
P. T. M. Barott, MRAIC, Montreal
Chairman

Paul-O. Trépanier, MRAIC, Granby W. G. Raymore, FRAIC, Toronto Robert Briggs, MRAIC, Toronto Ernest Smith, MRAIC, Winnipeg Allan Harrison, Montreal Graphics Designer

Applications for entry forms must be mailed by February 28, 1962 to Walter Bowker, Managing Editor, Journal of the Royal Architectural Institute of Canada, 160 Eglinton Avenue East, Toronto 12, Ontario. Entries should be mailed to arrive at the above address between April 16 and 19. Entry fee, \$25.00.

Judging of entries will take place in Toronto on or about May 4, 1962. The presentation of awards and display of winning entries will take place at the Annual Assembly of the RAIC at Vancouver May 30-June 2.

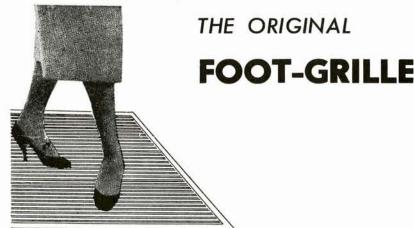
USED FROM COAST TO COAST

- Foot-Grilles only are dirt collectors.
- Bolar's have been used successfully thousands of times.
- The quality of Bolar extends beyond the appearance.
- Bolar grilles are made for keeps.
- · New designs.
- Several materials.
- Various combinations.

CAUTION

Be sure to specify '¼''
clear spacing between
bars, or less, if women are
expected to use grille.

BOLAR



BOLAR FOOT GRILL CO. LTD.

4362 Forest Street

Montreal North, P.Q.

Representative in Ontario and Newfoundland:

ART WIRE AND IRON CO. LIMITED 3 Carlaw Avenue, Toronto 8

NEW CANADIAN HEADQUARTERS for HOSPITAL ASSOCIATION



Architects: Peter Dickinson Associates
Engineers: Giffels & Vallet of Canada Ltd.



The new, three-storey headquarters building of the Ontario Hospital Association, at Flemingdon Park, near Toronto, built by Taylor Woodrow (Canada) Ltd., was officially opened by the Hon. Leslie M. Frost, Q.C., Prime Minister of the Province of Ontario.

A number of unusual architectural features are incorporated in its design, the most striking being vertical louvres which curtain the entire exterior of the east and west walls. The louvres are controlled from within the building and will admit or repel sunlight as required. Along the front of the building is an ornamental pool with fountains. The total floor area is approximately 45,000 sq. ft.

The building contains an assembly hall seating 200 persons, two lecture rooms, a library and a staff cafeteria.

TAYLOR WOODROW

BUILD EVERYWHERE

BUILDING & CIVIL ENGINEERING CONTRACTORS

42/48 CHARLES STREET EAST · TORONTO · TELEPHONE: WALNUT 8-4441 - 10 PARK STREET · LONDON WI

BE UP TO DATE!

Build light and bright

SAINT-GOBAIN

makes a **whole line** of products which can add distinction and grace to your project.

___among them: polished plate glass



Raphaël, the interior decorator, has here used to its utmost the outstanding feature of mirrors: the enhancement of perspective.

Silvered on one surface, polished plate glass becomes a mirror, that necessity of modern living. Mirrors open up infinite vistas, create charming delusions and a cheery bright atmosphere in the home.

SAINT-GOBAIN

DIVISION GLACES SERVICE EXPORTATION 8, Rue Boucry - PARIS (XVIII-)

AVAILABLE FROM YOUR SUPPLIER.
For further information consult our Canadian representative:



FT 368 NOTRE DAME ST. W., MONTREAL, QUE.

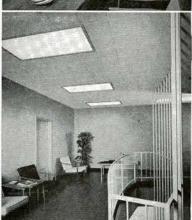
Telephone: 844-2523





Spring-loaded brackets make these troffers

EASIEST OF ANY TO INSTALL



THE ART CENTRE Pringle & Booth Limited Architect: S.D.F. Reszetnik. Consulting Engineer: Flanagan & Black. Electrical Contractor: Toronto Electric Co. Installation: 2' x 4' and 4' x 4' Eye Comfort Troffers

With new RAPIDJUST* spring-loaded support brackets, and hinged doors with concealed latches the EYE-COMFORT troffers by Curtis Allbrite are the easiest to install of any on the market. In four sizes and shallow recessing depth, with a choice of different enclosures, they provide superb yet restful lighting, and add a smart modern appearance to any type of building. Call or write us today for illustrated literature.



Planned Lighting with Eye Comfort

CURTIS ALLBRITE LIGHTING LIMITED

195 WICKSTEED AVE., LEASIDE, TORONTO 17, ONTARIO

District Offices: Montreal, Saint John, Winnipeg, Calgary, Vancouver



6101





FIR PLYWOOD PANEL ARCHES ATTRACT THE CUSTOMERS

Panel Arches were used for this B.C. supermarket because the architect, R. William Wilding, wanted to create an inviting exterior of pleasing lightness and rhythm so that shoppers would be drawn from more conventionally designed stores. He also wanted a spacious and relaxing interior. This 'floating' roof of novel design and high strength was constructed by C. J. Oliver Ltd. with arches prefabricated by Greenall Bros. Ltd. It was the first time Panel Arches of Fir Plywood had been used for a supermarket in Canada. The shopping centre is at Richmond, near Vancouver, and it was opened in September 1960. The consulting engineers were McKenzie & Snowball. To cover the supermarket and adjoin-





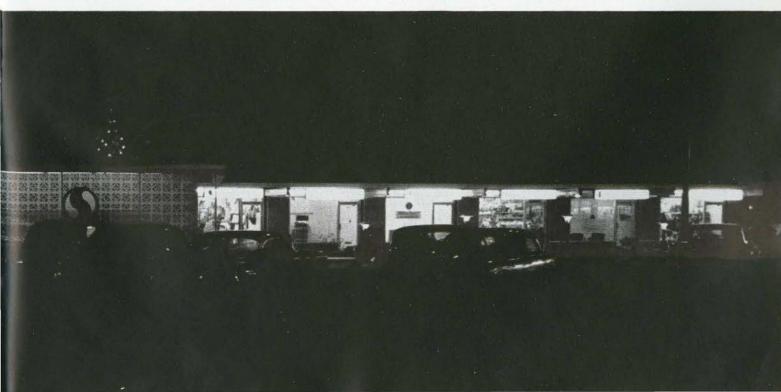
ing service station, 180 Panel Arches were used, made of 22,200 square feet of 1/4" Fir Plywood. The entire supermarket was roofed in one day. Each Panel Arch is 15'5" long and spans 13'111/2", and an unusual feature was the installation of sprinklers, headers, run-outs and electric wiring along the valleys between the arches.

The Panel Arch is yet another structural component of Fir Plywood that combines beauty with economy and boldness with sound engineering. You have only to consult the Plywood Manufacturers Association or any of its fieldmen across Canada to take full advantage of these new ideas.

FIR PLYWOOD

PLYWOOD MARKED (PMBC EXTERIOR) HAS WATERPROOF GLUE Plywood Manufacturers Association of B.C., 550 Burrard Street, Vancouver 1, B.C. Field Offices: Vancouver, Calgary, Winnipeg, London, Ottawa, Toronto, Montreal

S-61-1

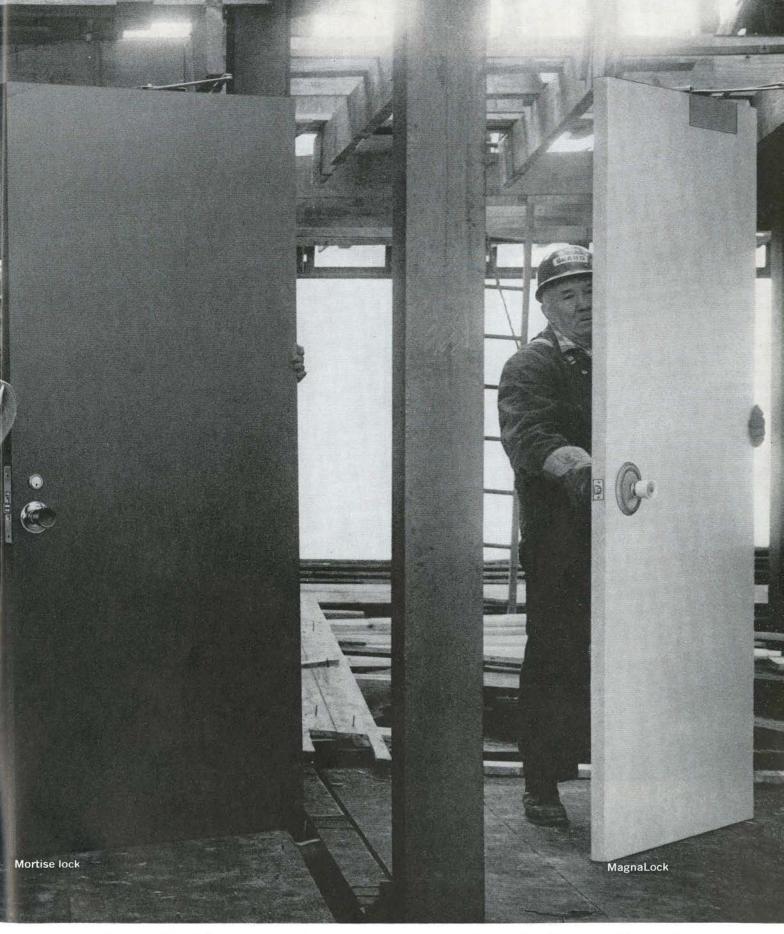




Going up all over Canada! Sargent's

Never before have function and beauty been so perfectly wed in four architectural lock lines. IntegraLock, a modern mortise lock. MagnaLock, the ultimate for those who prefer a heavy duty bored lock. SentryLock for reliable standard duty. And a full range of mortise locks

with new sectional trim—as up-to-date as tomorrow. All Sargent locksets are available with metal finishes or exciting new Delrin® knobs and fired copper roses. Choose from the widest variety of functions and fashion designs. Mix 'em or match 'em, but choose Sargent—a single



matched line of newest fashion locksets

source of quality and responsibility for almost 100 years. For more information see your Sargent supplier or write Sargent Hardware of Canada Ltd., Peterborough, Ontario.



SARGENT

THE NEWEST FASHION IN A COMPLETE LINE OF ARCHITECTURAL HARDWARE

COMMERCIAL FLUORESCENT



LUMILUX II Efficiency up to 88.4%, with low brightness. White, green, silver plastic louvres. Surface or pendant mounting. Cat. Sect. 1-1



JUBILEE Low brightness, shallow, surfacemounted luminaire with luminous side panels. Available with Cat. Sect. 1-14



UNILUX Slim, versatile fixture, plastic diffuser. Can be wall-mounted, horizontally or vertically. Cat. Sect. 1-15

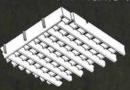


MODULUX Versatile modular units, surface-mounted or recessed for plaster and inverted tee ceilings. Assorted closures. Cat. Sect. 2-4



LITE-a-BED Restful hospital bed lighting. 5 models with up and downlight, fluorescent and/or incandescent. Accessories, colours optional. Cat. Sect. 1-16

LUMINOUS CEILINGS



PARAGRID-TILE 16" sq. and 24" sq. white and coloured polystyrene, de-staticized tiles for luminous ceilings. ½" square apertures. Cat. Sect. 5-2



CIRCLGRID 2' sq. and 2' x 4' vinyl louvre. Efficiency up to 86%. 1/2" openings. In assorted colours and translucencies. 45° x 45° shielding. Cat. Sect. 5-3

At the O.A.A. Convention, you are invited to examine many new Wilson fixtures including Paragrid - 24 Tile, coloured Circlgrid, coloured Space-Lites, Lite-a-Bed hospital fixture and the Unilux exit fixture. Booth No. 5.

INCANDESCENT



INCA- "Silvaglo", high LIGHTS efficiency, single layer glass. 4 different shapes, 3 sizes. Pendant or Lev-R-Lok holder. Cat. Sect. 4-1





INCA-DOMES Inca-Lights topped with aluminum shallow rimmed domes. Finished in assorted colours, copper and brass. 3 sizes. Cat. Sect. 4-9



SPACE-LITES Recessed units, round and square. Frames in bone white, chrome, copper, brass. Corning colouvered lens in black, coral, other colours. Cat. Sect. 4-2



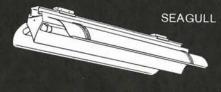
"CB" LIGHTS Die-cast aluminum wall and ceiling fixtures. Indoor or outdoor use. Springloaded safety thread, heat-proof gaskets. Thermopal glass. 3 models. Cat. Sect. 4-8





TRIM-LITE These three surfacemounted fixtures, the TFH line, fit snugly to the ceiling—no bands or fastening devices. 3 thermal barriers prevent heat transfer. "Silvaglo" glassware provides excellent diffusing qualities. Electrical connections within enclosed metal boxes. Installed and removed without tools. Cat. Sect. 4-3

INDUSTRIAL FLUORESCENT



SEAGULL 92.4% efficiency. Self-contained wiring channel. Rapid Start, H.O.R.S., Slimline, Power Groove. V.H.O. versions. Cat. Sect. 3-3



TRIANGULAR Enclosed, dust and moisture-resistant unit. Wall and/or ceiling mounting. Industrex glass closure, neoprene gasket. Cat. Sect. 3-6



high intensity lighting. Slimline, R.S., H.O.R.S., Instant Start and Standard models. Baked white or porcelain enamel. Cat. Sect. 3-5

and the Wilson range serves every industrial, commercial and institutional need

Every Wilson lighting fixture is a product of the Wilson tradition of Engineered Seeing. Each is designed to provide maximum efficiency and comfort in schools, offices, factories, stores, public buildings... for every activity that depends

upon light. Whether lighting new buildings or relighting existing buildings, there is a Wilson fixture to meet every lighting need-designed, made and laboratory-tested by this all-Canadian company with over 50 years of lighting experience.

Write for information and catalogues.



LIGHTING

280 LAKESHORE ROAD, TORONTO 14

Plants: Toronto, Ont., Medicine Hat, Alta. District Offices: Montreal, Toronto, Winnipeg Agents: Eric Ackland & Associates Limited, Vancouver, Edmonton, Calgary.

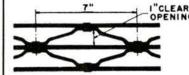
INDEX TO JOURNAL ADVERTISERS

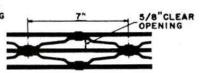
						Page		Page
Algoma Steel Corporation Limited, The		-	-	•	-	7	Honeywell Controls Limited	14-15
Art Woodwork Limited	-	•	-	-	-	79		
							Irving Wire Products	66
Blok-Lok Limited		3.0		1.00	-	80		
Blumcraft of Pittsburgh	•	-	•	-	-	22	Master Builders Company, Ltd., The Third	Cover
Bolar Foot Grill Co. Ltd	•	-	-	-	_	69	Metro Industries Limited	18
Borden Metal Products (Canada) Ltd.	•	•	•	•	•	78	Moyer Vico Ltd	8
Canadian Armature Works Inc -	•	•		-		6	Northern Electric Company Limited	9
Canadian Wood Development Council						10-11		
Compagnie de Saint-Gobain -		-	•	-	-	70	Para Paints Limited	67
Curtis Allbrite Lighting Limited -	•		-	-	-	71	Plywood Manufacturers Association of B.C	72-73
Cweco Industries Limited	-	=	2	-	-	17		
							Russell, The F.C., Company of Canada Limited Back	Cover
Darling Brothers Limited	•	•	•	-	-	3	Russwin Belleville Lock Division, International Hardware	
Dominion Aluminum Fabricating Limited		•	-	-	7	16	Company of Canada Limited	13
Dominion Bridge Company Limited	•	-	-	-	-	4-5		
Dominion Oilcloth & Linoleum Co. Limited	١-	٠	-	-	-	19	Sargent Hardware of Canada Limited	74-75
Electro-Vox Intercom Inc	_	-	-	-	-	67	Taylor Woodrow (Canada) Limited	69
							Trane Company of Canada Limited Second	Cover
Fiberglas Canada Limited	-	•	-	-	-	12		
							Weldwood - Westply	20-21
Government of Canada	•	-			-	60	Wilson, J. A., Lighting Ltd	76-77

BORDEN manufacturers of every type of grating, so...when it comes to grating...come to **BORDEN!**

MADE IN CARBON STEEL, STAINLESS STEELS, ALUMINUM ALLOYS ETC.

RIVETED

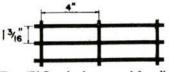




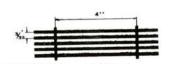
Type K Standard All purpose floor grating available in two standard and four special designs.

TYPE J (special) Ornamental design with close bar centers. Excellent for pedestrian traffic.

PRESSURE LOCKED



Type 'B' Standard approved for all general purposes. 5 special designs also available.



TYPE 'DD' (special) ½2 clear opening close bar spacing, for use as entry ways, vault covers, shafts in sidewalks etc.

All Borden gratings may be serrated to provide positive footing where there is excessive dampness, oil or grease.

RIVETED

Borden's riveted design permits perfect distribution of loads. It is excellent for rolling loads and pedestrian traffic. Made on the truss principle. Borden Riveted Gratings are hydraulically power-forged for strength and durability.

PRESSURE LOCKED

Borden Cold Forged rectangular floor gratings are neat, clean, durable and easy to paint and maintain — desirable in power plants, boiler rooms, etc. Deep cross bars increase lateral support. This grating permits maximum passage of light, heat and air.

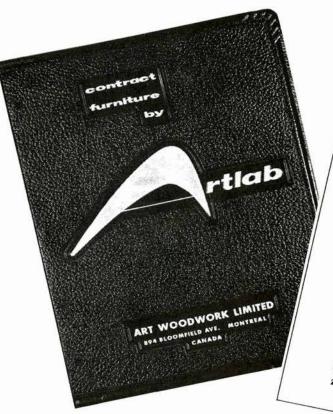


BORDEN METAL PRODUCTS (CANADA) LTD.
BEETON, ONTARIO

TORONTO direct Line 364-2867 BEETON: 729-2531

Write or phone for literature showing complete range of gratings and specifications.

VALUABLE CATALOGUE FOR LABORATORY EQUIPMENT AVAILABLE FREE!



Quick INDEX

INTRODUCTION STANDARD SECTIONAL UNITS CENTER TABLES WALL TABLES STORAGE CABINETS & CASES SPECIALIZED EQUIPMENT FUME HOODS LABORATORY SINKS SERVICE FIXTURES & ACCESSORIES STOOLS, CHAIRS AND SEATING PLANNING INFORMATION EDUCATIONAL SECTIONAL UNITS STUDENT DESKS INSTRUCTOR'S DESKS STUDENT TABLES NEW DIRECTION IN SCIENCE EDUCATION HOMEMAKING & SHOP EQUIPMENT HOSPITAL CASEWORK PHARMACY INSTITUTIONAL RESIDENCE FURNITURE OFFICE AND UBRARY FURNITURE SPECIFICATIONS, MATERIAL & CONSTRUCTION X GENERAL INFORMATION ... ALPHABETICAL INDEX REFRIGERATION EQUIPMENT

Page A-1 to Page A-10
Page B-1 to Page B-12
Page C-1 to Page C-4
Page D-1 to Page C-4
Page D-1 to Page D-6
Page B-1 to Page B-8
Page B-1 to Page B-8
Page B-1 to Page B-16
Page

ARTLAB exclusively engaged in the design, engineering and the manufacture of a wide range of laboratory equipment — ranging from hospital casework to laboratory sinks — has made available a complete 152 page catalogue. Architects who require detailed information of laboratory furniture and equipment may obtain this catalogue containing complete specifications of all items by completing the coupon on this page. The "QUICK INDEX" shown lists contents of the catalogue.

You are cordially invited to visit our display booths Nos. 51, 52 and 53 at the forthcoming BUILDING INDUSTRY EXHIBITION sponsored by the Province of Quebec Association of Architects, to be held at the Queen Elizabeth Hotel, Montreal, Que., on February 8, 9 and 10, 1962.

ART WOODWORK LIMITED

894 BLOOMFIELD AVE.

MONTREAL, QUE.

ART WOODWORK LIMITED, ARTLAB DIVISION, 894 Bloomfield Ave., Montreal, Que.

Please send a copy of your new catalogue on Laboratory Equipment, without obligation.

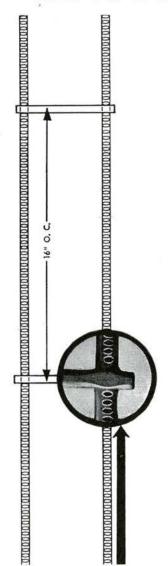
Name

Address

Retain Strength and Beauty IN MASONRY WALLS WITH

BLOK-LOK

MASONRY REINFORCEMENT



MAXIMUM STRENGTH

Tension test No. 17819, conducted by Columbia University on a competitive masonry wire reinforcement found that BLOK-LOK Reinforcement was far superior. BLOK-LOK Reinforcement was tested for tensile strength by the Robert W. Hunt Co., physical Laboratories Division, and their report No. 15430A on lock pull-out and breaking tests finds BLOK-LOK to exceed minimum requirements in every category.

MEETS STANDARDS

A.S.T.M. Specification A82 (tensile strength).

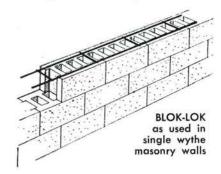
A.S.T.M. Specification 153 (hot dipped galvanized).

A.S.T.M. Specification 116 Class 1 (galvanized).

Federal Specifications.

CONTROLS CRACKS

- Shrinkage due to change in moisture volume and carbonation.
- Temperature due to change in temperature.
- Settlement due to movement of footing.
- Structural at points of stress concentration.



EASY ACCESS IN WALL

Mechanical and other trades are not hindered by obstructions. BLOK-LOK cross ties are spaced 16" o.c., permitting the placement of cross ties on cross webbing of block, leaving the core of the block open.

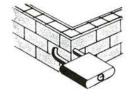
BETTER BOND

BLOK-LOK side rods are knurled for better bond, and cross ties are projected slightly beyond longitudinal wires, creating eight mechanical mortar locks every 16".

BLOK-LOK CROSS TIES

Flush welded to the same thickness as the side rods allowing for a thinner mortar joint. Knurled side rods assure superior bonding.

Stocked and distributed in all principal cities of Canada

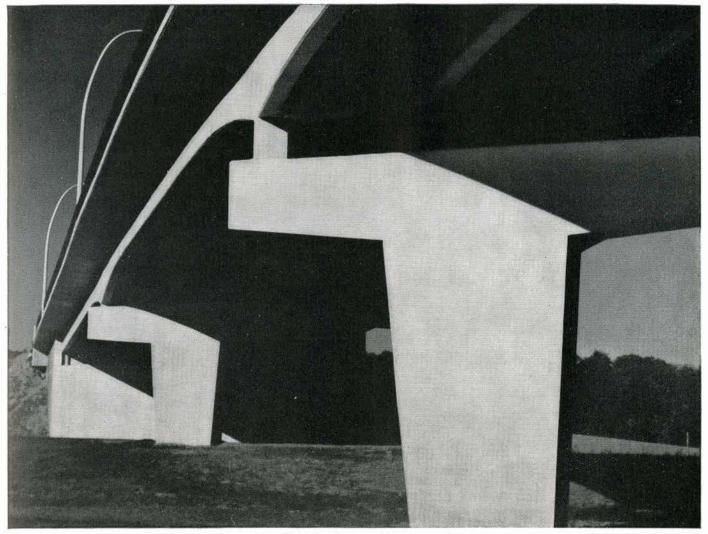


FLUSHWELD

BLOK-LOK LIMITED

3240 Bloor St. W., Toronto 18, Ont. Phone: 239-8443

* ® REGISTERED IN CANADA



One of the 46 reinforced concrete bridges and overpasses on the Montreal-Laurentian Autoroute.

POZZOLITH INCREASES DURABILITY, LENGTHENS LIFE OF MONTREAL-LAURENTIAN AUTOROUTE BRIDGES

Spaced along the 30-mile, 6-lane Montreal-Laurentian Autoroute...Quebec's greatest highway... are 46 heavily travelled reinforced concrete bridges and overpasses, each individually designed to blend harmoniously with the picturesque Laurentian landscape.

As in so many other bridges and overpasses built for Canadian provinces and municipalities during

the past 20 years, POZZOLITH contributes vitally to durability and increased service life. POZZOLITH provides:

Increased strength: up to 20% Reduced permeability: 40 to 80%

Greater resistance to freezing and thawing.

Increased bond-to-steel: up to 40%

Reduced shrinkage

Greater resistance to scaling

MC-6112

POZZOLITH* MASTER BUILDERS

MASTER BUILDERS Field Service Benefit by the competent, job-proven experience of your MASTER BUILDERS field man. Through him you get maximum value from the use of modern technical products. General Office and Factory — Toronto 15, Ontario. Branch offices: Vancouver, Calgary, Edmonton, Winnipeg, Ottawa, Montreal and Saint John.



*POZZOLITH, registered trade mark of The Master Builders Company, Ltd., for its concrete ingredient that provides maximum water reduction, controls setting time and increases durability.

RUSCO STEEL WINDOWS

designed for



Chequers Court, Montreal,

Architect: Greenspoon, Freedlander, & Dunne Contractor: Louis Donolo Inc.

Architectural Beauty, Utility and Savings

The flexible beauty of design of Rusco Steel Windows, in a variety of types and sizes, permits complete freedom of architectural imagination.

A wide choice of decorator colours in durable baked enamel, blend or contrast with all structural materials.

The rigidity and durability of galvanized tubular steel allow greater use of glass without sacrificing structural strength. Draught-free vertical or horizontal sliding openings function easily, quietly year after year.

Available with screens and self-storing, removable storm sash to increase insulation and functional efficiency . . . to save heating dollars. Glass replacement is easier, faster, less costly.



A Product of Canada

Call or write your nearest Rusco Office about

RUSCO WINDOWS DOORS

RUSCO CANADA LIMITED

750 Warden Avenue, Scarborough, Ontario

RUSCO SALES OFFICES

St. John's, Nfld. Halifax, N.S. Charlottetown, P.E.I. Moncton, N.B. St. John, N.B. Fredericton, N.B. Sorel, P.Q. Quebec City, P.Q.

Three Rivers, P.Q. Joliette, P.Q. Drummondville, P.Q. Granby, P.Q. St. Jean, P.Q.

St. Jerome, P.Q. Montreal, P.Q. Valleyfield, P.Q. Val d'Or, P.Q. Ottawa, Ont. Kenora, Ont.

Kingston, Ont. Toronto, Ont. Hamilton, Ont. London, Ont. Kitchener, Ont. Chatham, Ont.

Sarnia, Ont. Windsor, Ont. Sudbury, Ont. St. Catharines, Ont. Sault Ste. Marie, Ont. Fort William, Ont.

Winnipeg, Man. Brandon, Man. Regina, Sask. Saskatoon, Sask. Calgary, Alta. Edmonton, Alta. Vancouver, B.C.